FRAMING ENVIRONMENTAL DEGRADATION:

THE MODERN AMERICAN ENVIRONMENTAL

MOVEMENT AND CONSUMPTION

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CHAPTER I

INTRODUCTION

The effects of modern culture on the global environment have become critical contemporary problems. Dunlap and Marshall (2007) acknowledge that "there is little doubt that environmental problems will be one of humanity's major concerns in the twenty-first century." Others such as Shellenberger and Nordhaus (2004) refer to the current situation as "perhaps the greatest calamity in modern history". The Intergovernmental Panel on Climate Change (IPCC) (Bernstein et al. 2007) stated that global warming – perhaps the most significant aspect of environmental degradation – is primarily due to anthropogenic (human caused) greenhouse gas concentrations[1]. The IPCC report explains that greenhouse gas emissions are caused by such behaviors as driving cars, using coal-fired power plants, heating homes with oil or natural gas, deforestation, etc. According to the United Nations' Food and Agricultural Organization (FAO), about 25% of man made carbon dioxide emissions – the main greenhouse gas - is caused by deforestation (FAO 2005). The United States contributes about 21% of the world's carbon dioxide production, with 87% of it used for energy (Energy Information

[1] Their findings are consistent with the National Academy of Sciences' Committee on the Science of Climate Change publication: *Climate Change Science: An Analysis of Some Key Questions (*Cicerone et al. 2001). Moreover, in an overview of 928 peer reviewed studies in the period 1993-2003, Oreskes (2004) illustrates that there is consistency within the scientific community that the findings by the IPCC are correct and that none of the studies contradicted the IPCC.

Information Administration (EIA) 2008). The findings by the IPCC further explain that an increase in greenhouse gas concentration means an alteration of climate and weather, which in turn leads to more severe storms, flooding, and potentially to species extinction.

> "Global warming can also threaten human well-being profoundly, if somewhat less directly, by revising weather patterns – particularly by pumping up the frequency and intensity of floods and droughts and by causing rapid swings in the weather. As the atmosphere has warmed over the past century, droughts in arid areas have persisted longer, and massive bursts of precipitation have become more common. Aside from causing death by drowning or starvation, these disasters promote by various means the emergence, resurgence and spread of infectious disease" (Epstein 2000: 50).

In other words, extreme weather phenomena such as hurricanes, droughts, and wildfires may be attributable to global warming. The IPCC (2007) report states that humans are "more likely than not" a contributing factor to the rise of hurricane intensification since the 1970s. Moreover, the National Center for Atmospheric Research (NCAR) argues that the drying that occurred in large parts of the world since the 1970s is caused by rising temperatures, and that this creates serious concerns related to droughts (Dai, Trenberth and Qian 2004). Consider for example the tragedy in Darfur; even the genocide that occurred there can be traced back to climate change. The United Nations Environmental Programme (UNEP) explained that the Darfur region was transformed from "sustainable agricultural land into a partial desert (2007)." After decades of drought it should not be surprising that violent conflict arose. The World Health Organization estimates that the violence, hunger, and disease in Darfur have caused the deaths of approximately 200,000 people.

Droughts even have an effect in the United States: due to warmer temperatures there is a rise in wildfires in recent years in the Western part of the United States

(Running 2006). A wildfire in 2007 near San Diego led to the burning of over 200,000 acres of land and the evacuation of 265,000 people (Associated Press 2007). Rising temperatures also lead to heat waves, with recent incidents in Europe (in 2003, with 35,000 deaths) and North America (in 2006, with 225 deaths) (Bhattacharya 2003). Heat, according to the National Oceanic and Atmospheric Administration (NOAA) is the number one non-severe weather killer in the United States (NOAA 2006). These last few examples illustrate that global warming is present around the globe and should be of concern to us all.

Studies published by Harvard Medical Schools' Center for Health and the Global Environment (Epstein and Rogers 2004), the Journal of the American Medical Association (Patz and Khaliq 2002), and the Annual Review of Public Health (Patz et al. 2000) all explain that global warming has other impacts for human health as well. One of these impacts is that global warming causes certain weeds to grow that lead to pollens that trigger allergies and increase the risk of asthma. Another consequence is that due to changes in the climate, formerly inhospitable areas are now accessible for disease-carrying mosquitoes. Both Rogers and Randolph (2000) and Epstein (2000) predict that in coming decades, due to global warming, large parts of the world, including the richer nations of the Northern hemisphere, will be faced with increased malaria risks. Thus, global warming causes the rise and spread of infectious diseases. The consequences for human health are perhaps best summarized by the United Nation's World Resources Institute (UN-WRI) which in its 1999 report explains:

> "Despite vast improvements in health globally over the past several decades, environmental factors remain a major cause of sickness and death in many regions of the world. In the poorest regions, one in five children do not live to see their fifth birthday, largely because of environmentally related and preventable diseases. That number translates into 11 million childhood deaths each year, mostly due to illnesses such as diarrhea and acute respiratory infections. Insect-borne diseases also exact a heavy toll; malaria alone claims 1 to 3 million lives a year, most of them children.
>
> "Environmental threats to health are by no means limited to developing countries. In the United States, some 80 million people are exposed to levels of air pollution that can impair health. In China, which has one of the world's fastest growing economies, 2 million people die each year from the effects of air and water pollution, according to one recent estimate. Nearly 100 countries, both developed and developing, still use leaded gasoline, unnecessarily exposing their citizens to a pollutant long known to cause permanent brain damage. (UN-WRI 1999:1)"

All of the above are examples of impacts that are caused by changes in the environment. Many of these are caused by global warming. Because global warming is caused primarily by anthropogenic factors - as the cited research by the IPCC illustrates - humans are responsible for these emergencies.

Research into the link between human activity and global environmental degradation has focused on three aspects: 1) the effects of an expanding global population; 2) the effects of increased use of technology; and 3) the effects of increased production due to a global economic system and changing social symbols of affluence (Ehrlich 1968; Commoner 1971; Schnaiberg 1980). What emerges from all these studies is an increase in the impact of humans on the global ecosystem. While these areas of inquiry are of great importance, all three of them seem to overlook the effects of consumption. Lilienfeld and Rathje (1998) explain:

> "The simple truth is that *all* of our major environmental concerns are either caused by, or contribute to, the ever-increasing consumption of goods and services. But rather than deal with the effects of too much shopping and purchasing, we've taken the time-honored path of shooting the messengers – the packaging, dirty disposable diapers, foam cups, and other discards that are signs of consumption but are not really consumption itself. And in so doing, we have focused only on the symptoms – too much waste and pollution – and not the underlying problem itself. In this context, recycling is merely an aspirin, alleviating a rather large collective hangover. But just as aspirin does not prevent hangovers, recycling will not prevent overconsuming. Think about it. We feel good when we fill the recycling bin. In reality, we should feel good when there's no waste to put in it at all!" (Lilienfeld and Rathje 1998: 25).

The role of consumption in environmental degradation has been documented in works such as *Consuming Sustainability: Critical Social Analyses of Ecological Change* (Davidson and Hatt 2005); *One with Nineveh: Politics, Consumption, and the Human Future* (Ehrlich and Ehrlich 2004); *Confronting Consumption* (Princen, Maniates and Conca 2002); *Critical Consumption Trends and Implications: Degrading Earth's Ecosystem* (Matthews and Hammond 1999), *Consumption and the Environment* (Harris 1997), and *How Much is Enough? The Consumer Society and the Future of Earth* (Durning 1992). It has also been documented by major international organizations such as The Worldwatch Institute (Assadourian et al. 2004), and the United Nations (Jolly 1998). These sources argue the need to recognize that consumption is a major contributor to environmental degradation and that lifestyle changes are necessary especially in more affluent nations, where the ecological footprint is highest (Jorgenson 2003; York, Rosa and Dietz 2003). In *The State of the World 2004,* The Worldwatch Institute reports that approximately twelve percent of the world's population lives in the United States, Canada and Western Europe; however, these areas account for over sixty percent of the world's consumption. In comparison, those living in South Asia and sub-Saharan Africa

comprise one third of the world's population but account for only three percent of the world's consumption (Assadourian et al. 2004:6).

The environmental movement has brought about an increased awareness of the seriousness of global environmental degradation and has contributed to our understanding of the previously listed foci of research. However, the movement's awareness of or response to consumption's contribution to global degradation remains unclear. Although there have been studies that examined the modern American environmental movement in a comprehensive manner (see Dunlap and Mertig 1992; Gottlieb 1993; Dryzek 1997; Brulle 2000; Mertig, Dunlap and Morrison 2002), none of them explicitly addresses consumption. This project will address this question using social movement framing theory (Snow et al. 1986; Snow and Benford 1988, 1992; Benford 1997; Benford and Snow 2000). Doing so may enable us to analyze how environmental organizations are addressing consumption.

Framing is a widely used methodology that allows us to analyze the narrative of the movement and thereby its values and priorities (Benford 1997; Benford and Snow 2000). It offers a social-psychological approach to the study of movements in that it adopts the viewpoint of movement actors as they actively produce and maintain meaning for not only constituents, but also for antagonists and bystanders (Snow and Benford 1988). The framing perspective offers a narrative, interpretive, and rhetorical device to convey meaning. In doing so it provides social movements with an avenue for expressing their beliefs, values, ideals, goals, etc. In short, framing is a tool that social movements use not only to describe problems, but also by which they suggest solutions and call for

specific actions. Thus, the framing perspective offers a useful lens to content analyze the treatment of consumption by the modern American environmental movement.

In this dissertation I review pertinent literature on consumption. I then delineate the role of the environmental movement and review the function of framing as it has been applied by the modern American environmental movement. This is followed by a discussion of the methodological choices that guide this research. In this section I introduce four hypotheses which are the bases of my research. The subsequent section offers a discussion and overview of the findings of this research. Finally, I conclude by explaining the relevance of this research and what this means for future research.

CHAPTER II

REVIEW OF LITERATURE

Introduction

This chapter provides of a review of the relevant literature. This consists of addressing three questions: what is the problem, who can address this problem, and what lens do I use for this study? In answering these three questions I attempt to establish the link between consumption and environmental degradation. Second, I review the extant literature on the modern American environmental movement in order to illustrate that environmental degradation can be addressed at the meso level. Finally, literature related to the framing perspective indicates the appropriateness of using this methodology in analyzing the modern American environmental movement's position on consumption.

Consumption

At the most basic level, consumption is a relevant factor in the causation of environmental degradation because a rise in consumption typically means that more resources are extracted from the Earth. While technological efficiencies that mitigate environmental impact may exist, they can be ineffective if accompanied by an increase in demand. Carolan (2004), in an article criticizing the dematerialization thesis, points out that while the technology is available to minimize the use of paper, paper use has increased. In fact, Worldwatch Institute explains that the United States is responsible for the production and use of a third of all paper in the world (2004:9). While recycling might mitigate the impact of consumption and resource extraction, only half of the lead, a third of aluminum, steel, and gold and only thirteen percent of copper used today comes from recycled sources (2004:11). Stern (1997) explains:

> "Consumption is environmentally important to the extent that it makes materials or energy less available for future use, moves a biophysical system toward a different state or, through its effects on those systems, threatens human health, welfare or other things people value."

Ritzer uses the term "irrationality of rationality" to explain that environmental degradation is an unintended consequence of consumption. While it seems rational to consume more because it leads to a more comfortable life, it also leads to increased soil erosion, deforestation, emissions, waste, water and air pollution, and water shortages (2008:150-151). Said another way, the manifest or intended consequence of increasing our consumption is that it leads to a better quality of life, but there are also latent or unintended consequences; particularly environmental degradation. This can be best illustrated through the use of an example. The livestock sector is responsible for more carbon dioxide emissions, namely 18%, than transportation (FAO 2006). Almost 5,000

liters of water is used to produce 500 calories of beef (Assadourian et al. 2004:54). While eating a tasty hamburger may satisfy hunger, it may lead to unintended consequences such as water shortages in areas where beef is produced (FAO 2006). In these areas many people have limited access to potable water (Assadourian et al. 2004:55). Beyond that, increased demand for meat means a need for more cattle feed. As a result, grain that could be used to feed a starving population is used to feed cattle to produce meat. It is predicted that if Americans reduced their intake of animal products by 50% that the water intensity for the U.S. diet would be reduced by 37% (Assadourian et al. 2004:54). Thus, the consumption of beef directly translates to latent environmental degradation making the rational goal of eating tasty steaks and burgers an "irrational" contribution to water shortage and world hunger.

Consumption is heavily influenced by cultural beliefs and values. We associate consuming with personal well-being and social status (Maniates 2002a; Durning 1992). Our self-esteem is escalated when we consume more than others, and therefore we do not want to fall behind the consumption of others. This leads to an endless race to consume, to "keep up with the Joneses" (Schor 1998). This process has been complicated as our standard of living has increased. We rely on an even wider range of technological products. For example, for every 1,000 people living in the United States, there are 835 television sets, 659 mainline telephones, 451 mobile phones, and 625 personal computers (Assadourian et al. 2004: 9). Moreover, compared to 1973 in 1998 there were more refrigerators (100 to 115), clothes washers (70 to 77), dishwashers (25 to 50), and air conditioners (47 to 72) for every 100 households (Assadourian et al. 2004:34). At the

same time, fewer people per *household* live in bigger size houses and the prevalence of vacation homes has grown (Ehrlich and Ehrlich 2004:117).

Several scholars have alluded to this as evidence for growing overconsumption especially in the richer nations of this world (Harris 1997; Jolly 1998; Princen 1999; Princen, Maniates, and Conca 2002; Assadourian et al. 2004; Ehrlich and Ehrlich 2004; Davidson and Hatt 2005). This is largely driven by cultural notions about basic needs, and it is impossible to understand the connection between consumption and environmental degradation without considering the important role of culture. While merely twelve percent of the world lives in Western Europe, Canada, and the United States, they are responsible for over sixty percent of the world's consumption. For example, eighteen tons of natural resources are required for the consumption of the average American (Harris 1997:269). Jolly (1998) goes a step further and illustrates that, for many products, this imbalance in consumption is much higher. For example, the richest five percent of the world consumes 45% of all meat, 58% of total energy, have 74% of all telephone lines, consume 84% of all paper, and own 87% of all vehicles in the world.

While a lot of empirical attention focuses on household behaviors (see the meta analysis by Roberts 1996), there is empirical evidence that other forms of consumption are important to include in the debates as well. For example, Wilk (2006) provides evidence that bottled water is primarily used in countries (such as the U.S. and members of the E.U.) in which quality water is readily available. While the average person in the world consumed 6.0 gallons of bottled water in 2003 (up from 3.9 gallons in 1998), Italy (48.1 gallons), France (39.1 gallons) Germany (33.1 gallons), and the United States (22.6

gallons) consume more than this global average (Wilk 2006:304). In other words, people in affluent countries buy bottled water due to lifestyle rather than need.

Another example of lifestyle consumption is clothing. Both Durning (1992) and Lock and Ikeda (2005) have documented the ecological devastation associated with clothing. Lock and Ikeda (2005:23-24) note that 25% of the total pesticide use in the U.S. is due to cotton production, and that this has also led to soil depletion abroad, again indicating that lifestyle consumption is a significant contributor to environmental degradation. Changes in fashion trends compel us to buy more than we really need and to expend the resources required for socially acceptable maintenance (often using technology).

> "Surprisingly, whether your jeans and t-shirt are made from organic or conventionally grown cotton, most of the environmental impact associated with clothing – about 70 to 80 percent of the environmental costs – occurs during consumption rather than production. Activities such as washing, drying, ironing and dry cleaning all have an effect." (Lock and Ikeda 2005:27)

While these latter activities might be seen as household behaviors, there is also a lifestyle dimension related to clothing: the more clothes we buy (due to changes in fashion) the more we consume energy and other valuable resources in maintaining them. While the recycling of clothes might be an effective way to mitigate some of the problems, we still have to deal with cultural beliefs about buying the latest fashion and views of hygiene.

Consumers can also take specific steps in order to reduce their ecological footprints by changing decisions related to food choices (Ritzer 2000; Haley, Hatt and Tunstall 2005) by joining the slow food movement (Pietrykowski 2004) growing food at home or making dietary changes. In other words, confronting consumption can indeed have an impact. While individuals may only have a small impact, any positive change is a

contribution, especially when cumulated over numerous individuals. For example, growing food at home or buying from locally-owned stores means that the food is not transported from thousands of miles away. The further the transportation the higher the footprint – through such components as energy costs - associated with the product.

That consumers are willing to change their behaviors is shown in the realm of household behaviors. In a recent Gallup poll (Jones 2008) the number one change people report is recycling (approximately 40% of Americans), followed by driving less (close to 20% of Americans). Conversely, making more lifestyle choices by purchasing products for environmental reasons are only reported by less than 10% of the respondents, indicating a rich area for change which could improve our environment.

Despite the enduring relationship between consumption and environmental degradation most of the attention in the debate over sources of such degradation is focused on production. In environmental sociology, three dominant frameworks (Treadmill of Production, Ecological Modernization, and World Systems Research) are primarily aimed at supply-side processes. In fact, in their recent book on the Treadmill of Production, Gould, Pellow and Schnaiberg (2008) devote an entire chapter to explaining why production rather than consumption should be the focus of environmental analyses. These scholars explain that consumers have virtually no power in the process; they may boycott, they may avoid certain stores, but they have no voice in the allocation of investment in technologies. Although they conclude that production is the more salient process, their use of an entire chapter to legitimize the dismissal of consumption bespeaks the importance of that process. Consumers *can* make choices. Consumers could choose to avoid meat altogether or to buy from local farmers and producers.

In contrast, the Ecological Modernization scholar Spaargaren has begun to devote attention to the rise of green consumerism (Spaargaren and Van Vliet 2000, Spaargaren 2000; 2003). While Ecological Modernization is primarily focused on the supply-side, Spaargaren's work illustrates the need for consumer involvement in this process; however, green consumerism is focused on changing consumption patterns by making 'greener' choices, rather than questioning the actual *levels* and *frequency* of consumption.

Some researchers have focused on green consumerism and others have addressed consumption as a critical process in environmental degradation, but in both cases the link between consumption and social movements is not addressed. For example, Carolan (2004) argues that efficiency achievable through technological innovations is meaningless if the use of these technologies leads us to consume more. Some environmental sociologists have explored ecological footprints (Jorgenson 2003; York, Rosa and Dietz 2003) a measure of the pressure humans put on the Earth and its resources. Footprints measure the level of consumption in a certain area, and compares it to what the Earth is capable of providing. Jorgenson's work examines the imbalance of the core and developing nations and indicates that core nations such as the U.S. and those of the E.U. may be exerting pressure on developing nations to consume less in order to maintain current or increased consumption levels in core nations. This imbalance has led scholars such as Chase-Dunn (1998) to wonder what would happen if everyone in the world consumed as much as the Western nations do. After all, the consumption by twelve percent in the world already leads to problems with the carrying capacity of this Earth.

Ritzer (2007) argues that we are living in a consumption-based society. He uses Wal-Mart's position on the Fortune 500 List to support this statement. Since 2003, the

older, more traditional production companies have fallen behind Wal-Mart on this list. Thus, a company devoted fully to consumption has outperformed companies such as General Motors or U.S. Steel which represent both consumption and production.

In the introduction I alluded to the three major causal factors of environmental degradation that have consistently been addressed in the literature: population, technology, and affluence. The comparison between developing and developed nations introduces more nuanced implications relating to these factors. National consumption is not merely a function of population size, but is also a reflection of cultural patterns. Increased consumption can act in much the same way as increased population by speeding the depletion of natural resources. Ehrlich and Ehrlich (2004) conclude that, due to the level of consumption in the U.S., it should be considered the most overpopulated country in the world. Thus, while population plays a role in environmental degradation, research into its impact is incomplete without consideration of consumption patterns within that population.

The role of technology must be similarly considered. Technology in and of itself may not be problematic; however, the way in which technology is implemented can increase or decrease a given society's environmental demands. For example, computers and other electronic communication tools were predicted to transform us to a paperless society (York 2006). This potential was very real, but thus far unrealized. Instead, technology increased our access to information, which could then be printed out, processed, and stored traditionally. The end result was an increase rather than a decrease in paper consumption. For example, the book *The Myth of the Paperless Office* explains that the use of the most common office paper increased by nearly fifteen percent between

1995 and 2000 and introducing e-mail into an organization leads to an increase of 40% in paper use (Sellen and Harper 2002:11-13). Thus technology paired with culture can increase resource depletion independent of population size.

Finally, affluence in and of itself is not a problem, but when affluence is coupled with a materialistic way of life and excessive quality of life standards (and thus consumption) it becomes a problem. For example, Brown and Cameron (2000:29) argue that while overconsumption of natural resources is now generally considered to be problematic, material happiness could be achieved by consuming products that are widely available or by allocating money to non-material objects such as attending concerts. While it is certainly true that these events require the consumption of some resources, the net result would be lower consumption levels. Hence, affluence in and of itself is not problematic.

Rather than focusing on increases in population, technology and affluence in and of itself, research should realize that it is the *ways that a society deals with issues such as technology and affluence* that is problematic. The question then becomes: why have we focused only on the symptoms? Princen, Maniates and Conca (2002:2), refer to this problem as an “800 pound gorilla in the room” - we all know it is there but we refuse to acknowledge it. It is much simpler to point to an expansion of the global population or to analyze inequality as being problematic then it is to point the finger at ourselves for consuming too much. Likewise, it is easier to blame technologies for causing an increase in environmental degradation rather than questioning the way we use these advances. Finally, while affluence and consumption might be related, Schnaiberg and his associates

(1980; 1994; 2008) and other adherents of political economy focus on production rather than consumption, which necessitates a focus on consumption to provide balance.

This shift in focus is further justified by changes in consumer behavior. In recent years we have seen the rise of behaviors such as voluntary simplicity and green consumerism. For example, Maniates (2002b:200) explains that between 1990 and 1995 28% of Americans simplified their lives in pursuit of new personal priorities. Moreover, a majority of Americans say it is important to consider the environment in their behavior. For example, the 2007 Roper Green Gauge found that 87% of Americans are "seriously concerned about the environment" and that:

> "a vast majority of consumers say a company's environmental practices are important in making key decisions including: the products they purchase (79%), the products/services they recommend to others (77%), where they shop (74%), where they choose to work (73%), and where they invest their money (72%)."

This is consistent with other polls that find that Americans are making changes in their behavior. In the Annual Environment Poll conducted by Gallup (Jones 2008) 83% of Americans claimed that they had made minor or major lifestyle changes. Moreover, 54% of Americans believe that environmental protection is more important than economic growth (Dunlap 2002:13). While polls may suffer from social desirability bias, this nonetheless indicates that Americans are concerned about the environment and are willing to make the right choices. One only has to look at the success of *An Inconvenient Truth* which skyrocketed Al Gore from a boring politician to an almost rockstar-like being. Likewise, in recent years many popular cultural phenomena have focused attention on 'going green.' To mention just a few examples: the Oscars® have gone green, Oprah Winfrey has spent many episodes giving attention to the topic, and since June there is

even a television channel devoted to green issues. Thus, while the polls may exaggerate the extent to which Americans are willing to make changes, they surely indicate growing awareness.

A corresponding rise in voluntary simplicity is also evident. While different definitions exist about this phenomenon, the following description is generally agreed upon:

> "Simple livers try to get by on less conspicuous consumption and less income from waged work in order to buy time for the well-being of the global environment, and for themselves to pursue more fulfilling and pleasurable activities (Grigsby 2004:2)."

While the actual number of people who associate themselves with this lifestyle is unclear, we cannot deny that people are downshifting their lives. For example, Juliet Schor (1998) argues that about one in every five Americans desires to simplify their lives. At the organizational level we have seen the founding of the Center for a New American Dream, which seems largely based on the ideals of voluntary simplicity[2]; however, voluntary simplicity does not seem to qualify as a social movement, because there is no official recruitment of members (Grigsby 2004). It then becomes necessary to examine the modern American environmental movement's response to consumption, because Buttel (2003) hypothesized that it offers the best mechanism for environmental reform. This is especially salient since individual action alone is not enough to confront consumption. Political action, particularly as led by the environmental movement is crucial. This conclusion is acknowledged even by scholars who criticize the environmental movement for their lack of attention to the topic (Princen, Maniates and Conca 2005).

[2] According to the mission statement on their website *The Center for a New American Dream* helps Americans consume responsibly to protect the environment, enhance quality of life, and promote social justice, all of which are goals that voluntary simplifiers subscribe to (Grigsby 2004).

Modern American Environmental Movement: Challenges and Opportunities

The environmental movement is widely regarded as influential. While they disagree on many aspects of environmental degradation scholars from both Treadmill of Production and Ecological Modernization agree that the environmental movement is important. Whether it is in challenging the treadmill (Schnaiberg 1980), bringing about environmental reform (Sonnenfeld 2000; Spaargaren 2003; 2000; and Spaargaren and Van Vliet 2000) or advancing environmental protection legislation (Obach 2004), the environmental movement plays a key role. Buttel (2003) argues that the environmental movement remains the best hope to solve environmental problems. He argues that the most fundamental pillar of environmental reform lies at the social movement level rather than other types of solution (state environmental regulation, ecological modernization, and international environmental governance). He goes on to state that the best guarantee for environmental protection is citizen mobilization.

Some scholars argue that environmentalism could be seen as the single most important movement of the previous century (Nisbet 1982; Rootes 2004), primarily because it has been one of the more successful movements in influencing policies and in garnering public support (Dunlap and Mertig 1992; Dalton 1994; Mertig and Dunlap 2001; Davidson and Hatt 2005). A majority of Americans sympathize with the goals of the environmental movement (Dunlap 2007). The public is more likely to trust environmental movement organizations on environmental issues than governments or corporations (Worcester 2000; Christie and Jarvis 2001). In fact, Scott (1990) argues that of all modern social movements, it is environmentalism which carries the most support.

With this level of trust, members will likely perceive an issue as important if it is framed as such by the environmental movement. For example, the environmental movement has managed to educate people on energy conservation and recycling. Over 80% of the respondents say that they have made behavioral changes, with the number one reported change being recycling (Jones 2008).

The environmental movement transformed itself from very small organizations to an embedded powerful force within society (Coglianese 2001; Mertig, Dunlap and Morrison 2001). By the twentieth anniversary of Earth Day the movement had united more people concerned about a single issue than any other event (Dunlap and Mertig 1992). There was also a rise noticeable in the number and membership of organizations since the first Earth Day (Brulle 2000; Mertig, Dunlap and Morrison 2001). While the peace and democracy movement have exceeded these numbers in recent years, it does not diminish the fact that environmentalism remains one of the most successful social movements for which people mobilize.

Riley Dunlap has written several state-of-the-literature articles of environmental sociology and one of their major foci of this has been the state of the environmental movement (Dunlap and Catton 1994; Dunlap 2003; Dunlap and Marshall 2007). In these reviews he explains that the modern American environmental movement was born after such events as the first Earth Day in 1970, the lunar mission which gave us the first picture of our planet from space and the *Limits to Growth* book by the Club of Rome. During the Carter presidency, environmentalism was on the rise; however, in the 1980s a decline was noticeable. In reaction to anti-environmental actions of the Reagan administration (such as cutting the EPA budget by 60%, appointing business

representatives to lead the EPA, the selection of the known anti-environmentalist James Watts to be Secretary of the Interior), the American public increased its environmental concern. Eventually this led to the revitalization of the environmental movement in the nineties.

Some argue that the environmental movement has changed over time (Brulle 2000; Sutton 2004; Shellenberger and Nordhaus 2004; Conca 2005). They argue that movements became more professional and started to advocate market based solutions. They adopted strategies based on not 'rocking the boat,' which jeopardized the effectiveness of environmental legislation. Arguably, the most controversial criticism aimed at the environmental movement was the publication of "*The Death of Environmentalism,*" in which Shellenberger and Nordhaus argue that despite heavy investment the environmental movement has not accomplished much due to a "narrow definition of its self-interest" and a focus on technical solutions (2004:7). While they acknowledge the success and contributions of the environmental movement, they also point to a lack of recent pro-environmental legislation. The following two passages illustrate this shift from success to failure that

> "The clean water we drink, the clean air we breathe, and the protected wilderness we treasure, are all, in no small part, thanks to them…We hold a sincere and abiding respect for our parents and elders in the environmental community. They have worked hard and accomplished a great deal." (6)

> "Our parents and elders experienced something during the 1960s and 70s that today seems like a dream: the passage of a series of powerful environmental laws too numerous to list, from the Endangered Species Act to the Clean Air and Clean Water Acts to the National Environmental Policy Act." (8)

Shellenberger and Nordhaus suggest that the environmental movement operates under the belief that scientific knowledge is sufficient to overcome ideological and industry opposition (2004:10). They claim that the environmental movement, blinded by a rise in membership rolls, income, and professional staff, fails to realize that despite showing support for environmental protection in polls the Right dominates American politics (Shellenberger and Nordhaus 2004:11). Regardless of the validity of this claim, environmental sociologists (not to be confused with the environmental movement) have recognized this and examined the important role of right wing think tanks (McCright and Dunlap 2000; 2003; Jacques, Dunlap and Freeman 2008). Likewise, the notion that the support for the environmental movement expressed by a large majority of Americans in polls is not very strong has been recognized as well (see for example Guber 2003).

Shellenberger and Nordhaus accuse the environmental movement in the 1990s as being more interested in achieving politically viable goals rather than actively working towards real change. The following passage illustrates their criticism:

> "Because we define environmental problems so narrowly, environmental leaders come up with equally narrow solutions. In the face of perhaps the greatest calamity in modern history, environmental leaders are sanguine that selling technical solutions like florescent light bulbs, more efficient appliances, and hybrid cars will be sufficient to muster the necessary political strength to overcome the alliance of neoconservative ideologues and industry interests in Washington D.C." (Shellenberger and Nordhaus 2004:10).

They are not alone in this criticism. For example, Maniates (2002a:48) illustrates this by referring to a specific organization's steps to save the Earth such as visiting parks, conserving energy, recycling, keeping tires properly inflated, buying alternatives for chemical pesticides, buying dolphin-free tuna, and joining the movement. None of these steps would qualify as 'rocking the boat'.

While Brulle (2000:272) is also critical, he contends that the environmental movement is still important, but that it needs to come to terms with the challenges raised. This point is also made by Princen, Maniates and Conca (2002) in their work *Confronting Consumption*. In fact, strong supporters of the continuing relevance of the environmental movement realize and recognize that the effectiveness of the movement could use improvement (Mertig, Dunlap and Morrison 2001:475), but they question the validity of the claims made by Shellenberger and Nordhaus[3]. Thus, while the environmental movement may not be perfect or in need to improve it still continues to be a significant component of the fight against environmental degradation (Buttel 2003; Shabecoff 2003).

A second change that has occurred as the environmental movement has evolved is the broadening and in some cases the splintering of the movement. In the early days of the environmental movement the debate was centered on a single issue, whereas nowadays there are many issues and sides to consider. A distinction is made between three stages of environmental activism: conservationism, environmentalism, and ecologism (Mertig, Dunlap and Morrison 2001:452). While we often talk about "the" environmental movement, this is ignorant of the internal diversity of organizations. Understanding and recognizing this diversity is important, because:

> "organizations with similar goals frequently rely on different tactics and strategies to advance their agendas… experience, core values and beliefs, environmental philosophy, and political ideology work together to create distinct organizational interpretations of the political environment, efficacy of action, acceptability of tactics, significance of an issue, and source of the problem" (Carmin and Balser 2002).

[3] See the special issue in Organization & Environment (March 2006) where several scholars responded to the claims made by Shellenberger and Nordhaus. For example, Dunlap (2006) criticizes the lack of empirical evidence offered by the authors, while Brulle and Jenkins (2006) wonder if the solutions offered by Shellenberger and Nordhaus would lead to the revitalization of the environmental movement.

While it could be argued that all organizations comprising the modern American environmental movement have similar goals - reducing and eliminating environmental degradation - they differ on what exactly constitutes critical environmental degradation and what solutions are necessary. Dreiling and Wolf (2001) compared environmental movement organizations' stances on NAFTA. They found that different environmental movement organizations have adopted conflicting and contradicting views on what the problems are and how they can be solved.

A study into the diversity of the modern American environmental movement was conducted by Brulle (2000), who distinguishes between nine different discursive environmental worldviews. In a more recent update, Brulle (2007) has changed his classification slightly and it now includes eleven worldviews. Most scholars agree that these strands are present within the environmental movement (Dunlap and Mertig 1992; Dowie 1997; Johnson 2006), although to differing degrees. For example, while the Wise Use movement can be traced to the early environmental movement centered around the idea of Manifest Destiny (Brulle 2000) it is now typically considered an anti-environmental movement (Mertig, Dunlap and Morrison 2001:459-461). While other studies into the diversity of the environmental movement have been conducted (e.g., Dryzek 1997), Brulle's study is based on the U.S., provides empirical data rather than only a conceptual discussion and is more recent. A brief description of these worldviews is included in Table 1. Thus, his study is the basis of my research.

Table 1: Discourses in the U.S. environmental movement

Environmental Worldview	Description
Manifest Destiny (Wise Use) *	The natural environment is unproductive and valueless without development. Hence, the exploitation and development of abundant natural resources for economic development contributes directly to human welfare.
Wildlife Management *	The scientific management of ecosystems can ensure stable populations of wildlife. This wildlife population can be seen as a crop from which excess populations can be sustainably harvested in accordance with the ecological limitations of a given area. This excess wildlife population can be used for human recreation in sport hunting.
Conservation *	Natural resources should be technically managed from a utilitarian perspective to realize the greatest good for the greatest number of people over the longer period of time.
Preservation *	Nature is an important component in supporting both the physical and spiritual life of humans. Hence, the continued existence of wilderness and wildlife, undisturbed by human action, is necessary.
Reform Environmentalism *	Human health is linked to ecosystem conditions. To maintain a healthy human society, ecologically responsible actions are necessary. These actions ca be developed and implemented through the use of the natural sciences.
Deep Ecology *	The richness and diversity of all life on earth has intrinsic value, and so human life is privileged only to the extent of satisfying vital needs. Maintenance of the diversity of life on earth mandates a decrease in human impacts on the natural environment and substantial increases in the wilderness areas of the globe.
Environmental Justice *	Ecological problems occur because of the structure of society and the imperatives this structure creates for the continued exploitation of nature. Hence, the resolution of environmental problems requires fundamental social change.
Ecofeminism *	Ecosystem abuse is rooted in androcentric concepts and institutions. Relations of complementarily rather than superiority between culture and nature, between humans and nonhumans, and between males and females are needed to resolve the conflict between the human and natural worlds.
Ecospiritualism **	Nature is endowed with spiritual value. Humanity, as part of nature, has a moral obligation to preserve it intact. Religious beliefs need to be developed that embody this ethic. These beliefs can then inform actions to create an ecologically sustainable society.
Animal Rights **	All of creation is endowed with an ability to define itself and evolve. Life thus has a right to be left to develop according to its own character. Humanity has no right to infringe on these rights of animals.
Environmental Health **	Human health is the outcome of interactions with physical, chemical, biological, and social factors in the natural environment, especially toxic substances and pollution. To ensure community health requires a livable and healthy community, with adequate social services, and elimination of exposures to toxic or polluting substances. The precautionary principle should guide industrial development.

* from Brulle (2000:98); ** from Brulle (2007)

Environmental Movement and Consumption

With this background of the environmental movement, I will now shift the discussion to their position or focus on consumption. According to Buttel (2003), reducing individual consumption is perhaps the single most common strategy advocated by the movement. He states that early on the focus was on population and the effects of consumption (see e.g., Ehrlich 1968; Ehrlich and Ehrlich 1990 Chapter 12 which suggests specific actions individuals can take) and that recently this focus intensified due to the increase in green products and green consumerism. This shift is not universally perceived as a positive development. For example, the British sociologist Philip Sutton in his book *Nature, Environment and Society* argues that the ideology of (green) consumerism is promoted by the environmental movement which leads to a rapid turnover of products that are guided by fashion which in turn leads to more waste (Sutton 2004:134).

This is consistent with a recent study by Alfredsson who concludes that adopting green consumerism without reducing the overall level of consumption is unlikely to have any significant impact (2004:522). Likewise, Gould, Pellow, and Schnaiberg (2004), argue that while the environmental movement has promoted environmentally friendly behaviors such as recycling, its recommendation tends to center around more rather than less growth (the focus is not on confronting levels of consumption). Earlier, Schnaiberg (1980) argued that the environmental movement should not attempt to influence consumer purchasing decisions but rather focus on changing the role of production institutions.

Buttel (2003) acknowledges that the environmental movement could do more in its confrontation of consumption, and explains why the environmental movement (and environmental sociologists with them) may be reluctant to do so. He notes that previous researchers argued that production was the more salient process (Schnaiberg 1980) and thus set the tone for ensuing research. This assumption and the Treadmill of Production perspective in general became fundamental to establishing environmental sociology as a discipline (Buttel 1987) thus furthering a perspective centered on production rather than consumption. This view continues with the rise of Ecological Modernization in the debate on environmental reform.

A second reason for the reluctance to address consumption issues is the fear that companies may engage in green washing (Schnaiberg and Gould 1994). For example a company could market a product that is not Earth-friendly by using the color green and certain imagery that may mislead the consumer to believe the product is environmentally friendly. This may lead consumers to falsely believe that by buying certain goods and services they are fighting environmental degradation, whereas in reality they are not. This fear of green washing may lead to scholars to dismiss the feasibility of addressing consumption since consumers may not have access to information.

Yet another reason for this reluctance has to do with the weak relation between attitudes and actual green / environmentally friendly behavior. As most attitudinal research illustrates, there is a weak relationship between what people say they do and what they actually do (Tellegen and Wolsink 1998). This is partially explained by the social desirability bias, but may further explain the reluctance of environmental sociologists to focus on consumption.

Using a somewhat different rubric Princen (1999) proposes three reasons why consumption is not more proactively discussed. First, speaking about consumption makes us uncomfortable because it points a finger at our own behavior. It is much easier to say that environmental degradation is primarily caused by overpopulation so we can say that the problem lies elsewhere (in Southern nations). Second, while technological efficiencies have indeed been achieved, what has often been ignored is that consumer behavior has changed as well (see also Carolan 2004). Hence, while efficiencies may exist, the treadmill accelerates and overtakes these efficiencies. Finally, the way that policymakers phrase the problem diverts our attention from consumption. Princen (1999:360-361) gives a personal example: if he runs out of shelf space the problem is that his office is not big enough or that he needs more shelves rather than saying that the problem is that he may have too many books. Likewise, if roads are congested, the problem is defined as not having enough roads rather than that there are too many cars on the roads.

It seems that with the rise of Ecological Modernization the pessimistic 'declensionists' of the early modern environmental movement in the seventies have been in large part replaced by more optimistic advocates for market based solutions (Brulle 2000). Whereas in the seventies the message was that there are problems with our lifestyle in the United States, in the nineties this message seems to have changed. Consider, for example, this message from the *Green Consumer Guide*:

> "To truly care for the environment, it was said, you had to drastically reduce your purchases of everything – food, clothing, appliances, and other 'lifestyle' items – to a bare minimum. That approach simply doesn't work in our increasingly convenience- and consumption-oriented society. No one wants to go back to a less-comfortable, less-convenient way of life." (Elkington, Hailes and Makower 1988)

While this was not a work published by any organization within the environmental movement, many organizations in the movement contributed to it. Moreover, this quote is interesting because it seems to indicate an acceptance of defeat. Even in *Our Common Future*, the adopted definition of sustainable development states that economic growth is not incompatible with environmental protection (Brundtland 1987). This might have led to what Bernstein (2001) so aptly has described as the "compromise of liberal environmentalism."

It might very well be the case that the modern American environmental movement accepted the definition of sustainable development as truth rather than confronting it. This certainly is consistent with the observations made by Shellenberger and Nordhaus (2004), Brulle (2000), and Gottlieb's *Forcing the Spring* (1993). Gottlieb argues that the rise of the modern environmental movement was heavily influenced by a critique of the consumer society. With the rise of Ecological Modernization and with the rise in market-based solutions it appears that the early focus of the modern environmental movement has changed from confronting individuals to confronting corporations. Unfortunately, despite the valuable insight gained from Brulle's (2000) analysis of the modern American environmental movement, consumption was not explicitly included in this study. Therefore, empirical validation of shifts in the treatment of consumption by the environmental movement is not available. My dissertation attempts to investigate this.

Even though we do not have much insight into the treatment of consumption by the modern American environmental movement there are some predictions we can make. For example, several of the worldviews (see Table 1) can be described in terms of conserving resources or carefully managing what the Earth has provided. This makes

organizations belonging to worldviews such as Conservation, Reform Environmentalism, Deep Ecology, and Ecofeminism more likely to have a position on consumption, because conserving resources would be achievable through more responsible consumption. Two other worldviews (Animal Rights and Environmental Health) may discuss consumption as it relates to their respective foci. Thus, Animal Rights organizations care about the relation between animals and consumption (such as animal testing, fur in fashion, etc.) and Environmental Health organizations are worried about the health impacts of consumption. It is expected that the other worldviews either do not consider consumption to be problematic (Wise Use), or their focus is on preserving nature or parts thereof (Wildlife Management, Preservation, Ecospiritualism), or they deal with issues of clean communities (Environmental Justice). While some of these worldviews may have a connection to consumption it is a more distant relation. For example, “ensuring stable populations of wildlife” indirectly may be achieved through confronting consumption; however, “conserving resources” is much more directly related to it. Likewise, while Deep Ecology seeks to “increase the wilderness areas” it also includes “satisfying vital needs”, making this worldview more likely to include consumption than a worldview such as Preservation which focuses on “continued existence of wilderness and wildlife” which again is a more distant relation to consumption. Another prediction that we can make is that organizations belonging to Deep Ecology and Ecofeminism tend to be more radical (Brulle 2000). It is likely that this radical nature may also be present in their treatment of consumption. These predictions serve as bases for the hypotheses in this study.

Framing

The work of Snow and Benford (Snow et al. 1986; Snow and Benford 1988; Snow and Benford 1992) stimulated the inclusion of social psychological variables within social movement research. Despite the existence of critiques (Hart 1996; Benford 1997; Fisher 1997; Steinberg 1998; Oliver and Johnston 2000) framing remains one of the most widely used perspectives in social movement analysis (Benford 1997; Benford and Snow 2000). Since the inception of framing research in social movements and collective behavior in the 1980s a very rich body of literature emerged. A variety of social movements, countermovements, political parties and protest events (both in and outside of the U.S.) have been examined using this perspective.

The following (by no means exhaustive) list of research illustrates the richness and breadth of the research that has been conducted using this perspective: civil rights issues such as the American Indian Movement, gay and lesbian rights, women's movement, and the abolitionist movement (Ellingson 1995; Jenness 1995; Noonan 1995; Baylor 1996; Platt and Fraser 1998), peace and nuclear disarmament movements (Gamson and Modigliani 1989; Benford 1993a; Benford 1993b; Marullo, Pagnucco and Smith 1996; Nepstad 1997), the environmental justice movement (Cable and Shriver 1995; Pellow 1999), religious movements (Hart 1996; Evans 1997; Sherkat and Ellison 1997), and a variety of other movements that mobilize around issues such as the location of an expressway, anti-union, the environmental countermovement, homelessness, college sport reform, white separatism, and agrarian movement (Mooney and Hunt 1996; Berbrier 1998; Gotham 1999; Haydu 1999; McCright and Dunlap 2000; Cress and Snow 2000; McCright and Dunlap 2003; Benford 2007).

This social-psychological approach adopts the viewpoint that movement actors actively produce and maintain meaning not only for constituents, but also for antagonists and bystanders (Snow and Benford 1988). Based on the work of Ervin Goffman, frames are typically defined as "schemata of interpretation which enable individuals to locate, perceive, identify, and label occurrences within their lifespace and the world at large" (Goffman 1974; Snow et al. 1986). Reality is constructed and must be interpreted. Before people are going to rally around a cause they need to believe that not only is a problem present, but that there are available feasible solutions. A typical example used by scholars is the organization 'Mothers Against Drunk Driving.' Driving under the influence was not considered a problem until a mother whose child was killed by a drunk driver *defined* it as a problem. Thus, while resources - such as an organization, staff, and money as well as the existence of a political opportunity, are necessary, framing is needed in order to describe not only what the problem is but also what specific steps people can take to solve it.

The value of applying the framing perspective to social movements is that it offers a narrative, interpretive, and rhetorical device to convey meaning. In doing so, it provides social movements with an avenue to express their beliefs, values, ideas, goals, etc. In short, framing is a tool that social movements can use not only to describe the problems, but also to suggest solutions as well as calling for specific actions. Snow and Benford (1988) refer to these as the three core framing tasks: diagnostic, prognostic, and motivational framing.

The first core task, diagnostic framing, refers to problem identification and addresses questions such as: What is the problem? Who caused the problem? Who is

responsible? Several studies have informed our understanding of the development and articulation of so-called injustices (Capek 1993; Cable and Shriver 1995; Carroll and Rattner 1996) as well as identified victims (Best 1987; Benford and Hunt 1992; Capek 1993; Hunt et al. 1994; Jasper and Poulsen 1995; Jenness 1995). Benford and Snow (2000:616) illustrate that "controversies regarding whom or what to blame frequently erupt between the various SMOs comprising a social movement as well as within movement organizations." That this is true for the environmental movement as well can be derived from Dreiling and Wolf (2001) who debate the position on NAFTA and explain that there are both pro-NAFTA and anti-NAFTA environmental movement groups. Thus, while environmental groups share in common a concern about the environment, this research illustrates that there may be "substantial differences in both *the ideological frames* and material-organizational alliances formed among these groups" (Dreiling and Wolf 2001:34; emphasis mine).

Prognostic framing refers to proposing solutions to the identified problems. In other words: SMOs discuss what needs and can be done in order to solve a problem. According to Benford and Snow (2000) this is where the different organizations comprising a social movement tend to differ from one another (see also Haines 1996). Examples of studies that have looked at this are Gerhards and Rucht (1992) as well as Nepstad (1997).

Motivational framing deals with what Gamson (1995) calls the agency aspect of collective action frames: a call to action. What can and should we do about this problem? Who is "we"? It is in this task where the movement transitions from discussing the problems and solutions to an attempt to engage and mobilize people into action. In short,

the three core framing tasks represent the full spectrum of analyzing a specific problem: What is wrong? How can we fix it? What specific actions should each of us engage in? Benford (1993a) explains that the answer to the question why we should engage in collective action typically falls into four types of vocabularies: severity (how damaging is the problem at hand), urgency (why is there a need to achieve our goals rapidly), efficacy (success will arise from shared beliefs), and propriety/duty (we are obligated to act).

The framing choices made by the movement could lead to cognitive liberation (Nepstad 1997): people who are otherwise unconnected tend to be transformed into movement adherents. While movements need to engage in all three of the core framing tasks in order to successfully mobilize people (Benford and Snow 1988) typically movements are much better at the diagnostic aspect of framing (Benford 2007). This seems to imply that movements are better at explaining what is wrong and why it is wrong, than providing solutions and explaining what can be done about the problem.

While these core framing tasks lead to commonality among the different social movement organizations, Benford and Snow (2000) also identify four ways in which collective action frames are variable. First, collective action frames differ with regard to the identification of and assignment of responsibility for specific problems. Second, collective action frames can be exclusive or inclusive, rigid or open, inelastic or elastic, and restricted or elaborated in terms of the number of themes or ideas that are incorporated. In essence, this refers to the number of issues addressed by the framing strategy. Generalist organizations may be more open and inclusive as well as more elaborate on a number of themes, whereas specialist organizations are likely to be more exclusive, rigid and restricted in the number of themes addressed. Third, frames vary in

terms of scope and influence, sometimes evolving into master frames (Snow and Benford 1992). When a frame achieves the status of a master frame, different organizations with different goals use the same basic idea or justification to promote their cause. Finally, a fourth way frames vary is in their resonance, which is determined by two factors: credibility and relative salience. Benford and Snow (2000:219) explain that frame credibility is a function of three factors: frame consistency (are there contradictions between what the movement says and what it does?); empirical credibility (is there a fit between events happening in the world and the movement's framing?); and credibility of the claim makers. As noted earlier, the credibility of the environmental movement appears to be very high (Worcester 2000; Christie and Jarvis 2001). Relative salience is another factor determining frame resonance (Benford and Snow 2000:621). This factor consists of three dimensions (Snow and Benford 1988): centrality (do the frames convey ideas, beliefs, and values that are essential to the targets of mobilization?); experiential commensurability (do the frames resonate with the everyday experiences of the targets of mobilization?); and narrative fidelity (do the frames resonate with the cultural narratives of the targets of mobilization?). A frame seen as most credible and highly salient is more likely to resonate with potential mobilization targets.

Finally there are various framing processes and dynamics. Frames need to be developed, generated, elaborated and diffused, not only through the three core framing tasks but also through discursive, strategic, and contested processes (Benford and Snow 2000). There are two types of discursive processes: frame articulation, where connections are made between events and experiences, and frame amplification, where events or issues are highlighted to be more salient. A distinction can also be made among four

strategic processes designed for any specific goal. The first, frame bridging, links two or more congruent but unconnected frames. The second, frame amplification, deals with clarifying existing values or beliefs. The third, frame extension, means that the SMO extends its focus to beyond its primary interests. The last, frame transformation, means changing old understandings and meanings and/or generating new ones. Finally there is a whole range of contested processes further complicating the framing perspective. Opponents, bystanders and the media might engage in counter framing, frame disputes from within the movements might arise, and there might be dialectic between frames and events.

The framing perspective serves as the lens through which I content analyze the modern American environmental movement's websites to uncover the treatment of consumption. While the primary focus will be on the three core framing tasks: diagnostic, prognostic, and motivational, in the discussion of the findings I devote attention to the variability of frames by different organizations belonging to the environmental movement. The next chapter goes into greater detail of the specific methodology for this study.

Conclusion

The discussion in this chapter centered around three issues. The first issue dealt with the question of why consumption is problematic. I reviewed various reasons, examples, and indications of consumption causing environmental degradation. I provided evidence that the appropriate actor to address the problem of consumption is the environmental movement. Related to consumption, they have had a major influence in convincing Americans of the importance of recycling and energy conservation. I also indicated the variety of SMOs, their stated goals and overriding values and presented Brulle's categorization of organizations within the environmental movement. Finally, I reviewed the framing perspective and explained that it is a useful lens to analyze the modern American environmental movement's treatment of consumption. The literature review serves as a stepping stone to the next chapter where I introduce the research question, hypotheses, and other methodological choices that guide my research.

CHAPTER III

METHODOLOGY

Introduction

In the third chapter I discuss the methodological choices that guide this study. The discussion in the previous chapter has informed us that the modern American environmental movement can be the right actor to address the problem of individual and household consumption. Because our knowledge is limited concerning the extent to which the movement has begun to do so, I suggest investigating this matter further. In this chapter I explain my methodological choices. This is done by introducing the research question and hypotheses that guide my research. After this I make the case that using content analysis is a suitable technique to address this question.

Research Question and Hypotheses

This study is an extension of Brulle's examination of the modern American environmental movement. While Brulle (2000) provided an extensive overview of the different environmental worldviews present in the environmental movement, the topic of consumption was not discussed explicitly in his work. Therefore, I expand upon his research, by addressing the following question:

> *How does the modern American environmental movement treat consumption as reflected by its diagnostic, prognostic and motivational framing?*

I want to determine to what degree and in what way individual and household consumption is visible, salient and important to the movement. Moreover, with the rise of green consumerism and more market-oriented solutions to environmental degradation, does the American environmental movement frame its message consistent with the market or does it attempt to challenge the Treadmill of Production? From these, four hypotheses will be tested.

Hypothesis 1: References to consumption will vary across environmental organizations espousing the various worldviews.

Hypothesis 2: Organizations that reflect certain environmental worldviews (Animal Rights, Conservation, Deep Ecology, Ecofeminism, Environmental Health, Reform Environmentalism) will be more likely to discuss consumption than will those reflective of other environmental worldviews

(Ecotheology, Environmental Justice, Preservation, Wildlife Management, and Wise Use).

Hypothesis 3: References to consumption will be centered on green consumerism - with terms such as *support* and *buy* rather than *reject*, *avoid* – across all eleven categories, except Deep Ecology and Ecofeminism.

Hypothesis 4: The modern American environmental movement devotes more attention to diagnostic framing as it relates to the problem of individual and household consumption than to prognostic and motivational framing.

The logic behind these hypotheses arises from the discussion in the literature review chapter. Based on what we know about the different environmental worldviews from Brulle's (2000) study it is expected that there is a difference in attention to consumption among these worldviews (Hypothesis 1 and 2). Furthermore, due to the recent increase in attention that ecological modernization receives, it is expected that the language used by the environmental movement is more positive and optimistic in nature (Hypothesis 3). Finally, because of the observation made by Benford (2007) that movements tend to be better at diagnostic framing, it is hypothesized that more attention to this core framing task is devoted than is to the other two tasks.

Content Analysis

Definition

According to Krippendorf (2004:18) content analysis can be defined as "a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use." Content analysis is a technique because it offers specific procedures. Two specific requirements of this scientific tool are reliability and validity. Krippendorf argues that the most important measure of reliability for a content analysis is replicability. Essentially, this means that anyone using this technique on the same data - at different points in time and perhaps even different circumstances - should get the same results[4]. Validity is a second important requirement. The study should be open for scrutiny and any claims made should confirm independently available evidence.

Justification

There are several reasons why content analysis is an appropriate technique for this research. First, the internet has grown in volume and importance; thus, it is likely that organization websites contain both the depth and breadth required to answer the research question. There is evidence that the environmental movement has adopted the internet and uses it to communicate with potential adherents, bystanders, the media and opponents (Van de Donk et al. 2004). Second, content analysis is non-reactive: there is no need for interviews or questionnaires (Berg 2004). Websites portray the overall framing of the movement rather than the framing choices made by individuals within an organization; thus all the necessary information is already provided on the website. A third reason is based on media parameters bounding organization's ability to present their message. As

[4] Assuming the same coding procedures are used.

Johnson (2006:138) argues, due to space limitations in other forms of media, there is an underrepresentation of issues and this is likely to lead to organizations only reporting on their most salient and central issues. Since a website is virtually unlimited in the space available, it offers very good insight into the activities, values, and goals of the movement. Finally, rather than attempting to make causal inferences between variables I am interested in how the environmental movement frames consumption as part of its diagnostic, prognostic, and motivational framing decisions. These should be central to their self-presentation via websites. None of this is meant to imply that other appropriate statistical techniques will not be part of this dissertation research.

Procedure

According to Krippendorf (2004:83) there are several components to a content analysis: unitizing, sampling, recording/coding, reducing data, inferring contextual phenomena, and narrating the answer to the research question. The first four of these components constitutes data making and is similar to other research techniques, whereas the fifth component is unique to content analysis. The first four components refer to the systematic selection of segments of observations (such as text) that are of interest to an analysis (unitizing), the reduction of the number of observations to a manageable subset of units (sampling), the interpretation of observations (recording/coding), and reduction of data through analysis. The final two components, inferring and narrating the results, refer to moving the analysis outside the data, with a discussion of what the observations could mean (inferring) and making the results understandable for others (narrating). Each of these components is discussed in greater detail below.

Unitizing

This is selecting segments of texts that are of interest to an analysis. According to Weare and Lin (2000:280) greater care is needed in the definition of units of analysis when conducting content analyses on the web. It is necessary to distinguish between three types of units: sampling, context, and recording units.

Sampling Units: Sampling units are those units "that are distinguished for selective inclusion in an analysis" (Krippendorf 2004:98). In this study the sampling units are the websites of the organizations that reflect the nine different worldviews that constitute the modern American environmental movement as categorized by Brulle (2000:286-288). As Appendix I illustrates, of the 106 organizations in Brulle's sample, 85 have websites. Within each worldview at a minimum approximately half of the organizations from Brulle's sample have websites, which seems to indicate that the majority of the organizations belonging to the environmental movement have adopted the internet. The resulting list of 85 organizations presents a sampling pool which must be further reduced to meet the time limitations of this study. Further sampling was completed with the following goals in mind. 1) I want to respect not only the diversity *between* the worldviews that exist within the modern American environmental movement, but also examine potential diversity *within* a particular worldview and 2) I want to include the most influential organizations, as represented in what is known as the "Group of Ten" (Gottlieb 1993; Dowie 1995; Brulle 2000) or the Green Group (Mertig, Dunlap and Morrison 2001) and 3) I want to include those environmental movement organizations with the highest incomes.

In order to limit the amount of data for this study while respecting the three selection criteria, two organizations from each of the eleven environmental worldviews were selected. The resultant sample of twenty two organizations represents 20% of Brulle's sample. Websites were selected using the following procedure. The "Group of Ten" organizations were identified by environmental worldview using Brulle's categorization (Appendix I) (Method 1). The richest organizations were identified using Brulle (2007). The top 9 was included, because they each had an income over one million USD (method 2). Four of these nine organizations belong to the Group of 10[5], and one organization (Conservation International Foundation) was an international organization and not included.

This resulted in two worldviews (Preservation and Reform Environmentalism) being represented by more than two organizations (Table 2). To include all members of the most influential group of organizations as well as the top 9 richest organizations these two categories will be over sampled with Preservation represented by six organizations and Reform Environmentalism represented by four. A different way of looking at influential organizations is to examine their lobbying power (Mertig, Dunlap and Morrison 2001; Mitchell, Mertig and Dunlap 1992). However, looking at the twelve organizations identified by Mertig et al. (2001:463), and Mitchell et al. (1992:13) all but three organizations belong to the Group of 10. Given the fact that the other three organizations belong to Preservation (National Parks & Conservation Association), and Reform Environmentalism (Environmental Action, Environmental Policy Institute), and these two worldviews are already over sampled, there was no real need to add these

[5] The Sierra Club Foundation was left out, because the Sierra Club was already part of the sample.

additional organizations. Clearly, the sample includes the majority of the organizations that have strong lobbying power and thus could be considered as influential.

Remaining organizations were selected from Brulle's categorization (Appendix I). When only one additional organization was needed, I selected the middle organization from Brulle's list for that worldview (Method 3). When two organizations were needed, I selected the second and next to last organization from Brulle's list for that worldview (Method 4). In several cases this was problematic. Brulle's list of organizations representing the Ecofeminism worldview included only three entries, so the first and last entries were selected (Method 4a). Brulle's list of organizations representing the Ecospiritualism included two organizations that must be considered international and thus fall outside the scope of this project. In this case, there are three organizations left, so the first and last entries were selected (Method 4a). Because of the two added worldviews, I used an excel file made by Brulle which includes the most recent categorization to select organizations from those two worldviews. The second Animal Rights organization is an international organization. In this case the first and next to last organization was selected (Method 4b). The added worldview of Environmental Health created an additional problem: one of the selected organizations for Environmental Justice is now listed as belonging to the Environmental Health worldview. In this case it was decided that the second organization for these two worldviews would be selected by adding the first organization listed in Appendix I (Environmental Justice) and excel file (Environmental Health) (Method 5). The resultant sampling includes twenty eight websites, with at least two websites from each worldview, the ten most influential organizations, and the nine richest organizations (Table 2).

Table 2: Project Sampling

Worldview	Organization	Selection method
Wise Use	Alliance for the Wild Rockies	3
	Defenders of Property Rights	3
Wildlife Management	National Wildlife Federation	1
	Wildlife Conservation Society	2
Conservation	Izaak Walton League	1
	Trust for Public Land	2
Preservation	Defenders of Wildlife	1
	National Audubon Society	1
	Nature Conservancy	2
	Sierra Club	1
	Wilderness Society	1
	World Wide Fund for Nature	1
Reform Environmentalism	Environmental Defense Fund	1
	Natural Resources Defense Council	1
	Friends of the Earth	1
	Population Council	2
Deep Ecology	Earth First!	4
	Rainforest Action Network	4
Environmental Justice	Association of Forest Service Employees for Environmental Ethics	5
	National Tribal Environmental Council	4
Ecofeminism	Mothers and Others for a Livable Planet	4a
	Women's Council on Energy and the Environment	4a
Ecospiritualism	Coalition on the Environment and Jewish Life	4a
	National Religious Partnership for the Environment	4a
Animal Rights	Animal Protection Institute	4b
	Voice for Animals	4b
Environmental Health	Beyond Pesticides	4
	Center for Health, Environment and Justice	5

Recording Units: Those units "that are distinguished for separate description, transcription, recording, or coding" (Krippendorf 2004:99). McMillan (2000) notes that the majority of online content analyses do not report the specific site definition; that is, they do not indicate what part of the site was included in their analysis. However, as Weare and Lin (2000) mention, some analysts have focused on analyzing either the homepage or a random page on a website (see for example Bates and Lu 1997; Ha and James 1998; Bucy et al. 1999; Koehler 1999; Haas and Grams 2000). In this research I will analyze the homepage then use computer searches to identify pages within the website that relate to consumption. Certain criteria must be met by each site and no page

more than two clicks away from the homepage will be analyzed. See Appendix II for procedural details.

Context Units: Context units are those "units of textual matter that set limits on the information to be considered in the description of recording units" (Krippendorf 2004:101). In this research, there are two context units: 1) consumption as discussed earlier is narrowed down to only include individual and or household consumption and 2) the different framing tasks: diagnostic, prognostic, and motivational frames as indicated by the discussion by each organization of the causes, solutions, and calls for action in regards to environmental degradation. See Appendix II for detailed information.

Data Analysis

Krippendorf (2004:191) describes three specific tasks to be completed, after the data has been recorded: (1) the inferences from the text need to be summarized, (2) potential patterns and relationships that exist within the findings must be identified in order to test the hypotheses, and (3) the validity of the findings must be assessed by comparing them to existing literature. Krippendorf devotes an entire chapter to discussing tools available to researchers in this endeavor.

The software package NVivo 2.0 will be used to aid in the process of analyzing data. This program allows the researcher to store documents and analyze data. The software allows for the creation of nodes which function as 'sticky notes' throughout different documents that can indicate three things: (1) free nodes are unconnected ideas; (2) tree nodes are related ideas based on specific categories; and (3) case nodes reflect

groups of cases or specific cases. In essence, NVivo makes the process of analyzing large data sets manageable.

Hypotheses will be tested by using chi-square analyses. The first two hypotheses, repeated below, will be analyzed using crosstabs reflecting worldviews (IV) and the number of documents devoted to consumption, the number of sentences devoted to consumption and the number of referenced resources (DV). The third hypothesis (below) will use a similar crosstab with the number of sentences devoted to supporting or buying specific services or items and the number of sentences devoted to rejecting or avoiding certain services or items as DVs. The fourth hypothesis (below) will use a chi-square comparing the documents and the sentences with diagnostic framing to the documents and sentences containing prognostic and motivational framing.

H1: References to consumption will vary across environmental worldviews.

H2: Organizations that belong to certain environmental worldviews (Animal Rights, Deep Ecology, Reform Environmentalism, Conservation, Ecofeminism) will be more likely to discuss consumption than other environmental worldviews (Wildlife Management, Preservation, Environmental Justice, and Ecospiritualism).

H3: References to consumption will be centered on green consumerism - with terms such as *support* and *buy* rather than *reject, avoid* – across all eleven categories, except Deep Ecology and Ecofeminism.

H4: The modern American Environmental Movement devotes more attention to diagnostic framing as it relates to the problem of individual and household consumption than to prognostic and motivational framing.

Data Quality

Reliability and validity will be tested post-hoc. A content analysis is considered reliable if the data that is used remains constant despite potential variations in the measuring process (Krippendorf 2004:211). A reliable study can be trusted, in that it can be duplicated. Validity, on the other hand, ascertains whether or not the claims that are made are based on facts (Krippendorf 2004:212). Both conditions must be met.

Reliability. Krippendorf (2004:219) discusses several ways to establish reliability in content analysis research. He proposes the following two-step procedure: (1) use three or more observers working independently of one another, and (2) reconcile discrepancies in these data either by relying on a formal decision rule – majority judgments or average scores – or by reaching consensus in postcoding deliberations. In this research only one coder is used, however, the procedure of collecting and analyzing the data is fully disclosed making this study replicable. To guide this process coding sheets have been developed and can be found in Appendix III (Website Analysis), IV (Web page Analysis), and V (Resource Analysis).[6]

Validity. Krippendorf makes a distinction between three types of validity: face, social and empirical validity (2004:319). When something has face validity, the findings are accepted because they 'make sense.' Social validity indicates that findings contribute to the public discussion of important social issues. This study will have this type of validity because it adds to our understanding of the modern American environmental movement's treatment of the role of consumption in the debate on environmental degradation. Empirical validity is achieved when available evidence backs up the

[6] Further guidance in this process is given in chapter 11 of Krippendorf's seminal text on content analysis.

findings of the study. This evidence can come from three different sources: content, internal structure and relations to other variables. If the evidence is based on the content we either have sampling validity, which means that the sample accurately reflects the population, or semantic validity, which means that the categories identified in the analysis correspond to the meaning of the data in the chosen context. Because I am expanding on Brulle's research there is evidence that my sample accurately reflects the population. If evidence is based on the internal structure, we either have structural validity (available data corresponds with the modeled relationship), or functional validity (findings indicate a similarity to previous analyses). Finally, the evidence can be based on the relationship to other variables. In this case there is either correlative validity or predictive validity. Correlative validity either means that there is convergent validity, which is achieved if the results correlate to a known measure of the same phenomena or discriminant validity when there is a low or no correlation between the results and a known measure of a different phenomenon. Finally, predictive validity is met when the findings accurately predict future events[7].

[7] Further information is presented in chapter 13 of Krippendorf (2004).

Conclusion

In this chapter I explained that my study is going to investigate the modern American environmental movement's treatment of individual and household consumption. Furthermore, I introduced four hypotheses which are related to this question. By using a content analysis of websites of the environmental movement I expect to be able to answer the research question. It was suggested that of the eleven different worldviews that Brulle distinguished between I select two from each as well as ensure that the ten largest, most influential environmental organizations are included, as well as the nine richest organizations. This means that my conclusions are going to be based on a total of twenty eight organizations which would a good indication to the extent to which the environmental movement is framing consumption as a problem. Moreover, by distinguishing between the different worldviews I can investigate the internal diversity present between the different worldviews but also within a specific worldview. Finally, by including the ten largest, most influential movements and the nine richest organizations I have some level of certainty that the organizations in my sample are not just small, localized organizations.

CHAPTER IV

FINDINGS

Introduction

In this fourth chapter I introduce the results that I found by using the methodology provided in the previous chapter. This task is divided into several parts: First, I provide a detailed description of the data collection process. Next, the quantitative results (as provided by answering the hypotheses) are explained. It is here where an answer is provided to the question whether the environmental movement treats consumption the same way across the different organizations or if there are differences. Moreover, I explain whether the language used is more optimistic or pessimistic in nature. The final quantitative finding discussed is whether there is indeed more diagnostic framing. The third and final part of this chapter is devoted to reviewing the qualitative findings of this study. This is done twofold: a) how does the environmental movement as a whole treat consumption in its diagnostic, prognostic, and motivational framing, and b) how is this for the eleven different worldviews? This chapter serves as a stepping stone to the fifth and final chapter of the dissertation where I conclude the study with an interpretation of the findings and a discussion of future research directions.

Data Collection

Appendix II illustrates the process that was planned for this dissertation research. However, a few changes needed to be made, based on the experiences of the actual data collection. Below is a description of the process of collecting the data.

Step 1: Finding documents.

Using pre-selected keywords of "consumption", "consumer", "lifestyle", "shopping", "purchasing", and "buying" the websites[8] in the sample were searched for relevant documents.

Step 2: Including / Excluding documents.

A document was included as relevant if:

- It was published after 2000
- It dealt with or related to the U.S.
- It was authored by the movement organization (or its staff)
- It was not a blog post, magazine article, or unedited copy from a different source (newspaper, magazine[9])
- It dealt with the problem of and / or solution to individual and household consumption

The decision to include a document was made in the following order:

[8] There were two changes to the sample as presented in Table 2. Two of the websites did not work at the moment of data collection. First, the Ecofeminist organization Mothers and Others for a Livable Planet was replaced by Women's Voices for the Earth. This new organization was the middle organization in the excel file provided by Brulle (the excel file was used because the only other Ecofeminist organization in Appendix 1 is an international organization rather than a U.S. one). Second, the Wise Use organization Defenders of Property Rights was replaced by Keep America Beautiful, which was the last organization listed in Appendix 1.

[9] If it was a document that was authored by someone else (newspaper, organization, etc.) AND at the end of that document there were a few sentences indicating what the movement organization had to say about its content, then the document was included, but only those last sentences were considered for coding.

1. If the URL indicated a blog or magazine the document was skipped (oftentimes the URL clearly indicates that it is)

2. If the brief description accompanying the URL made it clear that the document was relevant (see the criteria above) it was included.

3. If (1) and (2) did not apply, a quick glance of the document, using the "find" option for the keywords was used in order to decide if a document would be relevant.

Step 3: Uploading to NVIVO

The documents were uploaded into NVIVO and some of the included documents were eliminated. Reasons for why these documents were included before but subsequently removed for further analysis were:

- The document discussed consumption but it was not related to individual consumers or households. In some cases it was a communication to schools, congregations, offices, all of which are important areas, but not the focus of this research. If a document discussed what individuals could do at their workplace it was included, but not if the focus was on the workplace in general.
- The document discussed individual/household consumption, but the focus was on either the government or corporations having to change their behavior without any action from consumers. While it could be argued that these documents are information for consumers they do not explicitly deal with individual consumers/households.
- The documents were blogs, magazine articles, or reprinted stories from other media sources. These all classify as resources, but not as documents

for this analysis. If it is a newspaper story, but at the end of the document the movement includes a brief response that last part is coded.

- The documents discussed events that had already passed (not relevant anymore).
- Finally, some of the documents dealt with non-US related countries.

Step 4: Coding Sentences

After this the coding of the documents began. The analysis is a sentence by sentence analysis and a sentence could receive the following codes:

- No code: the sentence is not relevant for the scope of the study.
- Diagnostic: the sentence discussed why consumption is problematic, how it is problematic, what the problems are, including what the consequences of consumption are.
- Prognostic: the sentence discussed what the solutions could be to the problem of consumption, why these solutions work, why they do not work, what are obstacles to these solutions, and evidence or case studies that illustrate the solutions.
- Motivational: if there is a clear call for people to take action, ranging from simply clicking a link for further information on the topic to actual calls for behavior.
- Resource: if a sentence was referring to an organization, document, or other source of further information.

A sentence can be coded several times. First, every relevant sentence has a general code (usually one of the above, rather than a combination). Second, every

diagnostic/prognostic/motivational sentence could be further coded into specific diagnostic frames. Thus if a sentence is classified as diagnostic, and there are four different diagnostic examples the sentence receives a code for all four categories. As much as possible only one of these diagnostic frames is assigned to each diagnostic sentence.

Step 5: Categorizing Diagnostic Frames

After going through each of the documents, it was decided to have the following eight categories for placing all the sentences that were coded as diagnostic frames:

- (1A) Animal health - if the problem associated with consumption led to a negative health effect of animals. This includes lack of access to water, comfort levels, animal testing, pain, and even death.
- (1B) Human health - if the consumption of the product leads to a negative health effect for humans. This includes statements about toxics and chemicals in the product.
- (1C) Health of the planet - if consumption of the product in some way negatively affected the planet. This could be things such as resource extraction as well as related forms of degradation (withdrawal). This also includes statements about the additions to the earth such as waste and pollution.
- (2) Legal problems - this includes statements such as “not enough legal protection”, “lack of oversight”, or “legislation allows for the continuation of the problem”.

- (3) Changed diet, driving, demand - if the problem is caused by the fact that we have changed our diets, our driving behavior, or simply consume more products than before.
- (4) Materialistic consumer lifestyles - related to (3) but more explicitly dealing with our lifestyles that are the cause of the problem rather than talking about a change in our behavior.
- (5) Consumer awareness - consumers are unaware of the problem, the lack (or confusing nature) of labels, as well as statements that indicate that corporations are (trying) to mislead consumers.
- (6) Prices - statements that indicate that the problem is that organic, locally produced, or healthy choices are more expensive.

Step 6: Categorizing Prognostic Frames

The difference between solutions and calls for action are that the solutions are those sentences that discuss ways to mitigate the problem but do not go as far as to actually communicating to people that they "should" or "ought" to do so. Of course many solutions require governmental, organizational, or a business action rather than consumer initiatives. The sentences with prognostic frames were coded into the following seven categories:

(1) Change behavior, etc. - If the solution is to enact changes into our own behavior, without explicitly mentioning supporting / avoiding something.

(2) Support - if the solution is to support certain corporations, products, ingredients, or even local businesses. If there is a discussion about which type is better than

the other, the statement fits here, rather than seeing as change something, support, and avoid.

(3) Avoid - if the solution is to avoid certain corporations, products, ingredients, or non-local businesses. A call to stop wasteful consumption is included here as well.

(4) Reduce, Recycle & Reuse – if the solution is not to support or avoid something but rather to reduce the amount consumed. This includes solutions that indicate that recycling and reusing products is the right way.

(5) Consumer education - if the solution lies in raising awareness or educating the consumer.

(6) Corporate behavior - any solution that is done at the corporate level, whether that is offering different products, or enacting clearer labeling.

(7) Legal - if the solution lies in the enforcement or creation of legislation at the government or organizational level. This category includes a call for a standard for humane treatment of animals.

Step 7: Categorizing Motivational Frames

Finally, sentences with motivational frames were coded into seven separate categories:

(1) Inform / Learn - This refers to any statement that calls on people to know more, find out more information, read something, get a copy of a report, read related stories, use a particular checklist in behavior, further information about actions, calling them to read labels, etc.

(2) Contact - Any statement that asks people to contact a group, person, salesperson, store, company, lawmaker, legislator, movement, police, etc.

(3) Support - Any statement that asks people to support something whether it is a store, movement, product, service, ingredient, method, law, etc. Exception: supporting recycling is not coded here.

(4) Avoid - Any statement that asks people to avoid something whether it is a store, product, service, ingredient, method etc.

(5) Reduce, Recycle, Reuse - Statements that asks people to not completely avoid something but rather to reduce usage, recycle, and reuse products etc.

(6) Change behavior - If it was not clear whether the change in behavior required people to reduce usage but rather involved a different approach to a typical behavior. Specific guidelines on how to do something is included here as well, unless there is a clear indication whether this supports, avoids, or reduces something.

(7) Do-It-Yourself - If the statement calls on people to do something on their own.

Step 8: Coding Resources

The term resources in this research refers to a reference made to something that backs a claim provides further information. Resources were coded into the following categories:

(1) Government – any reference made to a government organization or legislative body. For example: EPA.

(2) Academic – any reference made to a scientific / academic source.

(3) Movement – any reference made to the movement organization that authored the document.

(4) Organization – any reference made to other social movement organizations.

(5) Corporations – any reference made to corporations.

(6) Other – any reference made that does not fit in the aforementioned categories.

Step 9: Results.

Appendix VI presents an overview of all the documents included in the sample, with an indication of how many sentences in each document were diagnostic, prognostic, and motivational. There is a number for the total number as well as per specific category within diagnostic, prognostic, and motivational.

Overview of Quantitative Results

The research question that guided this research was as follows:

> *How does the modern American environmental movement treat consumption as reflected by its diagnostic, prognostic and motivational framing?*

The twenty eight movement organizations in the sample had a combined 525 documents with a total of 28,627 sentences on their respective websites (although none of the organizations mentioned consumption on their homepage). Of these sentences, 15,886 contained diagnostic, prognostic, and motivational framing (the results for each of the individual documents are found in Appendix VIII and IX). Based on this sample, the modern American environmental movement seems to devote some attention to individual and household consumption but to differing degrees. Whereas neither of the two Environmental Justice organizations seems to devote any attention to consumption (at least based on the specific search procedure in this study) other worldviews seem to devote more attention to the issue. Some of this makes sense based on the specific focus of organizations belonging to these worldviews. For example, Environmental Justice organizations typically rally around a specific injustice in a specific community and may not have an agenda beyond that issue (nor may they have the resources).

Thirteen organizations had less than ten documents (seven of those had zero documents). This does not necessarily mean that these organizations do not devote much attention to the issue of individual and household consumption. Rather it indicates that based on the specific search procedure and selection of documents used in this dissertation not many documents were revealed[10]. It is not unlikely that in blogs, magazines, and newsletters more attention is devoted to the particular issue of consumption. Therefore, the results only relate to the specific procedure used here and should not be generalized beyond the scope of this study.

On the other hand, 303 documents were found on the ten websites of the organizations belonging to Preservation and Reform Environmentalism, while eight of those belong to the Group of 10, and all but one is listed among the richest environmental movement organization. Thus, it seems that when it comes to consumption it is within these two worldviews where the most attention is devoted to the topic. On average about thirty documents are found on the websites of each of these ten organizations; among the other categories only Environmental Health and Ecospiritualism come close to that average. Thus, while some organizatons within the environmental movement devote no or little attention to consumption, other organizations seems to devote a lot of attention. (Although not every organization belonging to a particular worldview has a similar degree of attention to consumption.)

When it comes to the question of how consumption is treated through the framing activities of the movement, there are a variety of ways to look at this. As can be seen in the table on the next page, the most frequent types of diagnostic, prognostic, and motivational framing as measured through the number of documents as well as the

[10] The criteria are explained on page XXX.

number of sentences devoted to each of these framing tasks is displayed. In order to distinguish between the environmental movement as a whole and the organizations belonging to the Group of 10 and the richest organizations, the table presents the results for all three of these layers.

Table 3: Most Popular Categories of Framing[11]

	Diagnostic		**Prognostic**		**Motivational**	
	Documents	**Sentences**	**Documents**	**Sentences**	**Documents**	**Sentences**
Movement	250 (48%)	3,516 (12%)	183 (35%)	1,741 (6%)	438 (83%)	10,618 (38%)
	D1c (96)	D1c (1,173)	P2 (60)	P2 (566)	M1 (285)	M6 (2,829)
	D1b (92)	D1b (968)	P4 (57)	P4 (443)	M3 (174)	M3 (2,551)
	D1a (52)	D1a (426)	P7 (37)	P6 (252)	M2 (112)	M1 (1,778)
			P6 (36)	P7 (185)	M6 (93)	M5 (1,628)
			P5 (35)	P5 (110)	M5 (92)	M2 (669)
Group of 10	150 (47%)	2,366 (14%)	111 (35%)	1,194 (7%)	255 (81%)	7,624 (44%)
	D1c (74)	D1c (1,079)	P4 (36)	P2 (456)	M1 (168)	M6 (2,269)
	D1b (49)	D1b (538)	P2 (35)	P4 (222)	M3 (100)	M3 (2,127)
	D3 (31)	D4 (250)	P6 (27)	P6 (219)	M6 (67)	M1 (1,258)
	D1a (24)	D3 (217)	P5 (26)	P7 (110)	M5 (58)	M5 (893)
	D4 (19)	D1a (140)	P7 (18)	P5 (92)	M2 (51)	M2 (351)
High Income	93 (46%)	1,778 (15%)	67 (33%)	876 (7%)	169 (82%)	5,279 (45%)
	D1c (54)	D1c (957)	P4 (24)	P2 (324)	M1 (104)	M6 (1,817)
	D1b (18)	D4 (246)	P2 (17)	P4 (177)	M3 (57)	M3 (1,137)
	D4 (18)	D1b (237)	P5 (17)	P6 (142)	M6 (44)	M1 (861)
	D3 (17)	D3 (175)	P6 (15)	P5 (58)	M5 (32)	M5 (610)

Overall, 83% of all the documents in the sample include motivational framing, compared to 48% of the documents including diagnostic framing. This means that in general more attention is paid in calling people to engage in action rather than explaining the problem, why action is necessary, and what solutions might work. A similar pattern arises when looking at the framing activities within the sentences, albeit with lower percentages. These percentages are remarkably similar for the movement as a whole, the group of 10 organizations, as well as the richest organizations. The similarity in findings is likely a

[11] The chi-square lambda was significant for the documents and sentences at the organizational level with the exception of D6 (.067), the other frames were significant at .000 (except D2, D4 at .001; and P3 at .002). At the worldview level for the documents only D1c is significant (.043), and three others are nearing significance: D3 (.067), M1 (.067), M4 (.086). At the worldview level for the sentences nothing is significant, but D1c (.086) and M1 (.067) are near significance.

result that of the twenty eight organizations 35% of them belong to the Group of 10 and 29% of them belong to the richest organizations of the entire movement.

In the subsequent section I review the three core framing tasks for the environmental movement by providing examples of the different frames. When discussing the qualitative findings more examples of the different frames are provided.

Diagnostic Framing

What can be derived from Table 3 is that the most common diagnostic frames are that consumption is problematic because of health related concerns. This is true both measured in number of documents as well as number of sentences. While the first two diagnostic frames remain the same for the Group of 10 and the richest organizations, instead of arguing that consumption harms animal health, for the Group of 10 as the third most common diagnostic frame is that behavior has changed, and the richest organizations diagnose that materialistic lifestyles are the problem. Table 4 below shows the number of documents and number of sentences for the entire sample and for all diagnostic frames.

Table 4: Diagnostic Framing

Movement		**#D**	**D1a**	**D1b**	**D1c**	**D2**	**D3**	**D4**	**D5**	**D6**
Total	#d	251	52	93	96	37	38	32	34	6
	#s	3,472	426	960	1,167	127	253	322	182	55

Close to half (48% to be precise) of all the documents in the sample included diagnostic framing. While the health related problems of consumption were discussed in many documents (although the health of animals is discussed less frequently than the other two) one can derive from Table 4 that the other diagnostic frames were discussed much less. This is true both in number of documents as well as number of sentences. Next I discuss the diagnostic frames in order of most often used.

Health related concerns. By far the most often used diagnostic frame were concerns related to health. There are three diagnostic frames that are used: 1) health of the planet, 2) human health, and 3) animal health. Of these, animal health was mentioned less frequently, but still was the third most frequent diagnostic frame for the entire movement. Thus, as a whole the environmental movement considers consumption to be problematic because of the negative health impacts it has on the planet as well as on humans. Below is one example of each of these three frames.

> "Burning fossil fuels, such as gas in your car, emits heat-trapping pollution like carbon dioxide (CO2) that contributes to global warming." (EDF36, Health of the Planet)

> "Study Finds Eating Contaminated Fish Increases Risk of Breast Cancer. A new study by researchers at the University of Wisconsin has found breast cancer rates were higher for pre-menopausal women (the average age of menopause in 51) in Wisconsin who consumed sport fish contaminated with DDT, PCBs, and PBDEs." (BP3, Human Health)

> "To boost their milk production, the cattle are fed high intensity feeds and grains that often cause digestive upset. They are also injected with Bovine Growth Hormone (BGH) to increase by up to 25% the already exorbitant amount of milk they produce." (API2, Animal Health)

Lifestyles and Changed Behavior. Beyond the health related concerns, the next two most frequent diagnostic frames were the fact that materialistic consumer lifestyles and changed consumer behavior is why consumption is problematic.

> "Lifestyles dominated by consumerism despoil the earth and deplete resources that could be shared with the poor. Such lifestyles separate us from the grace and humility of our lord Jesus Christ, who emptied himself for our sakes to give us another way of living." (NRPE3, Materialist Consumer Lifestyles)

> "Research shows that America's children consume too many fats and sugars-and not enough dairy, fruits, and vegetables-when compared with dietary guidelines." (EDF39, Changed Diets)

Consumer Awareness. The third category of diagnostic frames related to the fact that consumers are not always aware about the impact of their consumptive choices, about the existence of alternatives, or as the following passage illustrates of claims made by corporations.

> "Unfortunately, such liberties may include manipulating consumers into purchasing products with mere final product claims. There are no repercussions for companies that make deceptive 'not tested on animals' claims, because they are likely being truthful in the literal sense. A company itself may very well not test; it may not even commission or contract testing on its behalf. However, ingredient suppliers may engage in testing, and companies may purchase ingredients with a 'don't ask, don't tell' philosophy. Or testing may occur in a parent company, while the subsidiary company - which labels the product - has not actually done the testing itself. What all this means is that a statement on packaging may be literally correct - enough so to shield the company from accusations of legal breaches or public relations problems - while also being disingenuous, if not downright deceptive. A company's "we don't test on animals" language may be at face value true, but animals are still suffering and dying to make the company's products!" (API16)

Legal Problems. Another diagnostic frame that was mentioned frequently was that consumption is problematic because legislation or the enforcement (or lack thereof).

> "Air fresheners are not tested for a variety of chemicals, including phthalates, because the government does not require it. 'Manufacturers are getting away with marketing products as 'natural' when they're not, and that's because no one is stopping them,' said Mae Wu, an attorney in NRDC's health program. 'Our research suggests this could be a widespread problem in a booming industry that - so far - has been allowed to do what it wants.' The tests, believed to be the first in the United States, cover only a fraction of the air freshener market." (NRDC18)

Prices. A final diagnostic frame, one that was only mentioned in only a few documents was that consumption was problematic because better alternatives are more expensive or that as the following passage illustrates, that the prices consumers pay do not necessarily reflect the actual cost.

> "But first we need to look at the current landscape: The way food is produced and the way we eat create huge costs that are not reflected in our food bills. Some are actual dollar amounts (subsidies and cleanup costs that we pay for in taxes); some are damage to the environment (pollution and loss of wildlife habitat); some are loss of quality of life (tasteless food, loss of the pleasure of preparing food and eating together); and some are health issues (obesity, diseases, poor nutrition, contaminated food). In most cases, sustainably-grown food does cost more on the checkout line than mass-produced food. Organic methods are more labor intensive than conventional, and thus more expensive in the short run." (S24)

Prognostic Framing

As far as prognostic frames go, Table 3 illustrates that the two most common frames for the movement as a whole, the Group of 10, and the richest organizations remain the same (although the order flips): "support" or "reduce, recycle & reuse". This is true for both the number of documents that mention these solutions as well as the number of sentences devoted to discussing these solutions. Table 5 presents the results for all of the prognostic frames measured both in number of documents and sentences.

Table 5: Prognostic Framing

Movement		#P	P1	P2	P3	P4	P5	P6	P7
Total	#d	183	19	60	18	57	35	36	37
	#s	1,733	91	564	97	437	109	250	185

Support and Recycling. By far the two most frequently mentioned solutions were either to support something or to reduce, recycle and reuse. This is true both in the number of documents as well as number of sentences. As the first quote below illustrates, the prognostic frame "support" differs from the motivational one, because it does not explicitly call people to do something, but rather explains that the movement is in favor of something. The second quote illustrates that reducing, recycling, and reusing is considered to be a solution.

> "API and the members of the Coalition for Consumer Information on Cosmetics (CCIC) support the Leaping Bunny logo. This logo offers the assurance of a company's compliance with the CCIC Standard, which

> proves that its products and ingredients are not tested on animals." (API13, Support).
>
> "If every household in the U.S. made energy-efficient choices, we could save 800 million tons of global warming pollution-more than the heat-trapping emissions from over 100 countries." (EDF43, Reduce)

Corporations and the Government. Beyond these two actions that individuals can take, it appears that the environmental movement seems to suggest that the solution lies not at the individual level but that it needs to originate either at the corporate or government level. The first quote illustrates that corporations sometimes do the right thing (in the eyes of the movement). The second quote explains that legal solutions can originate from different levels. In this case the EPA could be solution to the problem of consumption.

> "Many companies support such efforts through donating to humane research charities or by establishing their own non-animal testing facilities." (API13, Corporate)
>
> "According to Dr. Jeffery Foran, a toxicologist who reviewed the state's health warnings under contract to Clean Water Action Council, EPA has developed a risk-based fish consumption advisory designed to be fully protective of human health. If it were used, the public would be warned to virtually eliminate all consumption of Fox River fish." (BP3, Legal)

Consumer Education. The next most frequently mentioned solution was that consumers needed to be educated about their consumptive decisions. The following quote indicates: doing the 'right' thing does not always have to cost money.

> "Education is important, as many people are unaware of many of these effective and simple things they can do to save energy and money in their homes." (IWL1)

Avoid and Change Behavior. The two least frequently mentioned solutions were to avoid certain consumptive choices or to change behavior. While they were only

mentioned in a few documents, the following two quotes illustrate why the movement suggests these solutions.

> “"American consumers can protect their families and the environment by avoiding the purchase of products that contain mercury and properly disposing of mercury products they already have," concluded Stadler.” (NWF9, Avoid)

> “A plant-based diet has profound benefits for animals, for the planet, and for human health.” (API1, Change Behavior)

Motivational Framing

Table 6: Motivational Framing

Movement		#M	M1	M2	M3	M4	M5	M6	M7
Total	#d	442	285	112	174	76	93	92	21
	#s	10,641	1,764	661	2,549	557	1,623	2,822	656

The two most common calls to action were to “inform / learn” and “support”. While the most common call to action was to “inform / learn” this slightly changes when looking at the number of sentences it drops to the third place, and is replaced by a call to “change behavior”. This drop in rank is not very surprising, because a call to learn or read more about something can be done in a few words, whereas other calls for action may need further elaboration. I provide an example for each of these motivational frames in order of their frequency.

Inform. Over half of all documents that were found included a call for people to inform themselves about something in greater detail. These calls could be various things, such as the example provided here, where the call to inform themselves referred to a specific chart.

> “For specific consumption advice, view our Health Alert chart for adults and the Health Alert chart for children.” (EDF9)

Support. The second most frequent call to action (as measured in the number of documents it was brought up in) was to support products, stores, movements, organizations, legislation. To illustrate the difference between a prognostic and a motivational frame the example provided is related to the prognostic frame of support. This quote clearly indicates a specific call to consumers to do support particular products from particular companies.

> "Shop with confidence and compassion by only purchasing products from companies approved by the Coalition for Consumer Information on Cosmetics (CCIC) - the Leaping Bunny program." (API21)

Change Behavior. While the call to support was brought up in more documents, the call to change behavior was present in more sentences. In keeping with the most frequent diagnostic frame, the second quote below refers to a call to act in relation to the negative health impacts of consumption. The rise of soaps including Triclosan is considered to be problematic according to several organizations belonging to the environmental movement. This call is to convince people to change the way they change their behavior (in this case how to wash their hands).

> "Here are some guidelines on keeping clean without antimicrobials: Wash hands frequently and thoroughly. Regular soaps lower the surface tension of water, and thus wash away unwanted bacteria. Lather hands for at least 10 to 15 seconds and then rinse of in warm water. It is important to wash hands often, especially when handling food, before eating, after going to the bathroom, and when someone in your house is sick. Dry hands with a clean towel to help brush off any germs that did not get washed down the drain. Wash surfaces that come in contact with food with a detergent and water. Wash children's hands and toys regularly to prevent infection. If washing with soap and water is not possible, use alcohol-based sanitizers." (BP39)

Reduce. The call to reduce, recycle & reuse was the fourth most frequent motivational frame both in terms of the number of documents it was brought up in as well

as the number of sentences used to elaborate on this. The following quote (which also indicates a call to avoid) illustrates that what is needed is a reduction of consumption of a particular (food) product. It is not coded as a call to change behavior, because it is explicitly talking about reducing consumption.

> "What to Do: Decrease or eliminate poultry products - meat and eggs - from your diet. Decrease or eliminate foods containing poultry products from your diet." (API3)

Contact. Another frequent call to act was to contact someone or some organization. This call to contact could refer to stores, organizations, movements, governments, et cetera. The following passage illustrates the range of this frame.

> "Tell Target to phase out dangerous plastics - Polyvinyl chloride also known as vinyl, is one of the most hazardous consumer products ever created. Target's aisles are filled with products made from this plastic. Tell Congress to protect the Amazon - The Bush administration is pushing Congress to approve a free trade agreement that will put the Amazon rainforest on the chopping block. Get Toxic Chemicals out of Cosmetics - Tell the cosmetics industry that toxic chemicals don't belong in personal care products." (FOE20)

Avoid. One of the least frequent calls to action was to avoid. One of the biggest concerns shared in the environmental movement were health impacts of consumer products. The quote below explains, that consumers are urged to avoid products that have negative health impacts.

> "When purchasing personal care products such as deodorant, toothpaste and soap, always check the ingredient listing and avoid those that contain triclosan and triclocarban." (BP77)

D-I-Y. The least frequent call to act was to do something yourself. This call was only brought up in 4% of the documents in the sample.

> "Pet Food Shopping Checklist. The most reputable manufacturers of 'superpremium' and 'natural' foods agree with holistic veterinarians and other experts that the very best diet for your animal companion is one that

> you make yourself. A homemade diet, carefully balanced nutritionally and using organic foods, is closest to what Mother Nature intended." (API4)

References to Consumption

The first hypothesis was that "References to consumption will not be uniform across the modern American environmental movement." We fail to reject this hypothesis. Of the 525 documents that were found among the twenty eight movement organizations in the sample, there was considerable variation in the following criteria: 1) the number of documents; 2) the number of sentences within these documents devoted to framing; and 3) the number of resources. In the next paragraphs I explain how these criteria are different across the environmental movement. In addition to that I examine to what degree the environmental movement differs on three criteria, identified by Benford and Snow (2000), related to framing activities of the different movement organizations[12]: 4) assignment of responsibility; 5) number of issues addressed; and 6) credibility of the argument.

As can be seen in Table 7, most of the findings are statistically significantly different. This means that the environmental movement differs in its attention to consumption based on number of documents, number of sentences in these documents that contain framing, and the number of resources offered in these documents. Thus, for different levels of analysis - the twenty eight individual organizations, the eleven worldviews, within the Group of 10, and within the richest organizations – there is a different degree of attention to consumption. I now discuss each of the three measures.

[12] Benford and Snow (2000) address a fourth issue - master frame - but given the fact that all of the organizations in our sample belong to the environmental movement; they should all be considered part of the master frame environmentalism.

Table 7: Overview of Results

Type: Individual Organizations	# Doc.[13]	# Sent.[13]	# Res.[13]
Association of Forest Service Employees for Environmental Ethics	0	0	0
Animal Protection Institute	37	866	115
Alliance for Wild Rockies	0	0	0
Beyond Pesticides	63	753	89
Coalition on Environment and Jewish Life	35	1,119	54
Center for Health, Environment and Justice	14	370	33
Defenders of Wildlife	15	212	26
Environmental Defense Fund	62	2,034	117
EarthFirst!	0	0	0
Friends of the Earth	17	252	35
Izaak Walton League	4	34	2
Keep America Beautiful	6	256	2
National Audubon Society	23	754	32
Nature Conservancy	14	536	47
Natural Resources Defense Council	31	1,322	52
National Religious Partnership for the Environment	17	98	5
National Tribal Environmental Council	0	0	0
National Wildlife Fund	24	1,288	10
Population Council	1	32	1
Rainforest Action Network	11	354	6
Sierra Club	64	3,466	165
Trust for Public Land	0	0	0
Voice for Animals	1	1	0
Women's Council on Energy and Economic Development	0	0	0
Wildlife Conservation Society	2	37	0
Wilderness Society	0	0	0
Women's Voices for the Earth	8	247	45
World Wildlife Fund	76	1,820	10
Entire sample	525	15,885	846
Type: Worldviews	**# Doc.[14]**	**# Sent.[13]**	**# Res.[15]**
Animal Rights	38	867	115
Conservation	4	34	2
Deep Ecology	8	353	6
Ecofeminism	8	247	45
Environmental Health	77	1,123	122
Environmental Justice	0	0	0
Ecospiritualism	52	1,217	59
Preservation	192	6,788	280
Reform Environmentalism	111	3,640	205
Wildlife Management	26	1,325	10
Wise Use	6	256	2

[13] Chi-square using Lambda is significant (.000).
[14] Chi-square using Lambda is significant (.014).
[15] Chi-square using Lambda is not significant (.067).

Type: Group of 10	# Doc.[13]	# Sent.[13]	# Res.[13]
Izaak Walton League	4	34	2
Defenders of Wildlife	15	212	26
National Audubon Society	23	754	32
Sierra Club	64	3,466	165
Wilderness Society	0	0	0
World Wildlife Fund	76	1,820	10
Environmental Defense Fund	62	2,041	117
Natural Resources Defense Council	31	1,318	52
Friends of the Earth	17	252	35
National Wildlife Federation	24	1,288	10
All of Group of 10[16]	316	11,184	459
Type: Richest organizations	**# Doc.[13]**	**# Sent.[13]**	**# Res.[13]**
Nature Conservancy	14	536	47
Wildlife Conservation Society	2	37	0
Population Council	1	32	1
World Wildlife Fund	76	1,820	10
National Audubon Society	23	754	32
Trust for Public Land	0	0	0
National Wildlife Fund	24	1,288	10
Sierra Club	64	3,466	165
All of Income[17]	204	7,933	265

Number of Documents

The first measure included in this study was the number of documents found on the different websites. A total of 525 documents were found on the twenty-eight websites in the sample, but there was considerable variation. The range for the number of documents found was from 0-76, with an average of 18.75 documents per organization. While seven organizations, or a quarter of the sample, had no documents (based on the criteria used in this study) on their websites, four other organizations (Beyond Pesticides, Environmental Defense Fund, Sierra Club, and World Wildlife Fund) each had over 60

[16] If the same chi-square is used for the four worldviews that make up the Group of 10 (Conservation, Preservation, Reform Environmentalism, and Wildlife Management) the chi-square using Lambda remains significant (.038).

[17] If the same chi-square is used for the four worldviews that make up the richest organizations (Conservation, Preservation, Reform Environmentalism, and Wildlife Management) the chi-square using Lambda remains significant (.028) for two measures (documents and sentences) but is not significant for the third measure (resources: .102).

documents on their website and together they contributed 205 documents (or 40% of the total number of documents). Five other organizations (Animal Protection Institute, Coalition on the Environment and Jewish Life, National Audubon Society, National Wildlife Fund, and Natural Resources Defense Council) each contributed between 23 and 37 documents. The remaining nine organizations each had fewer than the average number of documents in the sample (range: 1-17 documents). What these results indicate is that there is quite some fluctuation across the different social movement organizations.

The second level of analysis is the eleven different worldviews. If attention is the same across these different worldviews, the average number of documents for each worldview should be 47.7 documents. Looking at Table 7 one can see that this is not the case: the spread is from 0-192 documents. However, this could be a result of having a different number of organizations for each of the eleven worldviews. Table 8 presents the number of documents for each of the eleven worldviews followed by an average per organization for these worldviews, which ranges from 0-38 documents.

What can be derived from this is that the different discursive communities that are present within the environmental movement differ from one another (in their attention to consumption). While some worldviews give no (Environmental Justice) or only marginal (Conservation, Deep Ecology, Ecofeminism, and Wise Use) attention to consumption, others (Environmental Health, Preservation, Reform Environmentalism, and Ecospiritualism) devote much more attention to individual and household consumption on their websites. However, clearly not all organizations that belong to a particular worldview devote the same degree of attention to consumption.

Table 8: Overview of Average Number of Documents per Worldview

Worldview	Organization	Doc.	Tot.	Avg.
Animal Rights	Animal Protection Institute	37		
	Voice for Animals	1	38	19
Conservation	Izaak Walton League	4		
	Trust for Public Land	0	4	2
Deep Ecology	Earth First!	0		
	Rainforest Action Network	11	11	5.5
Ecofeminism	Women's Voices for the Earth	8		
	Women's Council on Energy and the Environment	0	8	4
Environmental Health	Beyond Pesticides	63		
	Center for Health, Environment and Justice	14	77	38.5
Environmental Justice	Association of Forest Service Employees for Environmental Ethics	0		
	National Tribal Environmental Council	0	0	0
Ecospiritualism	Coalition on Environment and the Jewish Life	35		
	National Religious Partnership for the Environment	17	52	26
Preservation	Defenders of Wildlife	15		
	National Audubon Society	23		
	Nature Conservancy	14		
	Sierra Club	64		
	Wilderness Society	0		
	World Wildlife Fund	76	192	32
Reform Environmentalism	Environmental Defense Fund	62		
	Natural Resources Defense Council	31		
	Friends of the Earth	17		
	Population Council	1	111	27.75
Wildlife Management	National Wildlife Federation	24		
	Wildlife Conservation Society	2	26	13
Wise Use	Alliance for the Wild Rockies	0		
	Keep America Beautiful	6	6	3

What about the Group of 10? While the ten organizations that make up this group of the allegedly most influential organizations differ in their individual attention to consumption, together they account for the majority of all documents in the sample. Although these organizations represent 60% of the sample, this is largely a result of three organizations: two Preservation organizations (Sierra Club and World Wildlife Fund) and one Reform Environmentalism organization (Environmental Defense Fund). These three organizations had a combined 202 of the 316 documents for the Group of 10. If the Group of 10 is similar in nature, on average each of these ten organizations should have 31.6 documents related to individual and household consumption. As the results in Table 7 indicate this is not the case. However, if the organizations are grouped by their

respective worldviews the results are more similar, although clearly Conservation and to a lesser degree Wildlife Management organizations devotes less attention to consumption than do Preservation and Reform Environmentalism organizations.

Table 9: Average Number of Documents Per Worldview for Group of 10

Worldview	Organization	# Doc.	Total	Avg.
Conservation	Izaak Walton League	4	4	4
Wildlife Management	National Wildlife Federation	24	24	24
Preservation	Defenders of Wildlife	15		
	National Audubon Society	23		
	Sierra Club	64		
	Wilderness Society	0		
	World Wildlife Fund	76	178	35.6
Reform Environmentalism	Environmental Defense Fund	62		
	Natural Resources Defense Council	31		
	Friends of the Earth	17	110	36.67

Almost the complete opposite picture emerges when the results of the richest organizations are examined: while the Sierra Club and World Wildlife Fund represent 140 of the 204 documents found on the websites of these organizations, in total they only make up 38% of the sample. If these richest organizations are the same they should each have 25.5 documents related to consumption. As Table 10 indicates, while Conservation, Reform Environmentalism, and to a lesser degree Wildlife Management on average are similar on their attention to consumption, it is the Preservation organizations that devote much more attention to consumption.

Table 10: Average Number of Documents Per Worldview for Richest Organizations

Worldview	Organization	# Doc.	Total	Avg.
Conservation	Trust for Public Land	0	0	0
Reform Environmentalism	Population Council	1	1	1
Wildlife Management	Wildlife Conservation Society	2		
	National Wildlife Federation	24	26	13
Preservation	Nature Conservancy	14		
	World Wildlife Fund	76		
	National Audubon Society	23		
	Sierra Club	64	177	44.25

What the numbers in the last two tables indicate is that the different worldviews represent a significant difference even if you only examine the most influential organizations or the richest organizations.

Number of Sentences

The second measure that was included in this study was the number of sentences that include the three core framing tasks. The sentences in Table 7 represent an absolute number (count) of this measure and indicate that there is indeed a significantly different degree of attention to consumption across the 28 organizations. In order to be better able to compare the different organizations, Table 11 presents the relative attention (as measured in percentages) each organization devotes to framing. This is important because it informs us whether or not certain organizations devote more attention to the three core framing tasks or if this attention is relatively the same[18]. For example, 300 sentences that include framing might seem like a lot of attention but it becomes much smaller if the total number of sentences is 600, 3000, or higher. In essence, just looking at an absolute count of sentences is not enough.

[18] The chi-square Lambda was significant (.000)

Table 11: Percentage of Sentences That Include Framing

Organization	Tot. Sent.	Framing	%[18]
Association of Forest Service Employees for Environmental Ethics	0	0	0
Animal Protection Institute	1,778	866	49
Alliance for Wild Rockies	0	0	0
Beyond Pesticides	1,832	753	41
Coalition on Environment and Jewish Life	2,638	1,119	42
Center for Health, Environment and Justice	610	370	61
Defenders of Wildlife	404	212	52
Environmental Defense Fund	3,394	2,034	60
EarthFirst!	0	0	0
Friends of the Earth	719	252	35
Izaak Walton League	103	34	33
Keep America Beautiful	335	256	76
National Audubon Society	1,025	754	74
Nature Conservancy	833	536	64
Natural Resources Defense Council	1,953	1,322	68
National Religious Partnership for the Environment	962	98	10
National Tribal Environmental Council	0	0	0
National Wildlife Federation	1,376	1,288	94
Population Council	53	32	60
Rainforest Action Network	596	354	59
Sierra Club	5,065	3,466	68
Trust for Public Land	0	0	0
Voice for Animals	21	1	5
Women's Council on Energy and Economic Development	0	0	0
Wildlife Conservation Society	47	37	79
Wilderness Society	0	0	0
Women's Voices for the Earth	1,086	247	23
World Wildlife Fund	3,437	1,820	53
Total	**28,267**	**15,885**	**56**

What the results in the table indicate is that the movement does not just differ in the absolute number of sentences that include framing, but that the percentages indicate a difference as well. On average over half of all the sentences in the documents in our sample include at least one of the core framing tasks. Most organizations (thirteen to be precise) that had documents on their website that met the search procedure of this study used framing in these documents in at least half of the sentences. However, there was considerable variation in this factor. For example, while National Wildlife Federation used framing in almost every sentence, others (especially Voice for Animals and National Religious Partnership for the Environment) employ only a small amount of framing in their documents. In the case of NRPE this is a result of the fact that many documents

contain long discussions about what different religious belief systems stand for without spending much time on discussing diagnostic, prognostic, and motivational frames relating to consumption. Thus, based on sentences in the documents, there was considerable variation across the twenty eight environmental movement organizations.

Table 12: Percentage of Framing Across Worldviews

Worldview	Tot. Sent.	Framing	%[19]
Animal Rights	1,799	867	48
Conservation	103	34	33
Deep Ecology	596	353	65
Ecofeminism	1,086	247	23
Environmental Health	2,442	1,123	46
Environmental Justice	0	0	0
Ecospiritualism	3,600	1,217	34
Preservation	10,764	6,788	63
Reform Environmentalism	6,119	3,640	60
Wildlife Management	1,423	1,325	93
Wise Use	335	256	76
Total	**28,267**	**15,885**	**56**

The results in Table 12 illustrate that the different worldviews differ in their attention to consumption through the core framing tasks. While there were no documents (and thus no framing in these documents) found on the websites for the Environmental Justice organizations, the ten other worldviews range from 23-93% of sentences that contain framing.

Table 13: Percentage of Framing Group of 10

Worldview	Organization	Tot. Sent.	Framing	%[20]
Conservation	Izaak Walton League	103	34	33
Preservation	Defenders of Wildlife	404	212	52
	National Audubon Society	1,025	754	74
	Sierra Club	5,065	3,466	68
	Wilderness Society	0	0	0
	World Wildlife Fund	3,437	1,820	53
	All of Preservation	9,931	6,252	63
Reform Environmentalism	Environmental Defense Fund	3,394	2,041	60
	Natural Resources Defense Fund	1,953	1,318	68
	Friends of the Earth	719	252	35
	All of Reform Environmentalism	6,066	3,611	60
Wildlife Management	National Wildlife Federation	1,376	1,288	94
Total		**17,476**	**11,184**	**64**

[19] Chi-square lambda is significant (.014)
[20] Chi-square lambda is significant at the organizational level (.000) but not at the worldview level (.398).

The ten most influential environmental movement organizations also differ in their attention to consumption. While the number of sentences used for framing tasks is significantly different when looking at the individual ten organizations (the percentage of sentences devoted to the core framing tasks range from 0-94), the results are not statistically significantly different when the organizations are grouped by their respective worldview. That the latter is not significant is not surprising, because on average 64% of the sentences in documents found on the websites of the Group of 10 contain framing, similar percentages were found for Preservation (63%) and Reform Environmentalism (60%). And these two groups contribute all but two organizations in this group.

Table 14: Percentage of Framing Richest Organizations

Worldview	Organization	Tot. Sent.	Framing	%[21]
Conservation	Trust for Public Land	0	0	0
Preservation	National Audubon Society	1,025	754	74
	Nature Conservancy	833	536	64
	Sierra Club	5,065	3,466	68
	World Wildlife Fund	3,437	1,820	53
	All of Preservation	10,360	6,576	63
Reform Environmentalism	Population Council	53	32	60
Wildlife Management	National Wildlife Federation	1,376	1,288	94
	Wildlife Conservation Society	47	37	79
	All of Wildlife Management	1,423	1,325	93
Total		**11,783**	**7,933**	**67**

The number of sentences in the documents found on the websites of the richest organizations are also significantly different both for the individual organizations as well grouped by their respective worldview.

Number of Resources

A third measure in the study related to the number of resources in the documents used by the environmental movement. In 316 (or 60% of the sample) documents at least one resource was included, for a total of 846 resources in the entire sample. For nine

[21] Chi-square lambda is significant at the organizational level (.000) and at the worldview level (.028).

organizations in the sample, no resource was mentioned, but seven of those organizations also did not have a document on their website relating to consumption. Thus, essentially every organization that had documents related to consumption on their website included resources, albeit to differing degrees. As the results in Table 7 illustrate, while the number of resources was significantly different for the individual organizations, for the Group of 10, and for the richest organizations, it was not significant (although it was nearing significance with .067) for the different worldviews.

Assignment of Responsibility

One of the ways that social movement organizations differ in their framing activities is in the manner that they assign responsibility for the problem (Benford and Snow 2000). The majority of attention in the documents found on the websites were devoted to describing what individual consumers could and should do. However, also corporations and the government are considered responsible (or rather: the solution for the problem of individual and household consumption was seen as their response). In the table on the next page the relative attention each worldview devotes to these three responsible parties is listed[22]. The way that this is determined, is that of the seven prognostic frame categories used in the study, the first five imply that solution lies with individual / household action, and there is one prognostic frame each for the corporate and governmental level.

[22] The way that these numbers are calculated is by looking at how many documents have at least one prognostic frame that either assumes that the responsibility lies with the individual (P1-P5), corporations (P6), or government (P7). This means that if a document has more than one prognostic frame it is only counted once for each of these categories of responsibility.

Table 15: Assignment of Responsibility

Organization	# Doc.	Count[23]			Percentages		
		Ind.	Corp.	Gov.	Ind.	Corp.	Gov.
Animal Protection Institute	37	12	5	13	32	14	35
Voice for Animals	1	1	0	0	100	0	0
Animal Rights	38	13	5	13	34	13	34
Izaak Walton League	4	4	0	1	100	0	25
Trust for Public Land	0	0	0	0	0	0	0
Conservation	4	4	0	1	100	0	25
Earth First!	0	0	0	0	0	0	0
Rainforest Action Network	11	5	0	0	45	0	0
Deep Ecology	11	5	0	0	45	0	0
Women's Voices for the Earth	8	0	0	0	0	0	0
Women's Council on Energy and the Environment	0	0	0	0	0	0	0
Ecofeminism	8	0	0	0	0	0	0
Beyond Pesticides	63	11	0	3	17	0	5
Center for Health, Environment and Justice	14	4	2	0	29	1	0
Environmental Health	77	15	2	3	19	3	4
Association of Forest Service Employees for Environmental Ethics	0	0	0	0	0	0	0
National Tribal Environmental Council	0	0	0	0	0	0	0
Environmental Justice	0	0	0	0	0	0	0
Coalition on Environment and the Jewish Life	35	25	2	3	71	6	9
National Religious Partnership for the Environment	17	6	0	0	35	0	0
Ecospiritualism	52	31	2	3	60	4	6
Defenders of Wildlife	15	2	0	0	13	0	0
National Audubon Society	23	8	1	0	35	4	0
Nature Conservancy	14	1	0	0	7	0	0
Sierra Club	64	44	6	8	69	9	13
Wilderness Society	0	0	0	0	0	0	0
World Wildlife Fund	76	12	6	3	16	8	4
Preservation	192	67	13	11	35	7	6
Environmental Defense Fund	62	27	5	0	44	8	0
Natural Resources Defense Council	31	11	5	2	35	16	7
Friends of the Earth	17	2	2	3	18	18	18
Population Council	1	1	0	0	100	0	0
Reform Environmentalism	111	41	12	5	37	13	5
National Wildlife Federation	24	6	2	1	25	8	4
Wildlife Conservation Society	2	0	0	0	0	0	0
Wildlife Management	26	6	2	1	23	8	4
Alliance for the Wild Rockies	0	0	0	0	0	0	0
Keep America Beautiful	6	3	0	0	50	0	0
Wise Use	6	3	0	0	50	0	0
Total	**525**	**153**	**36**	**37**	**29**	**7**	**7**

[23] Chi-square lambda was significant (.000) at the organizational level for all three actors, but at the worldview level, only the individual is significant (.031).

Because of the sample size, I cannot discuss the findings at the worldview level; however a chi-square test using lambda turned out to be significant at the organizational level. What the data seem to suggest is that every organization considers the individual to be the primary responsible actor. The reason why there is so much more attention to individuals and households is an effect of the scope of this study: I was looking for documents that discussed this problem, so it is not a big surprise that the majority of attention goes to individuals and households. Two organizations that have documents pertaining to consumption (Wildlife Conservation Society and Women's Voices for the Earth) did not attribute responsibility to any actor. Seven organizations attributed responsibility to all three actors (Animal Protection Institute, Coalition on the Environment and Jewish Life, Sierra Club, World Wildlife Fund, Natural Resources Defense Council, Friends of the Earth, and National Wildlife Federation) although individuals were still the number one group. Despite the fact that the environmental movement organizations do not seem to differ on who is considered responsible for the problem of individual and lifestyle consumption, they do differ on the degree of attention they devote to this particular aspect.

Number of Issues Addressed

The movement as a whole addresses a variety of problems related to consumption: how the health of animals, humans, and the planet is affected by it, what the problem is with lifestyles, growing demand, and (lack of) standards and legislation. While each of these issues could be further distinguished into separate categories (for example health of the animals consists of issues such as death, discomfort, animal testing, fur in fashion, etc.), this was beyond the scope of this study. However, I can still compare

the different worldviews in the number of issues that is being addressed. There are two criteria: 1) how many of the eight diagnostic frames are brought up by the eleven worldviews, and 2) the relative attention is devoted to each of these issues.

Table 16: Number of Issues Addressed (Count)

Organization	# of issues[24]
Animal Protection Institute	6
Voice for Animals	0
Animal Rights	6
Izaak Walton League	1
Trust for Public Land	0
Conservation	1
Earth First!	0
Rainforest Action Network	0
Deep Ecology	0
Women's Voices for the Earth	2
Women's Council on Energy and the Environment	0
Ecofeminism	2
Beyond Pesticides	6
Center for Health, Environment and Justice	2
Environmental Health	6
Association of Forest Service Employees for Environmental Ethics	0
National Tribal Environmental Council	0
Environmental Justice	0
Coalition on Environment and the Jewish Life	6
National Religious Partnership for the Environment	3
Ecospiritualism	8
Defenders of Wildlife	5
National Audubon Society	6
Nature Conservancy	2
Sierra Club	8
Wilderness Society	0
World Wildlife Fund	6
Preservation	8
Environmental Defense Fund	6
Natural Resources Defense Council	6
Friends of the Earth	6
Population Council	3
Reform Environmentalism	8
National Wildlife Federation	5
Wildlife Conservation Society	0
Wildlife Management	5
Alliance for the Wild Rockies	0
Keep America Beautiful	2
Wise Use	2

[24] Chi-square lambda is significant at the organizational level (.000) and at the worldview level (.021)

Table 17: Attention Devoted to Issues (Percentages)

Organization[25]	D1a	D1b	D1c	D2	D3	D4	D5	D6
Animal Protection Institute	68	8	3	35	0	3	24	0
Voice for Animals	0	0	0	0	0	0	0	0
Animal Rights	66	8	3	34	0	3	24	0
Izaak Walton League	0	0	0	0	0	0	25	0
Trust for Public Land	0	0	0	0	0	0	0	0
Conservation	0	0	0	0	0	0	25	0
Earth First!	0	0	0	0	0	0	0	0
Rainforest Action Network	0	0	0	0	0	0	0	0
Deep Ecology	0	0	0	0	0	0	0	0
Women's Voices for the Earth	0	38	13	0	0	0	0	0
Women's Council on Energy and the Environment	0	0	0	0	0	0	0	0
Ecofeminism	0	38	13	0	0	0	0	0
Beyond Pesticides	2	40	2	8	0	0	10	3
Center for Health, Environment and Justice	0	57	14	0	0	0	0	0
Environmental Health	1	43	4	6	0	0	8	3
Association of Forest Service Employees for Environmental Ethics	0	0	0	0	0	0	0	0
National Tribal Environmental Council	0	0	0	0	0	0	0	0
Environmental Justice	0	0	0	0	0	0	0	0
Coalition on Environment and the Jewish Life	6	11	26	6	14	14	0	0
National Religious Partnership for the Environment	0	0	18	0	6	41	0	0
Ecospiritualism	4	8	23	4	12	23	0	0
Defenders of Wildlife	13	27	13	13	20	0	0	0
National Audubon Society	4	4	30	0	9	13	9	0
Nature Conservancy	0	7	14	0	0	0	0	0
Sierra Club	11	19	34	11	17	16	6	5
Wilderness Society	0	0	0	0	0	0	0	0
World Wildlife Fund	8	3	20	0	4	5	5	0
Preservation	8	10	25	5	10	9	5	2
Environmental Defense Fund	5	18	13	3	13	0	3	0
Natural Resources Defense Council	0	23	26	6	10	3	6	0
Friends of the Earth	18	59	29	24	6	0	12	0
Population Council	0	0	100	0	100	0	0	100
Reform Environmentalism	5	25	20	7	12	1	5	1
National Wildlife Federation	8	8	29	0	0	4	4	0
Wildlife Conservation Society	0	0	0	0	0	0	0	0
Wildlife Management	8	8	27	0	0	4	4	0
Alliance for the Wild Rockies	0	0	0	0	0	0	0	0
Keep America Beautiful	0	0	33	0	0	0	17	0
Wise Use	0	0	33	0	0	0	17	0

[25] Chi-square lambda is significant at the organizational level (.000 for D1a-D1c,D3,D5; .001 for D2,D4) except for D6 (.067; only three organizations include this issue) but not at the worldview level

What these tables show is that most worldviews devote attention to more than one issue. But the degree to which each of the issues is addressed differs. For example, while the impact of consumption on animal health is an issue of concern for six of the eleven worldviews, by far the most attention to this issue is devoted by Animal Rights. Likewise, seven worldviews make an issue about the effects of consumption on human health, but Environmental Health (and Ecofeminism) organizations devote more attention to this issue. What these findings show is that while the majority of the environmental movement organizations belong to Conservation, Preservation, and Reform Environmentalism (Brulle 2007) that this does not automatically mean that we should only examine organizations belonging to these three worldviews.[26]

Credibility. One way to measure the credibility is to look at what sources are being used. For example, while academic sources were provided most by organizations belonging to Preservation (39 references), Environmental Health (27 references), and Reform Environmentalism (23 references) organizations belonging to the other eight worldviews did not include academic sources as often. Using academic research is one way to establish credibility. However, the focus in this study was to examine how the core framing tasks were employed by the environmental movement. Future research will need to establish whether the framing used is credible.

In conclusion, the data in this study seem to indicate that references to consumption are not uniform across the modern American environmental movement.

[26] Although future research will need to establish whether this greater degree of attention is, because of: 1) more attention is devoted to discussing the same issues as brought up by other organizations or 2) that this greater attention to a particular issue means that additional concerns and points are raised. For example, the concern for animal health due to consumption could be related to animal testing and the fact that animal parts are used in the product. If every worldview discusses animal testing, but the Animal Rights organizations also discuss the use of animal parts used in products that means that there is an additional contribution made by these Animal Rights organizations.

There is considerable variation not only in the number of documents, sentences, and resources, but also in the assignment of responsibility, and the number of issues discussed. This means that we fail to reject the hypothesis.

The second hypothesis was that "organizations belonging to certain environmental worldviews (Animal Rights, Conservation, Deep Ecology, Ecofeminism, Environmental Health, and Reform Environmentalism) would be more likely to discuss consumption than others (Environmental Justice, Ecospiritualism, Preservation, Wildlife Management, and Wise Use)". This hypothesis is rejected, if we look at the number of documents on the websites (see Table 7). Of the six worldviews predicted to give more attention to consumption, only half do so. Moreover, of the five worldviews predicted to devote little attention to consumption, two worldviews (Ecospiritualism and Preservation) are found to be among those that devote a lot of attention to consumption contrary to the hypothesis.

Another way of testing this hypothesis is to examine the relative attention to framing by each of the worldviews. These figures can be found in Table 11 (for individual organizations) and Table 12 (for the different worldviews). Across the environmental movement, about half of the sentences in the documents contain framing. While four of the worldviews report lower relative attention to framing (Animal Rights, Conservation, Ecofeminism, and Environmental Health), the two other worldviews (Deep Ecology and Reform Environmentalism) are higher. The same applies for the worldviews that were hypothesized to be less likely to discuss consumption: two worldviews (Environmental Justice and Ecospiritualism) have a low relative attention to framing

related to consumption, whereas Preservation and especially Wildlife Management devote higher than average attention to consumption.

A third and final way that I examined this hypothesis is by going to the data in Table 8. What this table illustrates is that – when controlling for the number of organizations per worldview in the sample - the five worldviews that devote the highest level of attention to consumption are Environmental Health, Preservation, Reform Environmentalism, Ecospiritualism, and Animal Rights. The range was from 19-38.5 documents per organization. Three of these worldviews (Environmental Health, Reform Environmentalism, and Animal Rights) were hypothesized to be in this group. Two of these worldviews (Ecospiritualism and Preservation) were hypothesized to be in the other group. Looking at the bottom five worldviews we find: Environmental Justice, Conservation, Wise Use, Ecofeminism, and Deep Ecology with a range from 0-5.5 documents per organization. Two of these worldviews (Environmental Justice and Wise Use) were hypothesized to be in this group and three of these worldviews (Conservation, Ecofeminism, and Deep Ecology) were hypothesized to be in the other group. While Wildlife Management was hypothesized to not devote much attention to consumption, it was exactly in the middle of our sample.

In essence, I only correctly hypothesized five of the eleven worldviews and thus have to reject it.

Language Used

The third hypothesis was that "references to consumption will be centered on green consumerism - with terms such as *support* and *buy* rather than *reject, avoid* – across all eleven worldviews, except for organizations belonging to Deep Ecology and

Ecofeminism". What I failed to hypothesize was that the majority of references to consumption would be health related rather than support versus avoid. In fact, of the 3,472 diagnostic sentences that were included in the documents found, 2,553 sentences – or 74% of all the diagnostic sentences – argued that consumption was problematic because it had health effects on animals, humans, and / or the planet. This is related to what the sociologist Andrew Szasz (2007) has argued in his book *Shopping our Way to Safety*. In this book Szasz explains how in recent years people are more and more concerned about the dangers to humans that come with the consumption of certain products. One of the best examples in this realm is the rise of bottled water.

While the majority of references to consumption were health related rather than support versus avoid there is still reason to test the hypothesis, for which there is partial support. Table 18 below presents the number of documents and sentences that include prognostic and motivational frames for "support" and "avoid".

As the results in Table 18 clearly indicate, all but two organizations (National Religious Partnership for the Environment, Women's Voices for the Earth) include more documents that use the frame "support" than the frame "avoid". This result only slightly changes when we look at the sentences: four organizations (Coalition on the Environment and Jewish Life, Center for Health, Environment and Justice, National Religious Partnership for the Environment, and Women's Voices for the Earth) devote more sentences to the frame "avoid" than they do to "support". Both measures (documents and sentences) indicate that as a whole the environmental movement is more optimistic and positive in nature in its communication on the website.

Table 18: Overview of Support and Avoid

Organization[27]	Documents		Sentences	
	Support	**Avoid**	**Support**	**Avoid**
Animal Protection Institute	23	18	90	52
Voice for Animals	0	0	0	0
Animal Rights	23	18	90	52
Izaak Walton League	0	0	0	0
Trust for Public Land	0	0	0	0
Conservation	0	0	0	0
Earth First!	0	0	0	0
Rainforest Action Network	6	2	40	22
Deep Ecology	6	2	40	22
Women's Voices for the Earth	2	2	19	99
Women's Council on Energy and the Environment	0	0	0	0
Ecofeminism	2	2	19	99
Beyond Pesticides	37	18	150	42
Center for Health, Environment and Justice	11	6	83	120
Environmental Health	48	24	244	168
Association of Forest Service Employees for Environmental Ethics	0	0	0	0
National Tribal Environmental Council	0	0	0	0
Environmental Justice	0	0	0	0
Coalition on Environment and the Jewish Life	14	8	55	66
National Religious Partnership for the Environment	1	3	1	3
Ecospiritualism	15	11	56	69
Defenders of Wildlife	5	3	68	14
National Audubon Society	11	3	106	3
Nature Conservancy	5	3	84	10
Sierra Club	31	8	587	28
Wilderness Society	0	0	0	0
World Wildlife Fund	19	5	554	140
Preservation	71	22	1,399	195
Environmental Defense Fund	40	11	606	47
Natural Resources Defense Council	20	2	535	5
Friends of the Earth	1	0	1	0
Population Council	1	0	1	0
Reform Environmentalism	60	14	1,138	53
National Wildlife Federation	8	1	134	2
Wildlife Conservation Society	0	0	0	0
Wildlife Management	8	1	130	2
Alliance for the Wild Rockies	0	0	0	0
Keep America Beautiful	0	0	0	0
Wise Use	0	0	0	0
Total	**234**	**94**	**3,117**	**663**

[27] Chi-square lambdas were all significant at the organizational level (.000). At the worldview level there were mixed findings. Both measures of support were significant (.043 documents, .031 sentences) but both measures of avoid were not significant (.086 documents, .142 sentences).

Thus, the environmental movement is more likely to refer to consumption in terms of support than avoid. These references to support include both statements in reference to so-called mainstream products as well as organic products. In other words the decision to code sentences was based on the language used. While, it is indeed the case that the organizations belonging to Ecofeminism do not comply to this pattern, this was not true for Deep Ecology. This means that while I fail to reject the first part of the hypothesis, I only find partial support for the latter part of the hypothesis.

Framing Tasks

The fourth hypothesis was that "the modern American Environmental Movement devotes more attention to diagnostic framing as it relates to the problem of individual and household consumption than to prognostic and motivational framing". While there are two measures (documents and sentences) it makes more sense to look at the number of sentences, because I hypothesized that the attention devoted to the different framing tasks differs. Table 19 has the distribution of the total number of sentences for each of the core framing tasks, while in Table 20 the different number of documents and sentences devoted to each of the three framing tasks is measured in percentages.

As the results in Table 19 and 20 indicate this hypothesis is rejected, because for all the organizations (with the exception of Animal Protection Institute) more sentences are devoted to engaging people to act rather than to explaining what the problems are. Overall, 12% of documents contain diagnostic framing, compared to 38% motivational framing. This means that motivational framing is three times more likely to be used. [28]

[28] For an overview of each of the individual documents for each organization see Appendix X.

Table 19: Number of Sentences Devoted to Core Framing Tasks

Organization	# Sen.	# Fram.	# D	#P	#M
Animal Protection Institute	1778	866	465	105	296
Voice for Animals	21	1	0	1	0
Animal Rights	1,799	867	465	106	296
Izaak Walton League	103	34	5	10	19
Trust for Public Land	0	0	0	0	0
Conservation	103	34	5	10	19
Earth First!	0	0	0	0	0
Rainforest Action Network	596	386	23	35	328
Deep Ecology	596	386	23	35	328
Women's Voices for the Earth	1,086	247	40	0	207
Women's Council on Energy and the Environment	0	0	0	0	0
Ecofeminism	1,086	247	40	0	207
Beyond Pesticides	1,832	753	353	63	337
Center for Health, Environment and Justice	610	384	58	16	322
Environmental Health	2,442	1,137	411	79	659
Association of Forest Service Employees for Environmental Ethics	0	0	0	0	0
National Tribal Environmental Council	0	0	0	0	0
Environmental Justice	0	0	0	0	0
Coalition on Environment and the Jewish Life	2,638	1,119	144	181	794
National Religious Partnership for the Environment	962	115	34	36	52
Ecospiritualism	3,600	1,234	178	217	846
Defenders of Wildlife	404	212	43	8	161
National Audubon Society	1,025	754	160	48	546
Nature Conservancy	833	536	8	5	523
Sierra Club	5,065	3,466	1,375	735	1,356
Wilderness Society	0	0	0	0	0
World Wildlife Fund	3,437	1,820	122	48	1,650
Preservation	10,764	6,788	1,708	844	4,236
Environmental Defense Fund	3,394	2,041	268	200	1,573
Natural Resources Defense Council	1,953	1,318	122	96	1,100
Friends of the Earth	719	252	181	17	54
Population Council	53	32	23	8	1
Reform Environmentalism	6,119	3,642	594	321	2,727
National Wildlife Federation	1,376	1,288	90	32	1,166
Wildlife Conservation Society	47	37	0	0	37
Wildlife Management	1,423	1,325	90	32	1,203
Alliance for the Wild Rockies	0	0	0	0	0
Keep America Beautiful	335	256	19	107	130
Wise Use	335	256	19	107	130
Total	**28,267**	**15,875**	**3,516**	**1,741**	**10,618**

Table 20: Attention to Framing Tasks (Percentages)

Organization	Documents[29]			Sentences[30]		
	D	**P**	**M**	**D**	**P**	**M**
Animal Protection Institute	78	59	95	26	6	17
Voice for Animals	0	100	0	0	5	0
Animal Rights	77	61	92	26	6	16
Izaak Walton League	25	100	75	5	10	18
Trust for Public Land	0	0	0	0	0	0
Conservation	25	100	75	5	10	18
Earth First!	0	0	0	0	0	0
Rainforest Action Network	0	45	100	0	5	55
Deep Ecology	0	45	100	4	6	55
Women's Voices for the Earth	38	0	100	4	0	19
Women's Council on Energy and the Environment	0	0	0	0	0	0
Ecofeminism	38	0	100	4	0	19
Beyond Pesticides	46	21	90	19	3	18
Center for Health, Environment and Justice	57	29	100	10	3	50
Environmental Health	48	22	91	17	3	27
Association of Forest Service Employees for Environmental Ethics	0	0	0	0	0	0
National Tribal Environmental Council	0	0	0	0	0	0
Environmental Justice	0	0	0	0	0	0
Coalition on Environment and the Jewish Life	43	43	77	5	7	30
National Religious Partnership for the Environment	53	35	53	4	4	5
Ecospiritualism	46	40	70	5	6	23
Defenders of Wildlife	53	13	80	11	2	40
National Audubon Society	57	30	87	16	5	53
Nature Conservancy	21	7	100	1	1	63
Sierra Club	58	53	88	27	15	27
Wilderness Society	0	0	0	0	0	0
World Wildlife Fund	38	24	79	4	1	48
Preservation	47	32	81	16	8	39
Environmental Defense Fund	40	34	79	8	6	46
Natural Resources Defense Council	48	45	90	6	5	56
Friends of the Earth	76	35	41	25	2	8
Population Council	100	100	100	43	15	2
Reform Environmentalism	48	38	80	10	5	45
National Wildlife Federation	42	25	96	7	2	84
Wildlife Conservation Society	0	0	100	0	0	79
Wildlife Management	38	23	96	6	2	85
Alliance for the Wild Rockies	0	0	0	0	0	0
Keep America Beautiful	50	50	100	6	32	39
Wise Use	50	50	100	6	32	39
Total	**48**	**35**	**83**	**12**	**6**	**38**

[29] Chi-square lambda was significant at the organizational level (.000) for all three framing tasks. At the worldview level the results are slightly different. For both the prognostic and motivational framing it is significant (.031) but for the diagnostic it is only close to being significant (.067).

[30] Chi-square lambda was significant at the organizational level (.000) for all three framing tasks. At the worldview level the results are slightly different. For both the prognostic (.021) and motivational framing (.031) it is significant but for the diagnostic it is only close to being significant (.067).

Overview of Qualitative Results

In the previous part of this chapter I reviewed and presented the quantitative findings for this study. In this section I do the same for the qualitative results. To reiterate, here is the research question that guides this research:

> *How does the modern American environmental movement treat consumption as reflected by its diagnostic, prognostic and motivational framing?*

This research question is answered in two parts: in the previous section I presented the results for the movement as a whole. In this section I do the same for the individual worldviews. These worldviews are discussed using the chronological order that Brulle (2000) followed in his book: Manifest Destiny (Wise Use), Early Development of the Movement (Wildlife Management, Conservation, and Preservation), Reform Environmentalism, and Alternative Voices (Deep Ecology, Environmental Justice and Health, Ecofeminism, Ecospiritualism, and Animal Rights).

In the next section the results for each of the worldviews are discussed in greater detail. While attention is devoted to intra worldview differences as much as possible the discussion is centered on the worldview rather than the individual organizations. There are two exceptions to this rule: for Preservation and Reform Environmentalism more than two organizations were included in the sample and thus examples of the frames used by each individual organization are provided.

Manifest Destiny: The Wise Use Movement

While Wise Use organizations are considered as anti-environmentalist in nature (Brulle 2000; Dunlap 2006), it is nonetheless included in Brulle's overview of the environmental movement. Wise Use organizations identify themselves as being part of the environmental movement, however their objectives is what makes people skeptical

about their motives: "preserving our natural resources *for the public* instead of from the public" (Brulle 2000:129 emphasis mine). Nonetheless, it is interesting to see how consumption is treated in their core framing activities. The two organizations in the sample are Alliance for the Wild Rockies (AWR) and Keep America Beautiful (KAB). While there were no documents on the AWR website, six were found on the website of KAB. These six documents contain 256 sentences of framing.

Table 21: Wise Use – Diagnostic Framing

Organization		#	#D	D1a	D1b	D1c	D2	D3	D4	D5	D6
Alliance for the Wild Rockies	#d	0	0	0	0	0	0	0	0	0	0
	#s	0	0	0	0	0	0	0	0	0	0
Keep America Beautiful	#d	6	3	0	0	2	0	0	0	1	0
	#s	335	19	0	0	17	0	0	0	2	0
Total	**#d**	**6**	**3**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**
	#s	**335**	**19**	**0**	**0**	**17**	**0**	**0**	**0**	**2**	**0**

In three of the six documents a diagnostic frame was included. This organization is mostly concerned with the waste associated with consumption. The main diagnostic frame is that consumption has a negative effect on the health of the planet. Another problem with consumption had to deal with (lack of) consumer awareness.

> "Americans generate 251.3 million tons of garbage per year." (KAB2)

> "A 2005 CEA consumer survey found that 76 percent of consumers are unaware of their local electronics recycling options. Of that 76 percent, 71 percent said they would recycle if they only knew where to do so." (KAB7)

Table 22: Wise Use – Prognostic Framing

Organization		#	#P	P1	P2	P3	P4	P5	P6	P7
Alliance for the Wild Rockies	#d	0	0	0	0	0	0	0	0	0
	#s	0	0	0	0	0	0	0	0	0
Keep America Beautiful	#d	6	3	0	0	0	3	0	0	0
	#s	335	107	0	0	0	107	0	0	0
Total	**#d**	**6**	**3**	**0**	**0**	**0**	**3**	**0**	**0**	**0**
	#s	**335**	**107**	**0**	**0**	**0**	**107**	**0**	**0**	**0**

When looking at prognostic framing, it seems that KAB promotes recycling, because all of the three prognostic frames centered on this solution.

> "By choosing recycled, recyclable or reusable products, we can extend the functional life of a product and divert it from the landfill." (KAB2)

Table 23: Wise Use – Motivational Framing

Organization		#	#M	M1	M2	M3	M4	M5	M6	M7
Alliance for the Wild Rockies	#d	0	0	0	0	0	0	0	0	0
	#s	0	0	0	0	0	0	0	0	0
Keep America Beautiful	#d	6	6	2	0	0	0	4	1	0
	#s	335	130	28	0	0	0	97	5	0
Total	**#d**	**6**	**6**	**2**	**0**	**0**	**0**	**4**	**1**	**0**
	#s	**335**	**130**	**28**	**0**	**0**	**0**	**97**	**5**	**0**

This focus on the importance of recycling by Wise Use is further reinforced when looking at the calls to action: four of the six documents and 97 of the 130 sentences containing motivational frames were used to call people to recycle.

> "Look, you buy stuff every day, and when you pull out your fat wallet, you make some pretty important choices. I suggest you choose products that are recyclable or, even better, made from recycled materials. That's good." (KAB3)

> "How can you practice reuse? Donate, repair, refill, reuse, rent, rebuild, resell. Think of new uses for used items. If you can't reuse a product, there are usually others in the community that can." (KAB4)

> "This step is one that YOU need to support if recycling is to play a successful role in managing our country's solid waste." (KAB9)

Early Development of the Environmental Movement

The early days of the modern American environmental movement consisted of organizations that belong to three distinct worldviews (in chronological order): Wildlife Management, Conservation, and Preservation. All three of these worldviews remain highly relevant today. In fact, Conservation and Preservation are two of the three most dominant worldviews (Brulle 2007). First I review the findings for the three individual worldviews and after that I discuss whether or not there is a similarity between these three worldviews in their treatment of consumption through their core framing activities.

Wildlife Management

Dating back to the early days of the American environmental movement, WM has been a key component. Brulle (2007:2) describes its current focus as managing the supply and demand of game animals. Moreover the objective of this worldview can be described as: "conserving or rationally developing our wildlife resources to provide for human needs" (Brulle 2007:3). Two of the ten richest organizations belong to this worldview: Wildlife Conservation Society (WCS, number 2) and National Wildlife Federation (NWF, number 9). The NWF belongs to the Group of 10 as well. Both these organizations are included in the sample and a total of twenty six documents were found on their websites. All but two of these documents were found on the NWF website.

Table 24: Wildlife Management – Diagnostic Framing

Organization		#	#D	D1a	D1b	D1c	D2	D3	D4	D5	D6
National Wildlife Federation	#d	24	10	2	2	7	0	0	1	1	0
	#s	1,376	90	14	15	50	0	0	3	8	0
Wildlife Conservation Society	#d	2	0	0	0	0	0	0	0	0	0
	#s	47	0	0	0	0	0	0	0	0	0
Total	**#d**	**26**	**10**	**2**	**2**	**7**	**0**	**0**	**1**	**1**	**0**
	#s	**1,423**	**90**	**14**	**15**	**50**	**0**	**0**	**3**	**8**	**0**

In the ten documents that contain diagnostic framing seven bring up the fact that consumption harms the health of the planet (Fifty of the ninety diagnostic sentences referred to this diagnostic frame). The following two passages illustrate NWF's concern with the effects of consumption.

> "Laura Hickey, senior director of global warming education, represents NWF on the Catalog Choice taskforce. She shares some key statistics about the environmental impact of the 19 billion catalogs mailed each year to American consumers: 53 million trees used, 3.6 million tons of paper used, 38 trillion BTUs used to produce this volume of paper-enough to power 1.2 million homes per year, 5.2 million tons of carbon dioxide emissions, equal to the annual emissions of two million cars, 53 billion gallons of waste water discharged-enough to fill 81,000 Olympic-sized swimming pools. The Catalog Choice team realizes that lots of people love getting some catalogs, but there are many that consumers find of little or no interest and would rather not receive." (NWF7)

> "The U.S. is the world's largest single importer of wooden furniture from tropical timber-producing countries, with garden furniture representing about one-fifth of the wooden furniture market. U.S. imports of all tropical wood products have increased four-fold over the past decade. As a result, the once biologically rich forests of countries such as Indonesia, Malaysia and Brazil are being depleted at an unprecedented rate. 'Deforestation, especially in tropical forests, accounts for approximately one quarter of global greenhouse gas emissions, contributing significantly to global warming,' said Eric Palola, senior director of the National Wildlife Federation's Forests for Wildlife campaign. 'Unsustainable tree harvesting also greatly contributes to the rapid disappearance of the world's remaining natural forest habitats." (NWF8)

Table 25: Wildlife Management – Prognostic Framing

Organization		#	#P	P1	P2	P3	P4	P5	P6	P7
National Wildlife Fund	#d	24	6	1	1	1	2	1	2	1
	#s	1,376	32	5	9	2	4	5	4	3
Wildlife Conservation Society	#d	2	0	0	0	0	0	0	0	0
	#s	47	0	0	0	0	0	0	0	0
Total	**#d**	**26**	**6**	**1**	**1**	**1**	**2**	**1**	**2**	**1**
	#s	**1,423**	**32**	**5**	**9**	**2**	**4**	**5**	**4**	**3**

Six documents bring up solutions and while all seven categories of solutions are included, none of them are mentioned in more than two documents. Most attention (as in number of sentences used) seems to be devoted to the solution of support.

> "'Buying FSC-certified garden furniture helps support sustainable forest management, which reduces the emission of greenhouse gases and protects wildlife habitat,' Brown said." (NWF31)

Table 26: Wildlife Management – Motivational Framing

Organization		#	#M	M1	M2	M3	M4	M5	M6	M7
National Wildlife Fund	#d	24	23	11	4	7	0	4	8	2
	#s	1,376	1,166	63	14	125	0	68	740	160
Wildlife Conservation Society	#d	2	2	0	0	0	0	1	1	0
	#s	47	37	0	0	0	0	3	34	0
Total	**#d**	**26**	**25**	**11**	**4**	**7**	**0**	**5**	**9**	**2**
	#s	**1,423**	**1,203**	**63**	**14**	**125**	**0**	**71**	**774**	**160**

All but one document contained motivational framing. The two most frequent calls were to inform / learn, change behavior, and support. A total of 1,203 sentences in these twenty five documents were coded as motivational frames. While more documents called people to inform / learn many more sentences were used to explain why changing behavior was necessary and in what way behavior needed to be changed. In fact close to 65% of all motivational frame sentences were in reference to the call for changing behavior. This is not that surprising, because a call to read something or to inform yourself does not need that much explanation. Likewise, while only two documents call for DIY action, 160 sentences (or the second largest call to action) are used to explain this call.

Conservation

The conservation movement has been one of the most influential in the history of the American environmental movement (Brulle 2007:3). Several of the organizations belonging to this worldview are among the richest 50 organizations and the Izaak Walton

League (IWL) is part of the Group of 10. This means that the two Conservation organizations in our sample come from these two classifications: IWL from the Group of 10 and Trust for Public Land (TPL) from the richest environmental organizations.

Despite the relatively important role Conservation has within the American environmental movement, the organizations belonging to this worldview do not seem to devote much attention or importance to the issue of individual and household consumption. A total of four documents were found on the websites of these two organizations.

TPL is the 8th richest organization within the environmental movement but no documents were found based on the search terms that relate to consumption. Even the IWL only had four documents that were relevant. This is somewhat surprising, because as Brulle (2007) notes conservationists believe that: "The proper management philosophy for natural resources is to realize the greatest good for the greatest number of people over the longest period of time." This would appear to indicate that consumption of resources should occur wisely.

Table 27: Conservation – Diagnostic Framing

Organization		#	#D	D1a	D1b	D1c	D2	D3	D4	D5	D6
Izaak Walton League	#d	4	1	0	0	0	0	0	0	1	0
	#s	103	5	0	0	0	0	0	0	5	0
Trust for Public Land	#d	0	0	0	0	0	0	0	0	0	0
	#s	0	0	0	0	0	0	0	0	0	0
Total	**#d**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**
	#s	**103**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**

One of the IWL documents contained a diagnostic frame and in five sentences it was explained that consumer awareness makes consumption problematic. The problem here seems to be that consumers do not know about the existence of environmentally friendly options that would save resources.

> "Many 'active' home energy-efficiency practices, such as better insulation in walls and windows, high-efficiency furnaces, solar heating of water, programmable thermostats, and others, are well known. However, there are also many 'passive,' design-based planning practices that can maximize home heating and cooling efficiency that are less well known." (IWL1)

Table 28: Conservation – Prognostic Framing

Organization		#	#P	P1	P2	P3	P4	P5	P6	P7
Izaak Walton League	#d	4	4	0	0	0	3	1	0	1
	#s	103	10	0	0	0	3	4	0	3
Trust for Public Land	#d	0	0	0	0	0	0	0	0	0
	#s	0	0	0	0	0	0	0	0	0
Total	**#d**	**4**	**4**	**0**	**0**	**0**	**3**	**1**	**0**	**1**
	#s	**103**	**10**	**0**	**0**	**0**	**3**	**4**	**0**	**3**

All four documents contained prognostic framing. In three of these documents the solution lies in reducing, reusing, and recycling of products according to IWL. Other solutions that were suggested were to educate consumers as well as making legal changes.

> "But, reducing consumption is also practical and makes good economic sense." (IWL2, Reduce)

> "As the payback time for most of these actions is fairly short, using the building permit process may be an effective way to increase education of homebuilders/owners of these energy measures and increase the likelihood of them being implemented." (IWL1, Consumer Education)

Table 29: Conservation – Motivational Framing

Organization		#	#M	M1	M2	M3	M4	M5	M6	M7
Izaak Walton League	#d	4	3	1	0	0	0	1	1	0
	#s	103	19	2	0	0	0	4	13	0
Trust for Public Land	#d	0	0	0	0	0	0	0	0	0
	#s	0	0	0	0	0	0	0	0	0
Total	**#d**	**4**	**3**	**1**	**0**	**0**	**0**	**1**	**1**	**0**
	#s	**103**	**19**	**2**	**0**	**0**	**0**	**4**	**13**	**0**

Three IWL documents contained a specific call to action. Three different calls to action were mentioned: inform / learn, reduce, reuse, & recycle, and change behavior were each mentioned once. Of these by far the most sentences were used to call for changing

behavior (thirteen of the nineteen motivational frame sentences). Some examples of these are:

> "Click on the title above to learn more." (IWL2, Inform/Learn)
>
> "Our Shallow Footprints campaign helps you learn about your own footprint and find ways to "step more lightly"." (IWL2, Inform/Learn)
>
> "Low Impact Living wants to help you lower the environmental impact of your home and your daily life." (IWL7, Reduce, Recycle & Reuse)
>
> "Planting deciduous trees on the south side of a building to block the sunlight in the summer but let it through in the winter. Evergreens can go on the north side to protect a house in the winter." (IWL1, Changing Behavior).

Preservation

This worldview is highly influential, given the five organizations in the Group of 10, as well as six organizations in the ten richest environmental organizations. According to Brulle (2007) organizations espousing the worldview of Preservation represent 38% of the organizations and half of the income of the environmental movement. Brulle (2007:4) describes their objective as desiring to maintain wilderness untouched by humans. A total of 192 documents were found on the websites of the six Preservation organizations included in the sample. While this seems high, one of the organizations had zero documents, whereas two other organizations contained 140 of the 192 documents. Since this worldview led to the inclusion of six organizations, I want to discuss each of the six organizations, after discussing the worldview as a whole, to illustrate intra-worldview differences.

In ninety of the documents diagnostic frames were included. The most common diagnostic frame was that consumption harms the health of the planet. Other frequent

diagnostic frames are that our behavior has changed; consumption negatively affects human health, as well as materialistic consumer lifestyles.

Table 30: Preservation – Diagnostic Framing

Organization		#	#D	D1a	D1b	D1c	D2	D3	D4	D5	D6
Defenders of Wildlife	#d	15	8	2	4	2	2	3	0	0	0
	#s	404	43	3	24	4	7	5	0	0	0
National Audubon Society	#d	23	13	1	1	7	0	2	3	2	0
	#s	1,025	156	11	7	103	0	7	6	26	0
Nature Conservancy	#d	14	3	0	1	2	0	0	0	0	0
	#s	833	4	0	4	4	0	0	0	0	0
Sierra Club	#d	64	37	7	12	22	7	11	10	4	3
	#s	5,065	1,369	44	183	726	26	152	228	6	10
Wilderness Society	#d	0	0	0	0	0	0	0	0	0	0
	#s	0	0	0	0	0	0	0	0	0	0
World Wide Fund	#d	76	29	6	2	15	0	3	4	4	0
	#s	3,437	122	10	28	64	0	4	9	7	0
Total	**#d**	**192**	**90**	**16**	**20**	**48**	**9**	**19**	**17**	**10**	**3**
	#s	**10,764**	**1,694**	**68**	**246**	**901**	**33**	**168**	**243**	**39**	**10**

Of the sixty two documents that contained prognostic frames, the most frequently mentioned solutions were to reduce, reuse and recycle and consumer education.

Table 31: Preservation – Prognostic Framing

Organization		#	#P	P1	P2	P3	P4	P5	P6	P7
Defenders of Wildlife	#d	15	2	0	0	0	0	2	0	0
	#s	404	8	0	0	0	0	8	0	0
National Audubon Society	#d	23	7	1	3	0	3	1	1	0
	#s	1,025	48	3	26	0	10	7	2	0
Nature Conservancy	#d	14	1	0	0	0	1	0	0	0
	#s	833	5	0	0	0	5	0	0	0
Sierra Club	#d	64	34	6	13	3	13	9	6	8
	#s	5,065	735	61	289	14	142	27	123	79
Wilderness Society	#d	0	0	0	0	0	0	0	0	0
	#s	0	0	0	0	0	0	0	0	0
World Wildlife Fund	#d	76	18	2	0	0	4	6	6	3
	#s	3,437	48	4	0	0	9	19	13	3
Total	**#d**	**192**	**62**	**9**	**16**	**3**	**21**	**18**	**13**	**11**
	#s	**10,764**	**844**	**68**	**315**	**14**	**166**	**61**	**138**	**82**

162 of the 192 documents contain calls to action. Most common were the calls to inform / learn, followed by support and change behavior.

Table 32: Preservation – Motivational Framing

Organization		#	#M	M1	M2	M3	M4	M5	M6	M7
Defenders of Wildlife	#d	15	12	8	3	5	3	2	1	1
	#s	404	161	34	31	68	14	8	3	3
National Audubon Society	#d	23	20	14	6	8	3	6	5	3
	#s	1,025	550	100	27	80	3	98	127	111
Nature Conservancy	#d	14	14	11	2	5	3	5	4	1
	#s	833	523	135	31	84	10	161	100	2
Sierra Club	#d	64	56	35	12	18	5	8	16	5
	#s	5,065	1,362	340	108	298	14	60	341	195
Wilderness Society	#d	0	0	0	0	0	0	0	0	0
	#s	0	0	0	0	0	0	0	0	0
World Wildlife Fund	#d	76	60	32	1	19	5	8	10	1
	#s	3,437	1,650	222	4	554	140	220	475	35
Total	**#d**	**192**	**162**	**100**	**24**	**55**	**19**	**29**	**36**	**11**
	#s	**10,764**	**4,246**	**831**	**201**	**1,084**	**181**	**547**	**1,046**	**346**

Defenders of Wildlife. Not only is this organization part of the Group of 10, but it is also among the richest environmental organizations. There are fifteen documents, with a total of 212 framing sentences. In the eight documents that contain diagnostic framing, four of these argue that consumption harms human health and three discuss how behavior has changed making consumption problematic. The concern about human health refers to mercury in tuna fish, which was brought up in four documents. For example, in DW3:

> "Our testing shows that mercury content in light canned tuna fluctuates from can to can, brand to brand and country to country, but our results also showed that the average mercury content of Latin American brand tuna was much higher than government agencies have deemed 'safe.'"

Both the documents that contain prognostic framing explain how the problems can be solved through more consumer education. An example of this solution from DW3:

> "Consumers just need to be informed about the product they are buying and how much canned tuna they and their family should be eating in a given period of time."

There are twelve documents with motivational framing. Most frequent call to action was to inform / learn which was mentioned in eight documents. Some examples of these calls are:

> "The full report can be found here." (DW10)
>
> "Full information is available on Defenders' website." (DW13)
>
> "Learn more about what this agreement is and how it will reduce global warming here." (DW14)

Another frequent call to at was to support, which was mentioned in five documents. Below are four examples that came from the same document (DW14)

> "Buy green power."
>
> "If you are in the market for a new car, choose a fuel-efficient vehicle."
>
> "If your old washing machine is about to go, start off right and buy energy-efficient appliances."
>
> "Buy organic food."

National Audubon Society. This organization belongs to the Group of 10 and is also the 7th richest organization. On their website a total of twenty three documents were uncovered, thirteen of which contain diagnostic framing. In seven of these documents consumption is considered problematic because it threatens the health of the planet. Some of these threats arise because of the use of water.

> "It takes three liters of water to produce a one-liter bottle of water. It takes 16,000 liters of water (about 4,230 gallons) to produce one kilogram (2.2 pounds) of beef." (NAS13)

A diagnostic frame that was mentioned in three documents had to do with materialistic, consumer lifestyles.

> "Every time we burn fossil fuels to drive our cars, heat our homes, run our factories, light our cities, and more, we release carbon dioxide and other greenhouse gases into the atmosphere. Our greenhouse gas emissions have increased in recent decades because of both human population growth and the rising rates of affluence and consumption. Larger houses, bigger and faster cars and SUVs and more airplane travel all mean more energy consumption. In fact, the United States, with only about 5% of the global

> population, contributes about 25 percent of greenhouse gas emissions because our fuel consumption is so high." (NAS5)

There are seven documents containing prognostic framing. Two of these solutions were mentioned in three documents each (support and reduce). Twenty documents included a call to action. Most frequent were calls to inform / learn (14) and support (8). One of the unique calls to inform / learn for this organization was the water footprint calculator.

> "How much water do you require for the foods you eat, the items you purchase and the habits you keep? Find out with the Water Footprint Calculator." (NAS13)

As far as the call for support goes, there were several calls to support organic, local, community supported agriculture as well as certain legislation and products.

> "Whenever possible, select organic produce. As much as possible, buy local produce and other goods. The fewer miles your produce has traveled, the less energy has been used for refrigeration and transportation." (NAS1)

> "Among the most important things that you can do to shrink your shoe size is vote to support legislation that lowers U.S. greenhouse gas emissions, reducing every American's carbon footprint (like it or not)." (NAS10)

> "Not only is buying green furniture a way to reduce your impact on the earth. If you choose carefully it can improve the quality of your personal environment, too. For a list of companies that sell 'green' furniture (made, for instance, with sustainably harvested wood, organic cotton upholstery, or stains or finishes that don't pollute the indoor air), go to 'Shop Till You Drop'." (NAS29)

Nature Conservancy. While this organization does not belong to the Group of 10, it is the richest organization within environmental movement (it represents almost a fifth of the income of the entire American environmental movement, which is almost three times as high as the number two on that list). A total of fourteen documents were

uncovered. Three documents contain diagnostic framing, and the problem of consumption is that it threatens the health of the planet as well as human health. One of the problematic consequences of consumption is that it leads to waste. This is of concern to NC as the following two statements illustrate.

> "The most frequently collected items during beach cleanups are made of plastic - think reusable shopping bags, water bottles and utensils." (NC3)

> "The amount of solid waste produced by Americans is staggering. According to the U.S. Environmental Protection Agency, residents, businesses and institutions produced more than 245 million tons of trash in 2005. That is approximately 4.5 pounds of waste per person per day." (NC7)

Only one document (NC7) included a solution which was to reduce, reuse & recycle. Consistent with the diagnostic frame of added waste, the solutions were in this realm. More specifically the following statements were used to elaborate on this solution:

> "Reusing + Recycling = Less Waste. And that's a good thing."

> "Recycling and reusing materials are good for the economy, the community and the environment as well."

> "Recycling not only boosts the economy but is beneficial to the environment as well. Recycling prevents the emission of many greenhouse gases and water pollutants, saves energy and supplies valuable raw materials to industry."

> "Recycling is great but reusing is even better!"

There were fourteen documents that included a call to action, most frequently a call to inform / learn about recycling, such as these two statements from NC7.

> "Also check out their Buying Recycled website for even more information."

> "Visit Reduce Reuse Recycle for more ideas on how to reuse everyday items that are typically pitched or recycled."

Sierra Club. This organization is part of the Group of 10 and is also the 10th richest organization. This organization represents the second largest based on attention for consumption: sixty four documents were found. In thirty seven of these documents diagnostic frames were used. The most frequent diagnostic frame was health of the planet. Similar to NC, one of the concerns in this regard for the SC is the amount of trash that is associated with consumption, especially that of food.

> "As any outdoor concert/festival/picnic goer knows, the majority of trash at such events is convenience food related. Americans threw away more than 60 billion cups, 20 billion eating utensils and 15 billion plates last year. While a small percentage were composted (at green festivals), most were destined for landfills or incinerators." (SC11)

> "The Sustainable Consumption Committee (SCC)'s True Cost of Food Campaign makes it clear that our choice of food, now more than ever during the holiday season, affects our earth, our health and what we leave as a legacy to our children and our children's children." (SC14)

This latter statement also illustrates that consumption negatively effects human health. But that is not the only problem for the health of the planet. As the following statement illustrates, consumption may seem marginal when looking at the final product, but it becomes more significant when production is included as well.

> "According to David Wann, an environmental scientist and former EPA official, for each product consumed, raw materials averaging 20 times its weight were extracted from the earth." (SC15)

The problem does not only relate to the consumption of food, either.

> "Consumption of wood and paper products is devastating forests in the U.S. and other countries. Many of the trees used in paper production come from old-growth forests that are being clearcut. Producing one ton of virgin office printer or copier paper requires 2 to 3 tons of trees." (SC21)

Three other diagnostic frames were frequent: health of humans, changing behaviors, as well as materialistic consumer lifestyles. As far as human health is concerned, recently

there has been some concern about the consumption of GMOs. This concern is expressed by the SC as well.

> "We have discussed only some reasons for questioning the safety of consuming GMOs. While GMOs are consumed widely in the United States and Canada, to our knowledge there is no systematic effort to monitor the health of consumers to detect harms from such consumption." (SC27)

Part of the problem arises that consumer behavior has changed

> "Today, the Sierra Club released a new report that documents the links between worldwide forest destruction, human rights abuses, and the growing consumer demand for timber products." (SC26)

This demand for more products may arise from materialistic consumer lifestyles. Of all the organizations in the sample, it was the SC which devoted most attention to this issue (ten documents included this diagnostic frame). Of particular concern in this regard is the behavior of Americans, which is linked to global environmental change.

> "The United States, with less than five per cent of the world's people, consumes over twenty five percent of its resources." (SC1)

> "The United States contains 5 percent of the world's population but accounts for 22 percent of fossil fuel consumption, 24 percent of carbon dioxide emissions, and 33 percent of paper and plastic use. A child born in the United States will create thirteen times as much ecological damage over the course of his or her lifetime than a child born in Brazil." (SC3)

> "Ever-accelerating human consumption of natural resources lies at the root of many of our global environmental problems." (SC22)

There are thirty four documents that contain prognostic framing, with reduce, reuse & recycling being the most frequent. That this solution is favored by the SC is illustrated by this statement.

> "We are dedicated to exploring how to best minimize the use of natural resources and the byproducts of toxic materials, waste and pollution, involved in everyday consumer choices." (SC1)

The goal is not to necessarily avoid consumption, but merely to reduce (or slow) it.

> "We don't have to rely solely on federal laws and policies to protect our natural resources; our consumer behaviors and demands can create the market for goods that are created with renewable resources and manufactured with materials that do the least amount of harm to the earth. Most importantly we can slow our demand for ever-increasing quantities of throwaway goods that will spend more time in landfills than in our homes." (SC2)

> "A long-term solution must include reduction in our consumption of virgin forest products. We can practice sustainable consumption of paper and wood products as individuals, families, communities and constituents." (SC21)

> "Every person determines the size of his or her local ecological footprint when choosing to recycle and reduce the amount of waste produced. Making the decision to purchase locally grown food, thus reducing the amount of fossil fuels required to package and ship the food, limits the amount of CO2 emissions produced that pollute the air we all breathe and the atmosphere we all share." (SC22)

> "As consumers, we will need to make difficult choices in the coming years to reduce our personal carbon footprint." (SC54)

There are fifty six documents that included a call to action. Most frequent calls to action where to inform / learn (35), to support (18), and to change behavior (16). As far as support goes, there are a variety of calls in that area.

> "Eat more vegetables, fruit, and grains and less meat. Look for meat that is produced in the least harmful way-grass fed, organic, antibiotic- and hormone-free. Buy organic whenever you can. Buy from small, local sources whenever you can." (SC24)

Sometimes the call to act is to change behavior.

> "Individuals, families, and households: Wash in cold water and dry your clothes on a laundry line. Improve home energy efficiency by insulating, lowering water heater temperature, buying efficient (Energy Star) appliances, using fans instead of air conditioners, and using compact fluorescent bulbs. Carpool, walk, bike, or take the bus, and when you drive, combine errands to make fewer trips. Buy a fuel-efficient car and keep it maintained properly to maximize MPG." (SC20)

Wilderness Society. This organization represented the exception within the PR worldview as well as among the other organizations that make up the Group of 10, with zero documents on consumption.

Worldwide Fund for Nature. This organization is another member of the Group of 10 and the 6th richest organization. It also is the organization with the highest level of attention to consumption with seventy six documents. Twenty nine of those documents contain diagnostic framing, with about half of those explaining that consumption is problematic because it harms the health of the planet.

> "For example, for every tonne of fish we consume, we need 25 hectares of fishing grounds; for every cubic meter of timber we need 1.3 hectares of forest." (WWF31)

> "...your toilet paper very likely contains wood fiber from the Baltic States and Russia where unlawful and destructive harvesting practices cause big problems." (WWF113)

Similar to other PR organizations there is concern about waste.

> "Plastic bags, synthetics, plastic bottles, tin cans, and computer hardware-these are some of the things that make life easy for us. But what we forget is that these advanced products do not break down naturally. When we dispose them in a garbage pile, the air, moisture, climate, or soil cannot break them down naturally to be dissolved with the surrounding land. They are not biodegradable. However natural waste and products made from nature break down easily when they are disposed as waste. But as more and more biodegradable materials pile up, there is increased threat to the environment." (WWF93)

There are eighteen documents with prognostic framing, most frequently mentioned were consumer education as well as changes made by corporations.

> "To reduce the environmental footprint of paper production and paper consumption, WWF offers a one-stop paper toolbox to help guide paper producers as well as commercial and individual paper buyers." (WWF15, Consumer Education)

> “"At a time when the world's natural forests are under severe pressure because of the skyrocketing demand for all kinds of timber products, retailers should be offering the most environmentally-friendly tissue products to their customers," said Brandlmaier.” (WWF21, Corporate Behavior)

In other words, while there is consumer demand for products, and consumers should be educated about the environmental impacts of their choices, it is the responsibility of corporations to provide environmentally friendly products.

There are sixty documents that included a call to action. Most frequent calls where inform / learn (32), support (19), and change behavior (10). The calls to inform / learn were similar as discussed before, as were the calls to change behavior. WWF wants people to support a variety of different things.

> “Consumers should compare the different tissue products and buy those with the best environmental records.” (WWF21)

> “How can you help? Donate, Visit, Buy, Don't Buy.” (WWF128)

The last statement also includes a call to avoid.

Cohesiveness of Early Environmental Movement

In terms of diagnostic framing, the two most commonly mentioned problems of consumption were the negative health impacts on the planet and humans. For the prognostic frames, all three worldviews include the solution of reduce, recycle, and reuse which is the most frequently mentioned solution for these three worldviews combined. Other frequent solutions are corporate solutions (although Preservation differs here from the other two worldviews), consumer education, and support. Finally, the calls to action are fairly similar, all three call most frequently to inform and (with the exception of Conservation) to support.

Reform Environmentalism

According to Brulle (2000:173) Reform Environmentalism is the most dominant discourse within the modern American environmental movement. Due to rising concerns about pollution, and its effect on human health, organizations belonging to this worldview were able to attain this dominant position. Because there are four organizations that belong to this worldview I will discuss the findings for each individual organization. A total of 111 documents were found on the four organization's websites. Three of these organizations were included because they belong to the Group of 10 (Environmental Defense Fund, Natural Resources Defense Fund, and Friends of the Earth). The fourth organization (Population Council) is the 5th richest environmental organization.

Diagnostic Framing

There are fifty-four documents that contain diagnostic framing. Consistent with the assertion by Brulle (2007) that concern about human health largely motivates the organizations belonging to the Reform Environmentalism worldview, the most frequent diagnostic frame was that consumption negatively effects human health, followed by the negative effects it has on the health of the planet.

Table 33: Reform Environmentalism - Diagnostic Framing

Organization		#	#D	D1a	D1b	D1c	D2	D3	D4	D5	D6
Environmental Defense Fund	#d	62	25	3	11	8	2	8	0	2	0
	#s	3,394	261	14	154	40	14	38	0	7	0
Natural Resources Defense Fund	#d	31	15	0	7	8	2	3	1	2	0
	#s	1,953	122	0	35	60	5	10	4	8	0
Friends of the Earth	#d	17	13	3	10	5	4	1	0	2	0
	#s	719	181	44	92	31	10	1	0	3	0
Population Council	#d	1	1	0	0	1	0	1	0	0	1
	#s	53	23	0	0	10	0	12	0	0	1
Total	**#d**	**111**	**54**	**6**	**28**	**22**	**8**	**13**	**1**	**6**	**1**
	#s	**6,119**	**587**	**58**	**281**	**141**	**29**	**61**	**4**	**18**	**1**

Environmental Defense Fund. The EDF represents the fourth largest organization based on attention for consumption with a total of sixty two documents. Twenty five of these documents contain diagnostic framing, the three major problems with consumption are that it negatively affects human health, the health of the planet, as well as the fact that behaviors have changed. The health effects are centered on eating fish (as was seen before with other organizations bringing up this concern.)

> "Despite the health benefits of seafood, eating fish that are contaminated with toxins and chemicals can pose considerable health risks." (EDF11)

> "Certain pesticides pose particular problems when they contaminate seafood, since the properties that make these chemicals effective pest control agents also make them slow to break down in the environment." (EDF15)

> "Despite their valuable qualities, fish can pose considerable health risks when contaminated with substances such as metals (e.g., mercury and lead), industrial chemicals (e.g., PCBs) and pesticides (e.g., DDT and dieldrin)." (EDF24)

If the concern is not with fish, it is with other food items, such as the following statement illustrates:

> "But what you may not know is that most turkeys (and chickens) sold in this country for consumption are routinely fed antibiotics on factory farms, to compensate for the crowded, stressful and unsanitary conditions they are raised in and to make the birds reach slaughter weight slightly faster." (EDF22)

Other diagnostic frames alluded to the fact that our behaviors have changed. Some of these changes are that our demand for certain products has increased.

> "Fisheries are being overexploited by rising consumption of threatened species of fish." (EDF5)

> "Americans are eating more fish than ever, and seafood sales increase dramatically during the Lenten season." (EDF57)

National Resources Defense Council. This organization has thirty one documents related to consumption. In fifteen of those there were diagnostic frames included, most frequently the problem with consumption was that it negatively affects the health of humans as well as of the planet. It becomes clear that mercury is yet again viewed as problematic (other chemicals are considered problematic as well).

> "Children under six, as well as women who are pregnant or planning to become pregnant, are the most vulnerable to mercury's harmful effects." (NRDC5)

> "The labels do not mention, however, that many of these products also release potentially hazardous chemicals. A recent investigation of 14 common air fresheners by the Natural Resources Defense Council (NRDC) found hormone-disrupting chemicals known as phthalates in 12 products, including some fresheners marketed as 'all-natural' and 'unscented.' None of the air fresheners listed phthalates on their labels. Phthalates are known to interfere with hormone and testosterone production. Children and unborn babies are particularly vulnerable to the toxins." (NRDC17)

Friends of the Earth. This organization has seventeen documents relating to consumption. This is the only organization where there are more diagnostic frames than motivational frames. In thirteen of the seventeen documents diagnostic frames were included. Consistent with the other organizations in this worldview, negative health effects on humans were considered problematic, particularly in the case of toxic ingredients.

> "Three of the most serious risks are that genetically engineered foods could trigger allergic reactions, contain toxins, and that experimental crops might contaminate the food supply as StarLink did three years ago." (FoE4)

> "Consumer products that currently contain unregulated nanoparticles, including sunscreens and cosmetics used by children and adults could pose new dangers to human health and the environment." (FoE11)

> "Some of the biggest names in cosmetics, including L'Oreal, Revlon and Estee Lauder, continue to sell products containing nano-scale ingredients despite growing evidence that nanomaterials can be toxic to humans, according to a report released today by Friends of the Earth." (FoE13)

Population Council. There was only one relevant document relating to consumption on this organization's website. All three types of framing were included in that document. Diagnostic frames that were mentioned were that consumption harms the health of the planet as well as changed behavior. Solutions are to change behavior and to reduce, reuse & recycle. There was one call for action in the document and that was to inform / learn.

Prognostic Framing

Forty two documents included prognostic frames, and most frequently mentioned solutions were changing behavior as well as support.

Table 34: Reform Environmentalism - Prognostic Framing

Organization		#	#P	P1	P2	P3	P4	P5	P6	P7
Environmental Defense Fund	#d	62	21	2	12	0	8	5	5	0
	#s	3,394	200	2	118	0	23	21	36	0
Natural Resources Defense Fund	#d	31	14	2	6	0	3	0	5	2
	#s	1,953	96	3	14	0	31	0	38	10
Friends of the Earth	#d	17	6	1	0	0	0	1	2	3
	#s	719	17	1	0	0	0	1	3	12
Population Council	#d	1	1	0	0	1	1	0	0	0
	#s	53	8	0	0	1	7	0	0	0
Total	**#d**	**111**	**42**	**5**	**18**	**1**	**12**	**6**	**12**	**5**
	#s	**6,119**	**321**	**6**	**132**	**1**	**61**	**22**	**77**	**22**

Environmental Defense Fund. Prognostic framing was included in twenty one documents. Frequently mentioned solutions were: support (12), reduce (8), change behavior (5), and consumer education (5). For example, when examining the solutions for the health problems caused by fish, there appears to be healthy choices available. Other solutions that require consumers to support something involve non food choices.

> "The good news is that there are several low-contaminant, high-omega-3 seafood options available (see Eco-Best list), so there's no need to risk eating contaminated fish." (EDF11)

> "Buying a car or truck with better gas mileage." (EDF19)

> "Using compact fluorescent bulbs." (EDF19)

Another popular solution according to EDF is to change behavior or to reduce usage.

> "For those who choose it, even eating just a little less meat can help." (EDF19)

> "'Driving less and using a cleaner car are the best things people can do for the environment,' said UCS physicist Michael Brower." (EDF39)

Finally, the solution seems to be to educate consumers on how they themselves can help mitigate the problem.

> "Our seafood guide covers the most common kinds of U.S. seafood. Seafood Selector brings together comprehensive environmental and health information so consumers can make wise seafood choices. The guide covers the most common seafood in the United States - the fish and shellfish you are most likely to see in your local supermarket or restaurant." (EDF25)

> "Educate car owners and drivers on what they can do to reduce emissions. Explore ways we can all do our part to improve fuel efficiency and cut global warming pollution from America's automobiles." (EDF73)

NRDC. Prognostic frames were also included in fourteen documents. The two most frequent solutions were support (6) and corporate behavior (5).

> "Home energy consumption will rise unless manufacturers take steps to improve efficiency for electronics such as big-screen televisions, cable boxes and digital video recorders." (NRDC9)

> "The only two products that tested entirely free of phthalates were Febreze Air Effects and Renuzit Subtle Effects, both sprays." (NRDC17)

> "Increasing consumer demand for certification creates a powerful incentive for retailers and manufacturers to seek out good wood suppliers." (NRDC38)

Friends of the Earth. Six documents included specific solutions. While different types of solutions were suggested, legal was mentioned in three of the documents. This means that to solve the problem of individual and household consumption legal changes are necessary. Two documents suggested that the solutions arise from corporate behavior.

Motivational Framing

There are eighty five documents with motivational framing. Most frequent calls to action were: inform / learn, support, reduce, reuse & recycle, and change behavior.

Table 35: Reform Environmentalism - Motivational Framing

Organization		#	#M	M1	M2	M3	M4	M5	M6	M7
Environmental Defense Fund	#d	62	49	41	15	28	11	20	20	0
	#s	3,394	1,573	316	90	488	47	250	382	0
Natural Resources Defense Fund	#d	31	28	20	6	14	2	10	5	0
	#s	1,953	1,104	148	57	521	5	185	184	0
Friends of the Earth	#d	17	7	6	4	1	0	0	0	0
	#s	719	54	33	20	1	0	0	0	0
Population Council	#d	1	1	1	0	0	0	0	0	0
	#s	53	1	1	0	0	0	0	0	0
Total	**#d**	**111**	**85**	**68**	**25**	**43**	**13**	**30**	**25**	**0**
	#s	**6,119**	**2,732**	**498**	**167**	**1,010**	**52**	**435**	**566**	**0**

Environmental Defense Fund. In forty nine of the documents there were calls to action. Most frequent calls to action were: inform / learn (41), support (28), reduce (20), and change behavior (20). The EDF has clear calls for what consumers need to support.

> "Consumers who take fish oil supplements should consider purchasing them from companies that verified they have met the strictest U.S. standards for contaminants." (EDF18)

> "3. Save money at tax time by buying an environmentally friendly vehicle. Once you've decided on the most fuel-efficient car that suits your needs, see if there's a version of that car that can afford you a tax break. Buying a hybrid in and of itself doesn't mean fuel savings. But there are fuel economic hybrid, diesel, battery-electric, alternative fuel, and fuel cell vehicles that can be environmentally friendly and get you a tax credit, which is based on a formula determined by fuels saving and technology." (EDF20)

> "4) As you replace home appliances, select the most energy-efficient models. By replacing an old air conditioner with a new Energy Star air conditioner. 7) Buy energy-efficient compact fluorescent bulbs for your most-used lights. 15) When you buy a car, choose one that gets good gas mileage." (EDF21)
>
> "Make a donation today!" (EDF32)

EDF is an organization that spends a lot of time in calling people to change their behaviors.

> "1) Wash clothes in warm water or cold water, not hot. 2) Turn down your water heater thermostat: 120 degrees F is usually hot enough.3) Use the energy-saving setting to dry the dishes. Don't use heat when drying. Carbon Dioxide Reduction: 100 lbs C02/yr. 5) Don't overheat or overcool rooms. Adjust your thermostat (lower in winter, higher in summer). 6) Maintain your furnace and air conditioner, clean or replace air filters as recommended. An air conditioner tune-up can save 15% of the energy used. 8) Wrap your water heater in an insulating jacket. 9) Install low-flow showerheads to use less hot water. 10) Caulk and weather strip around doors and windows to plug air leaks. 12) Insulate your attic: this can save about 20% of home heating bills. 13) If you need to replace your windows, install the best energy-saving models. 14) Plant trees next to your home. 16) Whenever possible, walk, bike, carpool or use mass transit. 17) If you have more than one vehicle, use the smaller, more fuel efficient one for most trips, and the larger, less fuel efficient one only when needed." (EDF21)

A third frequent call to act relates to reduce, reuse & recycle.

> "'If there are a lot of leftovers after Thanksgiving dinner, use this holiday as an opportunity to start composting food waste, and consider donating extra food to a shelter. For leftovers, stock up on reusable food containers that can save resources all year long,' said Krupp. 'Another way to reduce solid waste is to recycle beverage containers and the aluminum foil that accumulates during the meal and the football game,' suggests Krupp." (EDF48)
>
> "Another idea to protect the environment is to make a costume from old clothes at home, instead of buying a disposable one from a store." (EDF60)

Natural Resources Defense Council. In twenty eight documents specific calls to action were included. Inform / learn (20), support (14) and reduce, reuse & recycle (10)

were the three most frequent motivational frames. There are several clear calls to support specific product.

> "What you can do. 1. Buy energy-efficient products - When buying new appliances or electronics, shop for the highest energy-efficiency rating." (NRDC16)

> "1 Buy paper products with recycled content -- especially post-consumer fibers. Look for products that have a high recycled content, including high post-consumer content. Post-consumer fibers are recovered from paper that was previously used by consumers and would otherwise have been dumped into a landfill or an incinerator. 2 Buy paper products made with clean, safe processes. Paper products are bleached to make them whiter and brighter, but chlorine used in many bleaching processes contributes to the formation of harmful chemicals that wind up in our air and water and are highly toxic to people and fish. Look for products labeled totally chlorine-free (TCF) or processed chlorine-free (PCF). In some cases, elemental chlorine-free (ECF) may be acceptable." (NRDC32)

The NRDC was only one of three organizations that seemed to call on children as well (the other two were CEJL and RAN). Here is an example of such a call.

> "What Kids Can Do. When it comes to paper, the three R's -- reduce, reuse and recycle -- are especially important. Don't forget that the kind of paper matters, too. Below are some things you can do to cut down on paper use." (NRDC15)

Friends of the Earth. Seven documents included calls to action. Only three calls to action were included in these documents: inform / learn (6), contact (4), and support (1). There were a variety of different types of calls to contact.

> "Please sign the petition and let cosmetics and personal care products companies know that their customers want safe products. Companies should commit to phasing out the use of chemicals that are known or suspected carcinogens, mutagens and reproductive toxins. Send your friends the postcard!" (FoE19)

> "Tell Target to phase out dangerous plastics - Polyvinyl chloride also known as vinyl, is one of the most hazardous consumer products ever created. Target's aisles are filled with products made from this plastic. Tell Congress to protect the Amazon - The Bush administration is pushing Congress to approve a free trade agreement that will put the Amazon

> rainforest on the chopping block. Get Toxic Chemicals out of Cosmetics - Tell the cosmetics industry that toxic chemicals don't belong in personal care products." (FoE20)

Alternative Voices

According to Brulle (2000:195) the limitations of the worldview of Reform Environmentalism as well as the fact that environmental problems continued to persist in the 1980s and 1990s other worldviews emerged. These worldviews are discussed in the following order: Deep Ecology, Environmental Justice and Health, Ecofeminism, Ecospiritualism, and Animal Rights.

Deep Ecology

Deep Ecology represents the more radical strand of the environmental movement, because they subscribe to the view that the rights of nonhuman beings should be unaffected by human intervention. Due to its radical nature, Deep Ecology is not part of the Group of 10 nor are any of its organizations among the fifty richest environmental organizations. While it was expected that Deep Ecology organizations would have a lot to say about individual and household consumption, only eleven documents were found in total, all belonging to Rainforest Action Network (RAN), whereas Earth First! (EF) did not have anything related to consumption[31].

None of the documents contain diagnostic framing. This means that the question as to why individual and household consumption is problematic is not discussed by these organizations in any of the documents included in the sample.

[31] Looking at their website, there are a lot of updates about news events relating to environmental issues, but other segments of their website did not seem updated. For example, in the section called "Issues" several of the links did not work.

Table 36: Deep Ecology - Diagnostic Framing

Organization		#	#D	D1a	D1b	D1c	D2	D3	D4	D5	D6
Earth First!	#d	0	0	0	0	0	0	0	0	0	0
	#s	0	0	0	0	0	0	0	0	0	0
Rainforest Action Network	#d	11	0	0	0	0	0	0	0	0	0
	#s	596	0	0	0	0	0	0	0	0	0
Total	**#d**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	#s	**596**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Five documents discussed possible solutions to these problems and counter to the hypothesized effect, three of those documents discussed that the solution lies in support (and twenty three sentences were devoted to discuss this).

Table 37: Deep Ecology - Prognostic Framing

Organization		#	#P	P1	P2	P3	P4	P5	P6	P7
Earth First!	#d	0	0	0	0	0	0	0	0	0
	#s	0	0	0	0	0	0	0	0	0
Rainforest Action Network	#d	11	5	0	3	0	1	1	0	0
	#s	596	27	0	23	0	2	2	0	0
Total	**#d**	**11**	**5**	**0**	**3**	**0**	**1**	**1**	**0**	**0**
	#s	**596**	**27**	**0**	**23**	**0**	**2**	**2**	**0**	**0**

Two examples of what needs to be supported:

> "Plug-in hybrid electric vehicles (PHEVs) are among the best available automotive technologies to break our oil addiction and curb the climate crisis." (RAN2)

> "To preserve our last unprotected ancient forests while ensuring a supply of lumber for future generations, we have to support sustainable harvesting methods and use sustainable alternatives." (RAN3)

Other solutions were mentioned in one document: Reduce, reuse & recycle, and consumer education. The benefit of reducing consumption and educating consumers is explained as follows:

> "By reducing the amount of oil we use, however, we can make a big difference to help the rainforests." (RAN8)

> "Consumers in the U.S. are beginning to understand the critical role of our consumption patterns in rainforest deforestation and how our actions here at home can help to protect rainforests abroad." (RAN4).

Table 38: Deep Ecology - Motivational Framing

Organization		#	#M	M1	M2	M3	M4	M5	M6	M7
Earth First!	#d	0	0	0	0	0	0	0	0	0
	#s	0	0	0	0	0	0	0	0	0
Rainforest Action Network	#d	11	11	4	7	3	2	2	3	1
	#s	596	326	16	72	17	22	62	118	20
Total	**#d**	**11**	**11**	**4**	**7**	**3**	**2**	**2**	**3**	**1**
	#s	**596**	**326**	**16**	**72**	**17**	**22**	**62**	**118**	**20**

Every document contained motivational framing. This is one of eight organizations where every category of motivational framing was included. The most popular call for action was to contact. Two other motivational frames deserve attention. First, the call to reduce was mentioned in only two documents, but was elaborated in 62 sentences. In comparison, the call to contact was mentioned in seven documents and took up 72 sentences. Second, the call to change behavior was mentioned in three documents in a total of 118 sentences. An example from each of these three calls to action is:

> "Ask your stationery store to carry tree-free paper, which is made from plants like kenaf. Write letters to corporations that are destroying the rainforest. Let the corporations know that you are boycotting their products because you care about the rainforests. Include a picture of the rainforest or of your favorite rainforest animal. Below are some suggestions for companies that you can write to." (RAN19, Contact)

> "7 Steps Kids Can Take. 1 Use less paper. Since most paper comes from trees, using less paper can help save the rainforests. Use recycled 100% post-consumer waste (PCW) paper whenever possible. Better yet, use tree-free paper. Tree-free paper uses no trees--it is made from plants like kenaf, or from farmers' leftovers like corn stalks and wheat straw. If paper is 100% PCW or tree-free, it will say so on the package." (RAN13, Reduce)

> "First, instead of driving our cars everywhere, we can walk, ride our bikes, carpool, and take the bus or train whenever possible." (RAN8, Change Behavior)

What is interesting about the second statement above is that the RAN is one of few organizations who specifically target kids on their websites.

Environmental Justice and Environmental Health

The EJ movement arose in the 1980s driven by a sense of disappointment with the environmental movement in the 1960s and 1970s. While Environmental Justice shared that disappointment with Deep Ecology, it had a different basis. Whereas Deep Ecology focused on wilderness, Environmental Justice highlighted the unequal burden put onto communities of color and working class people. Environmental Justice organizations are not part of the Group of 10 nor are they among the richest organizations. The two organizations in the sample are Association of Forest Service Employees for Environmental Ethics (AFSEEE) and the National Tribal Environmental Council (NTEC). Both organizations fail to devote attention to the problem of individual and household consumption, because on the two websites no documents were found that related to this issue. However, this may be a result of the specific search procedure used in this study.

A completely different picture arises from analyzing a closely associated worldview: Environmental Health. This relationship is strong because Environmental Health organizations explore the association between environmental pollution and health effects, whereas Environmental Justice organizations explore which groups of people face a disproportionate burden. It represents the third biggest worldview when it comes to attention to consumption. The sample included the organizations: Beyond Pesticides (BP) and Center for Health, Environment and Justice (CHEJ). A total of seventy seven documents were found on both websites, with sixty three of these found on BP's website. This result means that on average the highest number of documents per organization was found for this worldview (38.5).

Table 39: Environmental Health -Diagnostic Framing

Organization		#	#D	D1a	D1b	D1c	D2	D3	D4	D5	D6
Beyond Pesticides	#d	63	29	1	25	1	5	0	0	6	2
	#s	1,832	353	1	264	3	18	0	0	23	44
Center for Health, Environment and Justice	#d	14	8	0	8	2	0	0	0	0	0
	#s	610	50	0	46	4	0	0	0	0	0
Total	**#d**	**77**	**38**	**1**	**33**	**3**	**5**	**0**	**0**	**6**	**2**
	#s	**2,442**	**403**	**1**	**310**	**7**	**18**	**0**	**0**	**23**	**44**

Diagnostic framing was included in thirty seven documents. The most common explanation for why consumption was problematic was that it negatively affects the health of humans, which is consistent with the description given about this worldview. Some specific examples of these diagnostic frames are:

> "But unlike organic arsenic, which is found naturally in the environment, inorganic arsenic is present in our food as a result of pesticide application and animal feed." (BP1)

> "Every bottle of conventional wine included in the analysis was found to contain pesticides, with one bottle containing 10 different pesticides." (BP11)

> "FDA has shown that use of Baytril in poultry reduces the effectiveness of Cipro in treating Campylobacter, one of the most common causes of severe bacterial food poisoning." (BP17)

> "Studies conducted on laboratory animals and cell cultures have linked low doses of BPA to obesity, diabetes, thyroid disease, breast cancer, prostate cancer and other illnesses." (CHEJ11)

Other health concerns are the use of Triclosan in consumer products, mercury in fish, as well as a variety of other concerns.

Table 40: Environmental Health - Prognostic Framing

Organization		#	#P	P1	P2	P3	P4	P5	P6	P7
Beyond Pesticides	#d	63	13	1	7	3	0	0	0	3
	#s	1,832	63	1	48	10	0	0	0	4
Center for Health, Environment and Justice	#d	14	4	0	2	1	0	1	2	0
	#s	610	12	0	7	1	0	2	2	0
Total	**#d**	**77**	**17**	**1**	**9**	**4**	**0**	**1**	**2**	**3**
	#s	**2,442**	**75**	**1**	**55**	**11**	**0**	**2**	**2**	**4**

Seventeen documents contain prognostic framing, and four different solutions were mentioned: support and legal in four documents, and change behavior and avoid in three documents. Eating organic food was seen as one of the healthier choices:

> "Children who eat a diet of organic food show a level of pesticides in their body that is six times lower than children who eat a diet of conventionally produced food, according to a new study published in the March 2003 issue of Environmental Health Perspectives." (BP23)

But the government needs to step up to the plate as well:

> "The authors recommended that governments require clear and prominent labeling of farmed and wild salmon as well as the country of origin of all farmed salmon." (BP2)

A major problem that was brought up in the diagnostic framing concerned the issue of Triclosan in soaps. For this problem there is an easy solution available according to BP.

> "U.S Food and Drug Administration scientists and other experts said studies showed clear benefits from hand washing with plain soap, especially when people are taught when and how long to wash." (BP43)

Table 41: Environmental Health – Motivational Framing

Organization		#	#M	M1	M2	M3	M4	M5	M6	M7
Beyond Pesticides	#d	63	57	38	21	30	15	0	3	2
	#s	1832	337	69	45	102	32	0	18	71
Center for Health, Environment and Justice	#d	14	14	9	7	9	5	2	0	0
	#s	610	308	54	50	76	119	9	0	0
Total	**#d**	**77**	**71**	**47**	**28**	**39**	**20**	**2**	**3**	**2**
	#s	**2,442**	**645**	**123**	**95**	**178**	**151**	**9**	**18**	**71**

Almost every document (seventy one to be precise) contains motivational framing, most common calls to action were to inform / learn, support, contact, and avoid. Some examples are:

> "Consult our Triclosan factsheet for a list of products containing triclosan (some, like Teva sandals and kitchen knives, may surprise you) and for more detailed information on alternatives to triclosan." (BP17, Inform / Learn)

> "Learn how you can protect your children and loved ones from the effects of pesticides in your home, on your lawns, in schools and other public

> places. See Beyond Pesticides Alternative Fact Sheets, How-To Factsheets, information on Integrated Pest Management (IPM) in schools and any of our other available materials and publications." (BP18, Inform / Learn)

Both of these are clear calls upon people to take action by finding out more information about this particular problem. Other motivational frames were clear calls to support something particular, such as:

> "Eat USDA-certified organic chicken (it does not contain arsenic)." (BP1)

> "Eat organic food whenever possible. Look for the USDA Certified Organic Label when buying food for your family, grow your own produce and/or buy from a local farm that discloses their practices." (BP103)

Of course in this second example there is also a call to Do-It-Yourself included. If asked to contact a variety of alternatives were present. Some asked to lobby local stores to carry a specific product, others were to contact a government official or representative, and yet again others asked to contact someone else. One example that includes this call is:

> "Lobby your supermarket to label GE food. Voice your concerns to your U.S Senators and U.S Representative, U.S.EPA Administrator Michael Leavitt, and USDA Secretary Ann M Veneman." (BP99)

Ecofeminism

Ecofeminism is a relatively new worldview within the environmental movement. It considers environmental degradation as being caused by the notion that nature is something that can be possessed and dominated. Ecofeminism neither belongs to the Group of 10 nor is it part of the richest 50 organizations. The two Ecofeminism organizations in the sample are Women's Voices for the Earth (WVE) and Women's Council on Energy and the Environment (WCEE). While, there were no documents found on the WCEE website, a total of eight documents were found on the WVE website. That not more attention is devoted to the issue of consumption perhaps arises from the fact that

the few Ecofeminism organizations in existence devote their effort to empowering women as decision makers (Brulle 2007:9). Thus, not much attention is given to a discussion of the different causes and solutions for environmental degradation.

Table 42: Ecofeminism -Diagnostic Framing

Organization		#	#D	D1a	D1b	D1c	D2	D3	D4	D5	D6
Women's Voices for the Earth	#d	8	3	0	3	1	0	0	0	0	0
	#s	1,086	40	0	35	5	0	0	0	0	0
Women's Council on Energy and Environment	#d	0	0	0	0	0	0	0	0	0	0
	#s	0	0	0	0	0	0	0	0	0	0
Total	**#d**	**8**	**3**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**
	#s	**1,086**	**40**	**0**	**35**	**5**	**0**	**0**	**0**	**0**	**0**

Three documents contained diagnostic framing. All three of these documents mentioned that consumption is problematic because of the negative effects it has for human health. The concern here seems to be with eating contaminated fish which would lead to exposure to mercury.

> "The Environmental Protection Agency (EPA) estimates 7 million women and children are eating mercury-contaminated fish at or above a "safe level." (WVE1)

> "The major source of human exposure to mercury is through eating contaminated fish." (WVE2)

Table 43: Ecofeminism - Prognostic Framing

Organization		#	#P	P1	P2	P3	P4	P5	P6	P7
Women's Voices for the Earth	#d	8	0	0	0	0	0	0	0	0
	#s	1,086	0	0	0	0	0	0	0	0
Women's Council on Energy and Environment	#d	0	0	0	0	0	0	0	0	0
	#s	0	0	0	0	0	0	0	0	0
Total	**#d**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	#s	**1,086**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

No solutions were discussed in any of the eight documents, but all documents included calls for action. In all but one of the documents people were called to inform / learn.

Table 44: Ecofeminism – Motivational Framing

Organization		#	#M	M1	M2	M3	M4	M5	M6	M7
Women's Voices for the Earth	#d	8	8	7	1	2	2	1	1	0
	#s	1,086	207	70	1	19	99	3	15	0
Women's Council on Energy and Environment	#d	0	0	0	0	0	0	0	0	0
	#s	0	0	0	0	0	0	0	0	0
Total	**#d**	**8**	**8**	**7**	**1**	**2**	**2**	**1**	**1**	**0**
	#s	**1,086**	**207**	**70**	**1**	**19**	**99**	**3**	**15**	**0**

In two documents each there was a call to either support or avoid (although the call to avoid was much more elaborated). Consider the following document (WVE18):

> "Fight Toxic Burning at Bozeman Co-op! Fight Toxic Burning by Buying Groceries at the Bozeman Co-op's 4% Day! Dear Friends of WVE, Will you be in Bozeman this Friday May 25th? If so, please consider stopping by the Bozeman Community Food Co-op for 4% Day! On Friday, 4% of all sales at the Community Food Co-op will be donated to our colleagues at Montanans Against Toxic Burning (MATB), which has been valiantly fighting the proposal to burn tires and other toxic waste at Holcim Cement plant in Three Forks, MT. The latest news from MATB is that the Department of Environmental Quality will be releasing Holcim's Air Quality Permit and EIS in late June. (This is the permit that would allow Holcim to burn tires and other "questionable" waste products). Fund raising is now become a key issue for MATB. You can help them out this Friday! Think about stocking up on teas, vitamins and other staples! Or visit the wonderful mercantile section for gifts. Click here to visit the Montanans Against Toxic Burning website for more information. For more information about the Bozeman Community Food Co-op, click here. The Co-op is located west of downtown Bozeman at 908 W Main St and is open from 7am until 10pm. Thanks and Happy Shopping!"

As you can see this contains several motivational frames: calls to inform/learn and support. Other calls for support were in reference to legislation banning the use of mercury in products as well as support the movement through donating money (both of these are in WVE2). The calls to avoid were more elaborate and were in reference to products that include mercury (WVE2), and chemicals in cleaning products (WVE19).

Ecospiritualism

Ecospiritualism represents a unique focus within the environmental movement. As Brulle (2007:9) describes, about forty years ago the link was made between the western biblical tradition and the environmental crisis. An attempt was made to develop a new religious viewpoint which would accommodate harmony with nature. Ecospiritualism organizations do not belong to the Group of 10 nor are they part of the 50 richest organizations. The two organizations in the sample are: Coalition on the Environment and Jewish Life (CEJL) and the National Religious Partnership for the Environment (NRPE). Ecospiritualism represents the fourth largest worldview as it relates to attention for consumption. Both organizations devote some attention to consumption: thirty five documents originated from CEJL and seventeen documents from NRPE.

Table 45: Ecospiritualism -Diagnostic Framing

Organization		#	#D	D1a	D1b	D1c	D2	D3	D4	D5	D6
Coalition of the Environment and Jewish Life	#d	35	15	2	4	9	2	5	5	0	0
	#s	2,638	144	7	20	37	7	23	50	0	0
National Religious Partnership on the Environment	#d	17	9	0	0	3	0	1	7	0	0
	#s	962	25	0	0	4	0	1	20	0	0
Total	**#d**	**52**	**24**	**2**	**4**	**12**	**2**	**6**	**12**	**0**	**0**
	#s	**3,600**	**169**	**7**	**20**	**41**	**7**	**24**	**70**	**0**	**0**

Of those fifty two documents that were found on the websites of these two organizations twenty four documents contained diagnostic framing. While the two organizations had slightly different patterns individually, in combination the two main reasons that make consumption problematic are the fact that behavior has changed as well as that it negatively affects the health of the planet. One of these behavioral changes is that:

> "The average American's appetite for paper products has nearly tripled in three decades--to 700 pounds annually." (CEJL17).

That the health of the planet shows up as a major concern becomes clear after reading this passage:

> "How does our consumption lead to the endangerment of other species? There are three major ways. 1. We physically alter or destroy the ecosystems in which many species live when we log virgin forests for wood and paper products; when we build sprawling cities that destroy wetlands; when we turn vast areas of land into agro-industrial zones. 2. We pollute habitats, putting toxic materials and excessive levels of nutrients into species' homes when we release toxic industrial byproducts into rivers, lakes, and oceans; when pesticides leach into water; when we release sulfur into the air which falls as acid rain on forests; when mining and processing of metals pollutes watersheds; when poorly managed land erodes into streams. 3. We contribute to changes in the world's atmosphere and climate in ways that cause harm to many species when we burn fossil fuels; when we destroy forests; when we release ozone-destroying chemicals into the atmosphere." (CEJL2)

Table 46: Ecospiritualism - Prognostic Framing

Organization		#	#P	P1	P2	P3	P4	P5	P6	P7
Coalition of the Environment and Jewish Life	#d	35	15	2	6	6	9	2	2	3
	#s	2,638	181	10	18	63	64	2	5	19
National Religious Partnership on the Environment	#d	17	6	0	0	0	6	0	0	0
	#s	962	30	0	0	0	30	0	0	0
Total	**#d**	**52**	**21**	**2**	**6**	**6**	**15**	**2**	**2**	**3**
	#s	**3,600**	**201**	**10**	**18**	**63**	**94**	**2**	**5**	**19**

In twenty one documents a solution was mentioned; with avoid being the number one solution, not just in number of documents, but primarily in number of sentences. In some cases the solution seems straightforward because it is consistent with religious practices. For example, consider the following statement:

> "Unnecessary consumption is essentially waste and we have seen that Judaism prohibits waste." (CEJL1)

However, not everything is explicitly linked to religion as the following passage illustrates:

> "Our grounds should avoid pesticides altogether if possible, minimize the use of lawnmowers and other polluting maintenance devices, and emphasize low-water-usage native plantings which in turn create vital sub/urban pockets of natural habitat." (CEJL9)

Table 47: Ecospiritualism – Motivational Framing

Organization		#	#M	M1	M2	M3	M4	M5	M6	M7
Coalition of the Environment and Jewish Life	#d	35	15	2	6	6	9	2	2	3
	#s	2,638	181	10	18	63	64	2	5	19
National Religious Partnership on the Environment	#d	17	6	0	0	0	6	0	0	0
	#s	962	30	0	0	0	30	0	0	0
Total	**#d**	**52**	**21**	**2**	**6**	**6**	**15**	**2**	**2**	**3**
	#s	**3,600**	**201**	**10**	**18**	**63**	**94**	**2**	**5**	**19**

Motivational framing was included in thirty six documents. Most frequent calls to action were calls to inform / learn, reduce, reuse & recycle, and change behavior.

> "Click here for a listing of automobile fuel efficiency by model." (CEJL42, Inform / Learn)

> "I pledge to walk, bike, car pool, and use public transportation more" (NRPE11, Reduce, Recycle and Reuse)

> "Day 4: Skip a car trip. Transportation, specifically in automobiles, is responsible for about a third of American greenhouse gas emissions. What's worse, while the trend is to buy large SUVs or 8-passenger vans, we spend the majority of our time driving alone. Carpooling helps, and buying locally cuts down on unnecessary driving as well. Today, walk, run, skate, bike, or take public transportation instead of a car ride." (CEJL21)

While this could also be seen as a call to support specific actions and behaviors, it involves an alteration of a typical behavior. While the call to contact was not one of the most frequent calls to action, I wanted to include the following call since it symbolizes the spiritualism within this worldview.

> "We prophets, we Loraxes, we who hear the scream, must raise our voices still more, while modulating them so that others can hear it too. The silent scream can be a metaphor for the great environmental challenges which lie ahead. For trees, for the Earth, for us-let's make sure the scream goes unheard no more." (CEJL24)

Animal Rights

Concern for animal rights has been present within the environmental movement since the American Society for the Prevention of Cruelty to Animals (APSCA) was founded in 1866. According to Brulle (2007:10) it is now a well defined discursive community where the idea seems to be that all life has a basic right to develop without infringement of humans. While Animal Rights does not belong to the Group of 10 its influence based on levels of income is growing. For example, People for the Ethical Treatment of Animals (PETA, number 35) and the International Fund for Animal Welfare (IFAW, number 38) are both among the fifty richest environmental organizations in the United States.

The two organizations in our sample show a different picture of how Animal Rights organizations treat individual and household consumption. On the one hand, there is the Animal Protection Institute (API) which based on total number of documents found represents the fifth largest organization in the sample. On the other hand, Voice for Animals (VfA) only had one document that related to the topic. Looking at the average number of documents, Animal Rights has nineteen documents, which is around the average for the entire sample.

Table 48: Animal Rights -Diagnostic Framing

Organization		#	#D	D1a	D1b	D1c	D2	D3	D4	D5	D6
Animal Protection Institute	#d	37	29	25	3	1	13	0	1	9	0
	#s	1,778	465	278	53	5	40	0	2	87	0
Voice for Animals	#d	1	0	0	0	0	0	0	0	0	0
	#s	962	25	0	0	4	0	1	20	0	0
Total	**#d**	**38**	**29**	**25**	**3**	**1**	**13**	**0**	**1**	**9**	**0**
	#s	**2,740**	**490**	**278**	**53**	**9**	**40**	**1**	**22**	**87**	**0**

Of the thirty seven documents by the API, twenty nine contained a diagnostic frame. The main problem according to this organization was that consumption negatively

affects the health of animals (mentioned in 25 of the 29 documents), which does not come as a surprise. This health effect could be anything from a minor injury, illness, or discomfort to massive pain and even death. To illustrate the spread within this diagnostic frame sample sentences are useful.

> "Unfortunately, farm animals endure tremendous amount of pain and suffering for unnecessary human use and consumption." (API1)

> "More than 50 million animals are violently killed for use in fashion every year." (API35)

Other frequently mentioned problems are legal (13) and consumer awareness (9). The following passage illustrates why this is considered a problem:

> "Misleading Consumers. The fur industry works hard to mislead consumers about fur and fur trim. It fights against labeling laws that could help shoppers make informed decisions about what to buy. Its aggressive public relations efforts falsely claim that fur is a 'fabric' and that fur trim is a 'byproduct.' The fur trade will say anything to persuade consumers to dissociate its product from the actual animals who die to create it. Deceptive fur industry marketing has led to a surge in the popularity of fur trim, now commonly found on inexpensive clothing, accessories, and even toys, and to increased markets overseas."

Looking at the number of sentences devoted to each of the diagnostic frames, it becomes clear that about 60% of all the diagnostic sentences are devoted to explaining that consumption negatively affects the health of animals. Whereas, more documents discuss legal problems associated with consumption, more sentences are used to explain why consumer awareness is problematic. In essence, what these findings tell us is that animal health is threatened by our consumption and that this is happening due to (lack of) consumer awareness and legal issues.

Table 49: Animal Rights - Prognostic Framing

Organization		#	#P	P1	P2	P3	P4	P5	P6	P7
Animal Protection Institute	#d	37	22	0	7	3	0	5	5	13
	#s	1,778	105	0	12	6	0	11	24	52
Voice for Animals	#d	1	1	1	0	0	0	0	0	0
	#s	21	1	1	0	0	0	0	0	0
Total	**#d**	**38**	**23**	**1**	**7**	**3**	**0**	**5**	**5**	**13**
	#s	**1,799**	**106**	**1**	**12**	**6**	**0**	**11**	**24**	**52**

In the twenty three documents containing prognostic frames, the most often mentioned solution lies in effecting legal changes. Consider the following two examples:

> "The time has come to apply a common sense, humane and permanent standard to the treatment of all downed farmed animals - for the sake of the animals as well as human health." (API10)

> "In the absence of federal regulation, 27 states and the District of Columbia in the U.S have enacted laws which establish some form of humane care standards for animals kept at pet shops. The quality and the scope of these laws vary from state to state. Born Free USA united with API actively participates in community programs to improve the plight of animals in pet shops." (API19)

Table 50: Animal Rights - Motivational Framing

Organization		#	#M	M1	M2	M3	M4	M5	M6	M7
Animal Protection Institute	#d	37	35	29	16	16	15	4	0	1
	#s	1,778	296	67	89	78	46	10	0	6
Voice for Animals	#d	1	0	0	0	0	0	0	0	0
	#s	21	0	0	0	0	0	0	0	0
Total	**#d**	**38**	**35**	**29**	**16**	**16**	**15**	**4**	**0**	**1**
	#s	**1,799**	**296**	**67**	**89**	**78**	**46**	**10**	**0**	**6**

All but two of the documents by the API contained motivational framing. The most common call for action was to get more information or learn something, which was included in all but eight of all the documents.

> "Learn how easy it is to eat compassionately in API's Going Veggie guide." (API1)

> "Investigate the icon and find out exactly what it means." (API16)

Other frequent calls for action were to make contact (16), support (16), and avoid (15). An example of a call to contact is as follows:

> "When you see fur or fur-trimmed items in stores, window displays, catalogues, or advertisements, write to company executives and let them know that their support of the cruel fur industry is unacceptable." (API14)

When asked to support, references are made to: pet shops, legislation, organic food (or farms), API itself, health food stores, and logos. When asked to avoid, references are made to: fur, meat, poultry and dairy products, exotic pets, and circuses that abuse animal rights. Moving from documents to actual sentences, the picture slightly chances due to the fact that most sentences are devoted to explain the call to contact, which has almost twice as many sentences as the calls to avoid.

Cohesiveness of Alternative Voices

The five worldviews making up the Alternative Voices differ in their treatment of the core framing tasks. While overall the most common diagnostic frame across these five worldviews are the concern for impacts of consumption for human health, Ecospiritualism and Animal Rights differ from this pattern. This difference in treatment is also visible for the prognostic frames. While support overall is the most frequent solution, Ecospiritualism (Avoid) and Animal Rights (Legal Changes) offer differ views on where the solution lies. Finally, all five worldviews (with the exception of Deep Ecology) calls people to inform.

CHAPTER V

CONCLUSION

Introduction

In this fifth and final chapter of the dissertation I do three things. First, I briefly interpret the findings and attempt to make sense of them. This includes a discussion of why the methodology used in this research might have influenced the specific findings. The second part of this chapter is devoted to a discussion of what the findings mean for the environmental movement. Several related issues need to be addressed here: 1) the value of analyzing the different worldviews in examining the environmental movement; 2) the work done by the environmental movement related to consumption; 3) what does this research mean in terms of the work by Buttel (2003) who explained that the best hope for solving environmental degradation lies at the environmental movement level. Finally, I recognize research limitations and introduce future research directions.

Interpretation of Findings

Despite the concerns raised in the earlier chapters of this dissertation about whether or not the environmental movement devotes attention to the issue of (individual and household) consumption, an appreciable number of documents were found on the websites[32] of the movement organizations examined in this study. It is clear that the modern American environmental movement as a whole does pay attention to the issue of consumption in the debate on environmental degradation. Based on these results, not every worldview (and not every organization within any worldview) treats consumption in the same way. Moreover, even though consumption might be discussed by the movement, the salience of the issue remains unclear (see future research directions). While, none of the organizations discuss consumption on their homepages[33] the results indicate that it is not completely ignored either.

Research Question

The question that guided this research was "how do modern American environmental movement organizations treat consumption on their websites through the core framing tasks?" In the following discussion I interpret what the results for the different framing tasks could mean. This interpretation focuses on the movement as a whole rather than worldviews. The vast majority of the organizations sampled (21 out of 28) discussed consumption on their websites based on the search criteria used in this study (see step 1-4 as discussed on pages 53-55). While fifteen organizations had over ten

[32] Some organizations had very active discussions on consumption on blogs; however, it would have been hard to select only those posts made by the movement (rather than a member or someone not associated with the movement).

[33] Data was collected during September 2008. The websites might have changed since that time. Homepage is defined as the first page you see when you go to a particular organization's website. For example, www.foe.org would be considered the homepage for Friends of the Earth.

consumption related documents on their websites, the other thirteen had between zero and eight documents.

Table 51: Overview of Sample

Phase	# org.	# doc.	Organizations with <5 documents
Manifest Destiny (Wise Use)	2	6	• WU: Alliance for the Wild Rockies (0)
Wildlife Management	2	26	• WM: Wildlife Conservation Society (2)
Conservation	2	4	• CO: Izaak Walton League (4)
Preservation	6	192	• CO: Trust for Public Land (0)
All of Early Development	10	222	• PR: Wilderness Society (0)
Reform Environmentalism	4	111	• RE: Population Council (1)
Deep Ecology	2	11	• DE: Earth First! (0)
Ecofeminism	2	8	• EF: Women's Council on Energy and the Environment (0)
Environmental Justice	2	0	
Environmental Health	2	77	• EJ:Association of Forest Service Employees for Environmental Ethics (0)
Ecospiritualism	2	52	
Animal Rights	2	38	• EJ: National Tribal Environmental Council (0)
All of Alternative Voices	12	186	• AR: Voices for Animals (1)
Total	**28**	**525**	

Diagnostic Framing

As the discussion of the findings (see page 63, Table 4) illustrates, the modern American environmental movement seems to be primarily concerned with health consequences related to consumption, whether in reference to the health of the planet, human health, or the health of animals. Concerns about human health are one of the most used frames (mentioned in almost half of the documents that included diagnostic framing). It is not surprising that the environmental movement uses health concerns of consumption when we consider the rise of what Andrew Szasz refers to as "inverted quarantine" (2007). By this term Szasz refers to the idea that people are increasingly concerned about negative health effects of everyday behaviors such as exposure to sun, drinking water from the tap, and as a result consume products to feel safer and more protected. Moreover, as discussed in the Introduction many of the effects of anthropogenic global warming are health related. Thus, the environmental movement recognizes that not only does this connection exist, but that they must also explain its

relationship to consumers. It certainly lends credibility to the claims made by the environmental movement that it is consistent with academic research.

A second consistency between the claims made by the environmental movement and existing evidence deals with problems associated with our lifestyles. There is a growing body of literature which is arguing that our lifestyles are problematic (Durning 1992; Harris 1997; Jolly 1998; Matthews and Hammond 1999; Princen, Maniates and Conca 2002; Assadourian et al. 2004; Ehrlich and Ehrlich 2004; Davidson and Hatt 2005) and the environmental movement problematizes materialism and changing consumer behavior. While not every organization belonging to the environmental movement discusses this problem (and when it does there is a difference in the amount of emphasis it receives) it is important to know that the environmental movement acknowledges the problems associated with our lifestyles. Almost one in five diagnostic framing sentences by the environmental movement either problematizes materialistic consumer lifestyles or explains that our consumer behavior has changed (for the worse)[34].

This might be a result of another diagnostic frame, namely: consumer awareness. If people have no idea that their behavior is in any way harmful how can we blame them for this behavior and / or how can we expect them to change? Consumer awareness, which was brought up in 14% of the documents with diagnostic framing, might play a role in causing consumption to contribute to the process of environmental degradation. It is likely that people who are unaware of the impact of their behaviors may engage in materialistic lifestyles but would change those behaviors upon learning of the effects.

[34] While every attempt was made to code each sentence with only one diagnostic frame, some sentences were coded with more than one.

In fact, this data provides evidence for this assertion: confusing and misleading labeling, logos, and claims, as well as attempts from companies to hide information from consumers leads to consumers not being fully aware about the consequences of their consumption behavior. As can be derived from the examples below, this issue is brought up by organizations belonging to each of the different stages (distinguished by Brulle 2000) in the development of the environmental movement.

> "However a majority of homeowners do not think about the consequences of the products they the use on their lawns, and in some cases homeowners don't even know they are applying toxic chemicals." (NAS26, Preservation)

> "Unfortunately, reading our electric bill does not tell us where our electricity comes from, how much it really costs or how much pollution it causes. The green power revolution arrived quietly, without much education and preparation." (EDF43, Reform Environmentalism)

> "Genetically engineered material has become a major component of many foods in the diets of consumers in the United States, but consumers are largely unaware of which foods contain or are produced with genetically engineered material." (FoE3, Reform Environmentalism)

> "Consumers interested in knowing whether salmon is wild or farmed should be aware that the word 'Fresh' on the label does not mean the salmon is wild-caught from the ocean. And any salmon labeled 'Atlantic' in the U.S. and in other countries is most likely farmed."(BP2, Environmental Health)

Some of these examples illustrate that actors other than the consumer are responsible for the problem of consumer awareness. For example, corporations choose to keep information unclear or hide behind logos and claims that are technically true but hide some inconvenient facts. More importantly, the government does not enforce standards and labeling laws (if they even exist). The least discussed diagnostic frame employed by the environmental movement was that healthier, environmentally friendly, lower impact products were too costly. Other problems discussed by the environmental

movement such as health effects, lifestyles, consumer awareness and legal problems, might have overshadowed the cost associated with products; although in this troubling economic time, it certainly becomes a more salient issue to consumers.

Prognostic Framing

By far the least amount of attention is devoted to describing solutions to the problem of individual consumption. The environmental movement appears to focus more on describing the problem than calling people into action; however, this does not mean that the prognostic framing should be ignored. When prognostic frames are interpreted (see page 66, Table 5) the environmental movement as a whole appears to be focused on using optimistic language: the two most frequent solutions were either to support certain products, stores, developments, legislation, etc. or to reduce, reuse, and recycle products. Each of these solutions was mentioned in approximately a third of all documents containing prognostic framing and represent almost 60% of all sentences with prognostic framing. The least frequently mentioned solution was to avoid stores, products, specific ingredients, or diets. The fact that the focus is on positive language such as ‘support’ rather than ‘avoid’, indicates that the focus of the movement is in offering alternatives to consumers, rather than telling them not to do something.

Consistent with some of the findings regarding diagnostic framing, organizations suggested several solutions in response to identified problems. For example, several movement organizations alluded to confusing labeling and misleading claims which reduced consumer awareness. These organizations pointed out actions that corporations can take and sometimes already do. For example, consumers might be unaware of the use of animal testing or be confused by conflicting claims. The following quotes indicate,

that corporations can be part of the solution, and that some of the controversy is unnecessary.

> "Many companies support such efforts through donating to humane research charities or by establishing their own non-animal testing facilities." (API13)

> "Animal testing is wholly unnecessary; there are sufficient existing safety data as well as in vitro alternatives to make animal testing for these products obsolete. While it is true that virtually every ingredient, even water, has been tested on animals in the past, there is nothing requiring further animal testing for cosmetics and we must prevent future needless animal testing. Neither the United States Food and Drug Administration (FDA) nor the U.S. Consumer Product Safety Commission requires animal testing for cosmetics or personal care or household products." (API16)

Further, if corporations and the government do not cooperate, an alternative solution aimed at consumer education is already available.

> "Since no market or product can profit without customers, we focus our efforts in the fight against fur on consumer education - letting people know that the way they spend their money makes a difference in the lives of animals. We provide valuable educational materials about how to see through the fur industry's marketing ploys, how to determine if the fur on store shelves is real or faux, how to most effectively speak out against the fur trade, and how to gently educate others. We're also a major partner in an international coalition, the Fur Free Alliance, which gets the message out to countless consumers around the world that compassion is always in style." (API11)

As these three examples illustrate, we might have to deal with problems that involve several actors, but solutions are available. The environmental movement thus acknowledges the enormity of some problems, but provides hope by offering a light at the end of the tunnel. Given the fact that experts on the environmental movement (such as Buttel 2003) argue that it offers the best potential for environmental reform, this focus provides members a relief. A final quote illustrates that the environmental movement

cares about the issues facing consumers and their families, while offering practical solutions:

> "'American consumers can protect their families and the environment by avoiding the purchase of products that contain mercury and properly disposing of mercury products they already have,' concluded Stadler." (NWF9)

Motivational Framing

The environmental movement has a variety of different motivational frames aimed at calling individual consumers to action (see page 68, Table 6). It is to this third core framing task that the environmental movement seems to devote itself. By far the most attention and detail is provided for this particular framing aspect. There are several ways to classify motivational frames.

The first major category of motivational frames used by the movement is in calling upon people as consumers and voters to use their buying or voting power with motivational frames such as support, avoid, reduce, and Do-It-Yourself. In doing so, it informs people what products, services, stores, policies, legislation, politicians, causes, organizations, etc. deserve their attention and which of these should be avoided. Some organizations mention the type of products; others go so far as to list specific brand names at specific stores that should be supported or avoided.

Critics might consider this an indication of green consumerism in which the environmental movement provides free advertising for companies; however, this interpretation overlooks salient issues. Most of the motivational calls to support use a description of product or store type that needs to be supported, rather than promoting specific stores or products. In doing so, it offers concerned consumers enough information for decision making. Below are three illustrating quotes. As the third quote

indicates, there is no difference between mainstream organizations like the Sierra Club and other organizations.

> "Support pet shops that do not sell live animals." (API19)

> "Eat organic food whenever possible. Look for the USDA Certified Organic Label when buying food for your family, grow your own produce and/or buy from a local farm that discloses their practices." (BP103)

> "While we all have to eat, we can educate ourselves and make better food choices to reduce the harmful consequences of our diet. Eating less animal products and more locally and organically grown products is good for your health and for the Earth." (S4)

Consumers and voters are also called upon to educate themselves and others through calls to "inform" and "contact". Rather than focusing on spending money in these statements the environmental movement calls upon people to inform themselves about a wide variety of issues or to contact their friends, businesses, the media, the movement, politicians etc. This is directly tied to the problem of consumer awareness and the solution of consumer education. The environmental movement indicates that it is crucial to go beyond calling people to educate themselves, but that they in turn, should educate others.

The least frequently mentioned call to action was to do it yourself (21 documents; 656 sentences). While two other calls to action - avoid (76 documents; 557 sentences) and contact (112 documents, 661 sentences) - were discussed in an equal number of sentences, they were discussed in more documents. All other motivational frames were each discussed using over 1,500 sentences. It is striking that the calls involving more action and more discomfort are the least frequently used. A call to contact is not necessarily discomforting; yet it still requires people to do something extra, whereas calls

such as support, reduce, and (to a much lesser degree) read something, are actions that are more easily included in daily behavior.

Summary

In conclusion, the data suggest that when it comes to the treatment of consumption through framing tasks, the environmental movement offers a variety of diagnoses about why consumption is problematic, what can be done about it, and what specific actions individuals could and should engage in. However, there is no evidence for the existence of what Benford (1993b) refers to as frame disputes: the idea that moderate and radical factions that make up a particular social movement might disagree about the problems and solutions. While the sampling method employed in this study did not distinguish explicitly between radical and moderate organizations, there certainly were clear examples of both included. For example, whereas the Group of 10 organizations could be seen as moderate organizations, those belonging to Animal Rights, Deep Ecology, and Ecofeminism could be construed as being more radical in nature. Whereas there are slight differences across the different worldviews, there were no clear indications of frame disputes in this research[35] and in fact a broad amount of consensus existed.

Hypotheses

In this section I interpret findings for each of the four hypotheses. First, I briefly review the hypotheses and the findings. Second, I interpret what these findings might indicate. Third, I discuss some of the limitations that are associated with my study and areas for future research.

[35] Although in its motivational framing organizations belonging to Ecospiritualism called more often for avoid than support.

References to Consumption

In the first hypothesis I predicted that environmental movement organizations would differ in their treatment of consumption. The reason for testing this hypothesis was to find out if the environmental movement is a monolithic entity or consists of a diverse collection of organizations. The second hypothesis predicted that organizations belonging to particular worldviews (Animal Rights, Conservation, Deep Ecology, Ecofeminism, Environmental Health, and Reform Environmentalism) would be more likely to discuss consumption than other worldviews (Environmental Justice, Ecospiritualism, Preservation, and Wildlife Management). I based this prediction on the description Brulle (2000) provided in his book about the nature, goals, objectives, and other characteristics of each of these discursive communities that are present within the environmental movement.

In Chapter 4 (see Table 7 on page 72) I failed to reject the first hypothesis. The environmental movement differs in the references to consumption as measured in the number of documents found on the organizations' websites, the number of sentences in those documents, the number of resources mentioned in the documents, the assignment of responsibility, and the number of issues addressed. However, the second hypothesis was rejected because results did not support the predicted variation across organizations in terms of attention to consumption.

Any attempt to explain why there is a difference in attention to consumption among the different worldviews must assume that the results are an accurate representation of the actual importance or attention that a particular organization devotes to consumption as reflected in 1) the number of documents found on the websites of these

organizations, and 2) the length and depth of the discussion in each of these documents. In this research the number of documents and the number of sentences within these documents were measured. Based on these results, conclusions about a particular worldview's degree of attention were formed.

However, it is important to consider other possibilities. This is especially true because of the rejection of the second hypothesis. In this hypothesis I predicted a pattern of varying levels of attention to consumption across the organizations reflecting differing worldviews. This hypothesis was rejected because only five of the eleven worldviews were correctly predicted; however, these findings may reflect the affects of the methodology used or the sample employed, resulting in a Type II error.

One factor that might affect results is the criteria for selecting website content used in this study. Only web based documents were used as opposed to offline material such as magazines, publications and newsletters. Moreover, blogs were not included in this study. Both offline articles and blogs may frequently address consumption.

A second factor to consider is the criteria used in selecting the organizations. For example, of the two Animal Rights organizations one, Animal Protection Institute, devoted a lot of attention to consumption, whereas the other, Voices for Animals, only had one relevant document. Likewise, while organizations belonging to Preservation and Reform Environmentalism worldviews used in this sample accounted for a total of 303 documents, each worldview included an organization with no (Wilderness Society) or only one document (Population Council). This indicates a possible effect due to sampling error. While the conclusion that not every organization belonging to a particular worldview holds similar views, is clearly warranted, it cannot be concluded that the

results found on these two particular organization's websites are representative of the specific worldviews.

A third factor to consider is that smaller organizations may not have the resources to devote a lot of attention to consumption and other issues on their websites, while larger organizations typically have resources available. The sampling method used in this research ensured that the most influential (Group of 10) and richest organizations were included. This, of course, means that larger organizations were over sampled, particularly for the Preservation and Reform Environmentalism worldviews. In fact, the results for Wildlife Management were largely driven by the inclusion of National Wildlife Federation, which was included because of its membership both in the Group of 10 as well as being among the richest organizations. The other organization, Wildlife Conservation Society, had only two documents related to consumption on its website. In the case of the Conservation worldview both organizations came from either the Group of 10 (Izaak Walton League) or from the richest organizations (Trust for Public Land), although this did not lead to a large number of documents related to consumption. Other worldviews that did not include any Group of 10 or richest organization representative can be assumed to represent smaller organizations and a more random inclusion.

Finally, certain organizations might not discuss individual and household consumption, because its members already practice lifestyles that are more environmentally friendly, or because it assumes it knows that its members would not support those positions. This idea is consistent with the charge by Shellenberger and Nordhaus (2004) and Maniates (2002a) about the environmental movement not wanting to challenge the status quo. It is likely that a worldview such as Deep Ecology does not

devote much attention to consumption on its website, but that might do so via newsletters, magazines, etc.

The lack of consumption related documents on Deep Ecology websites could be due to: 1) the exclusion of blog posts and magazine articles, 2) the fact that these organizations may not have the resources for comprehensive websites, 3) members identifying with Deep Ecology organizations already implement lifestyle changes making it an unnecessary issue for the organization to discuss, or 4) the fact that not much importance may be attributed to consumption by these organizations. However, this last possibility seems unlikely due to the objectives and goals associated with Deep Ecology.

Language Used

The above discussion is also relevant for understanding the results of the third hypothesis. In essence, I predicted that the language used by the movement would be more positive and optimistic in nature by using terms like “support” rather than “avoid”. This prediction was based on the rising importance of ecological modernization and green consumerism. It was also hypothesized that this pattern would hold for all of the worldviews except Deep Ecology and Ecofeminism, as they tend to be more radical in nature (Brulle 2000).

In testing this hypothesis the emphasis is on language rather on what issues were being supported. Thus, a discussion of supporting certain products from a store like Wal Mart was coded in the same manner as a discussion of the importance of supporting organically or locally produced products. Clearly, the focus of these discussions differs, although both offer a call to action extended through similar language. I failed to reject the first part of aspect of this hypothesis, because as the data shows (see Table 18 on page

90) 45% of the documents included the prognostic or motivational frame of support, compared to 18% of the documents which reflected the avoid frame. While not every case of "support" is an automatic example of green consumerism (supporting community supported agriculture or buying from local stores) it certainly is one of the more frequently discussed mechanisms for environmental improvements as explained by Buttel (2003).

While there is full support for the first part of the hypothesis, there is only partial support for the second part, in which it was predicted that organizations belonging to Deep Ecology and Ecofeminism would focus more on negative and pessimistic language by discussing the importance of avoiding certain products, stores, etc. While this prediction was supported for Ecofeminism, it was not for Deep Ecology. Contrary to the hypothesis, based on the number of sentences, the two organizations reflecting Ecospiritualism devote more attention to avoid than support. These results could be due to the reasons discussed on pages 148 and 149, particularly since only one of the two organizations belonging to Deep Ecology and Ecofeminism provided data for our sample and neither of them had that many documents (eight and eleven documents respectively) on their websites.

Framing Tasks

The fourth and final hypothesis was rejected because, contrary to what was predicted, there was less diagnostic framing than motivational framing. The prediction was based on assertions by Benford (2007) who argued that usually social movement organizations devote more attention to describing problems rather than to providing prognostic and motivational framing. The fact that this hypothesis is rejected should be

interpreted positively as the environmental movement expends great effort in calling people to act. Overall, the environmental movement seems to offer an alternative to the description offered by Benford (2007).

Implications of Findings

There are several questions that need to be answered based on the results of this study. First, how extensively does the environmental movement treat consumption? Second, is it worthwhile to continue making a distinction between the different worldviews within the environmental movement? Finally, what do the findings of this study mean in terms of Buttel's (2003) assessment of the role of environmental organizations in achieving environmental reform?

Treatment of Consumption by the Environmental Movement

In a controversial essay titled *The Death of Environmentalism* Shellenberger and Nordhaus (2004) accuse environmental leaders of focusing too much on selling technical fixes such as fluorescent light bulbs, more efficient appliances, and hybrid cars. In their eyes, the environmental movement has not accomplished any significant legislation since the 1970s. Others have voiced similar critiques to the effect that, over time, the environmental movement has become more professionalized and rather than advancing environmental protection, a strategy of "not rocking the boat" was adopted (Brulle 2000; Maniates 2002a; Sutton 2004; Conca 2005).

This accusation is correct only if we view the environmental movement as a generic monolithic entity, which it is not. The environmental movement is very broad, and while not every part (organization) of the movement has the same level of influence, there clearly are organizations offering more than technical fixes. For example, the

Ecospiritualism organizations focus not just on simple fixes, but also argue that our lifestyles are materialistic and that this is part of the problem. They move beyond simple calls to drive a hybrid car, and challenge its members to consider and question our entire relationship with the Earth.

> "As part of Operation Noah, the Coalition on the Environment and Jewish Life (COEJL) has developed the following materials for Passover to help you explore the ways in which over consumption and materialism 'enslave' us as individuals and as a society and threaten the survival of other species and our planet…… We tend to take for granted the material comforts of our society and tend not to see the real costs of those comforts to other people and ecosystems around the world. Our lifestyle seems 'normal' to us, and most of us would not consider ourselves extravagant consumers. Yet we in the US consume, on average 10 or more times as much of the earth's resources as someone living in China, India, or another developing country." (CEJL2)

> "Whereas there are two levels of discipline and sacrifice: first at the personal level, there is need to eliminate the large amount of waste in food production, delivery, packaging, marketing, and consumption; secondly, if these personal changes are to affect the world situation, they must be related to political action to develop a national and international food policy committed to the development of a world food security system…" (NRPE2)

This claim is further substantiated even by large mainstream organizations such as the Sierra Club and World Wildlife Fund who make similar statements. There are other examples of changes that must be classified as "rocking the boat."

> "Look to community supported agriculture (CSA) systems, as well, which enable you to buy a 'share' in a farm up front in return for a weekly box of farm products throughout the growing season (see 'The New Harvesters,' September 2002, http://magazine.audubon.org/features0209/csa.html)." (NAS10)

Thus, while it may be true that some environmental movement organizations do exactly what the 'death of environmentalism' thesis critiques, it is evident that some organizations within the environmental movement are not similarly guilty. In fact, there

is considerable variation in the treatment of consumption within the environmental movement.

This variation precludes our ability to assume a monolithic, comprehensive treatment of consumption by the environmental movement This is especially so if we consider that there were seven organizations and one worldview (Environmental Justice) with zero documents relating to consumption. While one of the more frequent diagnostic frames was the problems associated with materialistic lifestyles, this problem was only discussed by organizations associated with five worldviews, and three of those only had one document devoted to this problem (Wildlife Management, Reform Environmentalism, and Animal Rights). Two worldviews (Preservation and Ecospiritualism) devote more extensive attention to the problems associated with our lifestyles.

While consumption might not be as widely discussed by the various worldviews as some would feel is warranted, it must be acknowledged that advocating lifestyle changes does go beyond mere technical fixes. More importantly, the fact that organizations belonging to the influential Group of 10, and organizations associated with the dominant worldview of Preservation, indicates that this is not simply an issue discussed by a few smaller, marginalized organizations. On the other hand, the other two dominant worldviews (Conservation and Reform Environmentalism) devote only little or no attention to the problems of our lifestyles (although Reform Environmentalism does devote a lot of attention to other issues related to consumption).

This lack of attention may be due to several things. Perhaps movement organizations believe that consumption problems are most salient when considering the

health of the planet or human health. Thus, whereas these organizations might devote more attention to consumption they fail to do so, because their focus is on what they see as a more pressing and important problem. Alternatively, these organizations might not think individual consumers and households are responsible for environmental problems, but that the responsibility lies with other actors. This would explain why lifestyles are not more frequently discussed in diagnostic framing. This would be consistent with the ideology of the treadmill of production (Schnaiberg 1980; Gould and Schnaiberg 1994). As mentioned earlier, it is also possible that the issues of lifestyle problems are discussed in other sources (blogs, offline newsletters, magazines). Finally, it is possible that these organizations assume that their members are not living damaging lifestyles, and/or of members' unwillingness to make lifestyle changes. Whatever the reasons, the environmental movement is very diverse and devotes attention to numerous issues. These findings illustrate that the different worldviews add value, which is further discussed in the next section.

Value of Using Worldviews

In his comprehensive overview of the history of the environmental movement, Brulle (2000) distinguishes between four different phases or stages in its development: Manifest Destiny; Early Development; Reform Environmentalism; and Alternative Voices. Other observers of the environmental movement discuss a shift in thinking within the environmental movement from landscape preservation and wildlife issues to anti-pollution issues (Gottlieb 1993; Shabecoff 2003; Cohen 2006).

A similar shift can be found in my data. Whereas organizations formed during the early stages of movement development problematize the health of the planet using

diagnostic framing, those that established in the Reform Environmentalism phase shifted the diagnostic frame to concerns about human health. This supports the assertion that there are several discursive communities present within the environmental movement, even when it comes to a topic such as consumption.

Brulle (2007:11) mentions that 78% of environmental movement organizations frame environmental problems along Conservation, Preservation, and Reform Environmentalism lines. This makes the environmental movement seem united, a perception that is strengthened when income is included. Organizations belonging to these three worldviews represent 82.9% of the income of the environmental movement. Thus, a question arises: is it acceptable to limit studying the environmental movement to these three worldviews? Do we gain enough insight from these worldviews or is a different classification needed?[36]

This research indicates that other worldviews such as Environmental Health, Ecospiritualism, and Animal Rights offer additional insights into the issue of consumption. For example, Animal Rights organizations problematize our consumer choices based on the effects on animal health. In doing so, they also offer insight into the role of corporations and the government. Moreover, Conservation organizations do not devote a lot of attention to consumption and while Reform Environmentalism shifts the focus to human health, they do not do so with the same degree of attention as the Environmental Health organizations. While there was not much consumption-related evidence found on the websites for organizations associating with worldviews such as

[36] The following answer only relates to the modern American environmental movement's treatment of consumption. No inferences could or should be made to other topics. Moreover, the discussion is based on the specific methodology used in this research. For example, it might be the case that a different result emerges after examining blogs, magazines, and other offline publications of the movement. Likewise, interviewing staff and members of these organizations might lead to additional insights.

Deep Ecology, Ecofeminism, and Environmental Justice, they are still distinctively different in nature (Brulle 2000). Additional insight is gained from a variety of worldviews that make up the modern American environmental movement. This is true even for a topic such as consumption.

Solving Environmental Degradation

Near the end of his article, Buttel (2003:336) suggested that the best hope for solving environmental degradation comes from the environmental movement. He believes that citizen mobilization is the best guarantee for providing change. While he recognizes that alternative solutions might be viable as well, he claims that the environmental movement is going to be an important and necessary partner. He cites the work of Sonnenfeld (2000), who put ecological modernization to an empirical test and found that social movements and activism were necessary for implementing necessary changes in the pulp-and-paper manufacturing industry.

The findings of this research support his assessment that the environmental movement is instrumental in enabling changes. While initially I was skeptical about movement activities in the area of consumption, my findings indicate that not only does the movement offer very broad and diverse insights into the problems associated with consumption, but that it also calls people into action. This is true not just for a few radical organizations, but also for larger, mainstream organizations that by no means focus only on solutions that do not 'rock the boat'. These organizations question our way of life in the Western world and suggest changes we can make in order to maintain a better, healthier world. While there may be a long road before we reach a sustainable world, based on the findings of my research, environmentalism is certainly not dead yet.

Future Research Directions

In this final section of my dissertation I offer future research directions that are aimed at helping the environmental movement achieve its goals and narrow the gap between what needs to be done and what is being done. As discussed earlier, the sampling method matters. One way to address this limitation is to analyze all of the organizations belonging to a particular worldview or (because this could lead to a very large sample set) to include a larger number of representative organizations in the sample. Clearly, not every organization belonging to a particular worldview has the same resources available. Perhaps dividing each worldview into resource clusters would lead to a more detailed insight into the treatment of a particular issue by different worldviews.

Another potential strategy would be to examine a mixture of on and offline content. Including a wider variety of content might address the question of whether the presentation of self by the movement differs in different types of communication (Kubal 1998). This might provide insight into how organizations and worldviews that did not have much content related to consumption on their websites address this issue more extensively in other media.

In this dissertation I set out to explore whether the environmental movement treats consumption. In order to ascertain the importance the environmental movement attributes to consumption, either one or both of the following questions need to be answered: 1) what is the percentage of all documents on the website of a particular organization that is devoted to consumption? And 2) what percentage of attention is devoted to other issues

on their websites?[37] An additional way to gain insight into the salience of consumption would be to ask movement organizations for a policy statement indicating what they consider to be causes of environmental degradation and what role and degree of importance they attribute to individual and household consumption.

Consumers engage in materialistic lifestyles, and the role of the advertising industry has been recognized (Brulle and Young 2007). The findings of my research point to the problem of consumer awareness and the solution of consumer education. How effective will it be to make consumers aware of the consequences of their behaviors? Polls show consumer willingness to pay more for environmentally friendly products, which would indicate that this is the case (Jones 2008). Moreover, the environmental movement has been successful in promoting recycling and energy conservation (Jones 2008). While there are certainly problems with the attitude-behavior literature (such as social desirability bias), it should be expected that members of environmental movement organizations would be more likely to change their behaviors than the general public.

One of the positive findings in this study was that the environmental movement devotes more attention to motivational framing than to diagnostic framing. Several future research directions might be based on this. To what extent do calls to action lead people to engage in these actions? In other words, how effective is the framing used by the various environmental movement organizations? Benford and Snow (1988) explain that SMOs need to engage in all three core framing tasks in order to successfully mobilize people. The findings in this research illustrate that while two environmental movement

[37] Neither of these two questions were part of the design of this dissertation research, because I was interested in the way that the modern American environmental movement treats consumption rather than the question of how important consumption is.

organizations (Rainforest Action Network; Voices for Animals) did not engage in all three tasks, all the other organizations that were included in the sample did so. The question then becomes: does the environmental movement successfully mobilize people and does 'cognitive liberation' occur (Nepstad 1997)? Additionally, as Benford (1993a:201) explains, even if people agree with the movement's claim that problems exist, does this necessarily mean that they are willing to engage in action? What type of evidence do people need when they read statements by the environmental movement? Or put in slightly different words: why do people engage in action after being called upon to do so by the movement? Finally, how do environmental movement organizations decide what to include in its framing tasks? There is of course an extensive body of social movements' literature addressing the mobilization of people (Snow, Zurcher, and Ekland-Olsen 1980; McAdam and Paulsen 1993; Oegema and Klandermans 1994; Gamson and Meyer 1996).

A final question we must ask is what barriers block people from engaging in environmentally friendly consumer behavior? There is social movements' literature that examines reasons behind non participation as well as the freerider effect (Walsh 1981; Walsh and Warland 1983; McAdam 1986; Snow and Benford 1988). The least used diagnostic frame in my research was that products were too costly. In these pressing economic times, the cost of products could present a huge barrier for people. It will be interesting to see how price affects consumer behavior as consumer spending power declines. The apparently low level of attention given to cost might be a reflection of this sample, in which larger organizations were overrepresented. As these larger organizations are more established and enjoy greater resources, we might assume that members enjoy

enough affluence to overcome any barrier presented by cost. After all, the mainstream environmental movement has been accused of elitism (Morrison and Dunlap 1986), which was one of the reasons behind the birth and rise of the environmental justice movement. A sampling of smaller organizations might provide evidence of greater cost concern.

Above all, this research should serve to remind us that environmental sociology encompasses a broad array of behaviors, from corporate and governmental policies to the study of the environmental movement to individual shopping decisions. Consumption remains a vital part of this complex entity. Consumption matters. Economic challenges, inequality (even within the movement) and marketing forces may all influence consumption patterns, making the need for ongoing, robust investigation into consumption a meaningful, necessary component of environmental research.

REFERENCES

Alfredsson, E.C. 2004. "'Green' consumption—no solution for climate change." *Energy* 29:513-524.

Assadourian, Erik et al. 2004. *State of the World 2004: The Consumer Society*. New York: The Worldwatch Institute.

Associated Press. 2007. "S. California Fires Destroy Hundreds of Homes." *MSNBC.com*, October 23, 2007. Retrieved June 10, 2008 (http://www.msnbc.msn.com/id/21405632/).

Bates, Marcia J. and Shaojun Lu. 1997. "An Exploratory Profile of Personal Home Pages: Content, Design, Metaphors." *Online and CD-Rom Review* 21:331-340.

Baylor, Tim. 1996. "Media Framing of Movement Protest: The Case of American Indian Protest." *The Social Science Journal* 33:241-255.

Benford, Robert D. 1993a. "Frame Disputes Within the Nuclear Disarmament Movement." *Social Forces* 71: 677-701.

------. 1993b. "You Could Be the Hundredth Monkey: Collective Action Frames and Vocabularies of Motive Within the Nuclear Disarmament Movement." *The Sociological Quarterly* 34: 195-216.

------. 1997. "An Insider's Critique of the Social Movement Framing Perspective." *Sociological Inquiry* 67:409-430.

------. 2007. “The College Sports Reform Movement: Reframing the ‘Edutainment’ Industry.” *The Sociological Quarterly* 48:1-28.

Benford, Robert D. and Scott A. Hunt. 1992. “Dramaturgy and Social Movements: The Social Construction and Communication of Power.” *Sociological Inquiry* 62:36-55.

Benford, Robert D. and David A. Snow. 2000. “Framing Processes and Social Movements: An Overview and Assessment.” *Annual Review of Sociology* 26:611-639.

Berbrier, Mitch. 1998. “Half the Battle: Cultural Resonance, Framing Processes, and Ethnic Affectations in Contemporary White Separatist Rhetoric.” *Social Problems* 45: 431-450.

Berg, Bruce L. 2004. *Qualitative Research Methods: For the Social Sciences.* Boston, MA: Allyn and Bacon.

Bernstein, Steven. 2001. *The Compromise of Liberal Environmentalism.* New York: Columbia University Press.

Bernstein et al. 2007. *Climate Change: Synthesis Report*. Intergovernmental Panel on Climate Change.

Best, Joel. 1987. “Rhetoric in Claims-Making: Constructing the Missing Children Problem.” *Social Problems* 34: 101-121.

Bhattacharya, Shaoni. 2003. “European Heatwave Caused 35,000 Deaths.” *New Scientist*, 10 October, 2003. Retrieved 10 June 2008 (http://www.newscientist.com/article.ns?id=dn4259).

Brown, Paul M. and Linda D. Cameron. 2000. “What Can be Done to Reduce Overconsumption?” *Ecological Economics* 32:27-41.

Brulle, Robert J. 2000. *Agency, Democracy, and Nature: The U.S. Environmental Movement from a Critical Theory Perspective.* Cambridge, MA: MIT Press.

------. 2007.

Brulle, Robert J. and J. Craig Jenkins. 2006. “Spinning Our Way to Sustainability?” *Organization and Environment* 19:82-87.

Brulle, Robert J. and Young. 2007.

Brundtland, Gro H. 1987. *Our Common Future.* Oxford: Oxford University Press.

Bucy, E.P., et al. 1999. “Formal Features of Cyberspace: Relationships Between Web Page Complexity and Site Traffic.” *Journal of the American Society for Information Science* 50:1246-1256.

Buttel, Frederick H. 1987. “New Directions in Environmental Sociology.” *Annual Review of Sociology* 13: 465-88.

------. 2003. “Environmental Sociology and the Explanation of Environmental Reform. *Organization & Environment* 16:306-344.

Cable, Sherry and Thomas Shriver. 1995. “Production and Extrapolation of Meaning in the Environmental Justice Movement.” *Sociological Spectrum* 15:419-442.

Capek, Stella M. 1993. “The ‘Environmental Justice’ Frame: A Conceptual Discussion and an Application.” *Social Problems* 40: 5-24.

Carmin, JoAnn and Deborah B. Balser. 2002. “Selecting Repertoires of Action in Environmental Movement Organizations: An Interpretive Approach.” *Organization & Environment* 15:365-388.

Carolan, Michael S. 2004. “Ecological Modernization Theory: What About Consumption?” *Society and Natural Resources*, 17:247-260.

Carroll, William K. and R.S. Ratner.1996.”Master Framing and Cross-Movement Networking in Contemporary Social Movements.” *The Sociological Quarterly* 37: 601-625.

Chase-Dunn, Christopher. 1998. *Global Formation: Structures of the World-Economy*. Lanham, MD: Rowman and Littlefield.

Christie, Ian and Lindsey Jarvis. 2001. “How Green Are Our Valleys?” Pp.131-157 in *British Social Attitudes: The Eighteenth Report*, edited by Alison Park et al. London: Sage.

Cicerone, Ralph J. et al. 2001. *Climate Change Science: An Analysis of Some Key Questions*. Washington, DC: National Academy of Sciences.

Coglianese, Cary. 2001. “Social Movements, Law, and Society: The Institutionalization of the Environmental Movement.” *University of Pennsylvania Law Review* 150:85-118.

Commoner, Barry. 1971. *The Closing Circle: Nature, Man, and Technology*. New York: Knopf.

Conca, Ken. 2005. “Consumption and Environment in a Global Economy.” Pp. 133-154 in *Confronting Consumption*, edited by Thomas Princen, Michael Maniates, and Ken Conca. Cambridge, MA: MIT Press.

Cress, Daniel M. and David A. Snow. 2000. “The Outcomes of Homeless Mobilization: The Influence of Organization, Disruption, Political Mediation, and Framing.” *American Journal of Sociology* 105:1063-1104.

Dai, Aiguo, Kevin E. Trenberth, and Taotao Qian. 2004. "A Global Dataset of Palmer Drought Severity Index for 1870-2002: Relationship with Soil Moisture and Effects of Surface Warming." *Journal of Hydrometeorology* 5:1117-1130.

Dalton, Russell J. 1994. *The Green Rainbow: Environmental Groups in Western Europe.* New Haven: Yale University Press.

Davidson, Debra and Kristin Hatt, eds. 2005. *Consuming Sustainability: Critical Social Analyses of Ecological Change.* Black Point, Nova Scotia: Fernwood Publishing.

Dowie, Mark. 1997. *Losing Ground: American Environmentalism at the Close of the Twentieth Century*. Cambridge, MA: MIT Press.

Dreiling, Michael and Brian Wolf. 2001. "Environmental Movement Organizations and Political Strategy: Tactical Conflicts Over NAFTA." *Organization & Environment* 14: 34-54.

Dryzek, John. 1997. *The Politics of the Earth: Environmental Discourse*s. Oxford University Press, Oxford.

Dunlap, Riley E. 2002. "An Enduring Concern." *Public Perspective* September/October 2002:10-14.

------. 2003. "Environmental Sociology: Recent Trends in the Field." *Journal of Environmental Sociology* 9:74-90.

------. 2006. "Show Us the Data: The Questionable Empirical Foundations of 'The Death of Environmentalism' Thesis." *Organization and Environment* 19:88-102.

------. 2007. "Sociology of the Environment." Pp. 1417-1422 in *Blackwell Encyclopedia of Sociology*. Vol 4, edited by George Ritzer. Malden, MA: Blackwell.

Dunlap, Riley E. and William J. Catton. 1994. “Struggling with Human Exemptionalism: The Rise, Decline, and Revitalization of Environmental Sociology.” *The American Sociologist* 25:5-30.

Dunlap, Riley E. and Brant K. Marshall. 2007. “Environmental Sociology” Pp. 329-320 in *21st Century Sociology: A Reference Handbook.* Vol. 2, edited by Clifton D. Bryant and Dennis L. Peck. Thousands Oaks, CA: Sage.

Dunlap, Riley E. and Angela G. Mertig. 1992. *American Environmentalism: The U.S. Environmental Movement, 1970-1990*. Bristol, PA: Taylor and Francis.

Durning, Alan. 1992. *How Much is Enough? The Consumer Society and the Future of the Earth.* New York: W. W. Norton & Company.

Ehrlich, Paul R. 1968. *Population Bomb*. New York, NY: The Ballantine Publishing Group.

Ehrlich, Paul R. and Anne Ehrlich. 1990. *The Population Explosion*. Touchstone Books.

------. 2004. *One With Nineveh: Politics, Consumption, and the Human Future.* Washington, DC: Island Press.

Elkington, John, Julia Hailes, and Joel Makower. 1988. *The Green Consumer Guide*. New York, NY: Penguin Book.

Ellingson, Stephen. 1995. “Understanding the Dialectic of Discourse and Collective Action: Public Debate and Rioting in Antebellum Cincinnati.” *American Journal of Sociology* 101: 100-144.

Energy Information Administration. 2008. “What Are Greenhouse Gases and How Much Are Emitted By the United States?” (May 1, 2008). Retrieved June 10, 2008 (http://tonto.eia.doe.gov/energy_in_brief/greenhouse_gas.cfm).

Epstein, Paul R. 2000. “Is Global Warming Harmful to Health?” *Scientific American* August: 50-57.

Epstein, Paul R. and Christine Rogers. 2004. “Inside the Greenhouse: The Impacts of CO_2 and Climate Change on Public Health in the Inner City.” *Center for Health and the Global Environment,* Boston, MA: Harvard Medical School.

Evans, John H. 1997. “Multi-Organizational Fields and Social Movement Organization Frame Content: The Religious Pro-Choice Movement” *Sociological Inquiry*. 67:451-469.

Fisher, K. 1997. “Locating Frames in the Discursive Universe.” *Sociological Research Online* 2. Accessed at http://www.socresonline.org.uk/socresonline/2/3/4.html.

Food and Agricultural Organization. 2005. “Incentives to curb deforestation needed to counter climate change.” (December 9, 2005.) Retrieved June 10, 2008 (http://www.fao.org/newsroom/en/news/2005/1000176/index.html).

------. 2006. “Livestock A Major Threat to Environment: Remedies Urgently Needed.” (November 29, 2006.) Retrieved June 10 2008 (http://www.fao.org/newsroom/en/news/2006/1000448/index.html).

Gamson, William A. 1995. “Constructing Social Protest.” Pp. 85-106 in *Social Movements and Culture*, edited by Hank Johnston and Bert Klandermans. Routledge.

Gamson, William A. and David S. Meyer. 1996. “Framing Political Opportunity.” In: *Comparative Perspectives on Social Movements: Political Opportunities, Mobilizing Structures and Cultural Framings.*

Gamson, William A. and Andre Modigliani. 1989. “Media Discourse and Public Opinion on Nuclear Power: A Constructionist Approach.” *The American Journal of Sociology* 95: 1-37.

Gerhards, Jürgen and Dieter Rucht. 1992. “Mesomobilization: Organizing and Framing in Two Protest Campaigns in West Germany.” *The American Journal of Sociology* 98: 555-596.

Goffman, Erving. 1974. *Frame Analysis: An Essay on the Organization of Experience*. New York, NY: Harper & Row.

Gottlieb, Robert. 1993. *Forcing the Spring: The Transformation of the American Environmental Movement*. Washington, DC: Island Press.

Gotham, Kevin Fox. 1999. “Political Opportunity, Community Identity, and the Emergence of a Local Anti-Expressway Movement**.”** *Social Problems* 46: 332-354.

Gould, Kenneth A., David N. Pellow, and Allan Schnaiberg. 2004. “Interrogating the Treadmill of Production: Everything You Wanted to Know about the Treadmill ut Were Afraid to Ask.” *Organization and Environment* 17: 296-316.

------. 2008. *Treadmill of Production*. Boulder, CO: Paradigm Publishers.

Grigsby, Mary. 2004. *Buying Time and Getting By: The Voluntary Simplicity Movement*: New York, NY: SUNY.

Guber, Deborah Lynn. 2003. *The Grassroots of a Green Revolution: Polling America on the Environment.* MIT Press.

Ha, Louisa and E. Lincoln James. 1998. “Interactivity Re-examined: A Baseline Analysis of Early Business Web Sites.” *Journal of Broadcasting & Electronic Media* 42: 457-474.

Haas, Stephanie W. and Erika S. Grams. 2000. “Readers, Authors, and Page Structure: A Discussion of Four Questions Arising from a Content Analysis of Web Pages.” *Journal of the American Society for Information Science* 51:181-192.

Haines, 1996

Haley, Ella, Kierstin C. Hatt, and Richard Tunstall. 2005. “You Are What You Eat.” Pp. 70-100 in *Consuming Sustainability: Critical Social Analyses of Ecological Change,* edited by Debra Davidson and Kierstin Hatt. Black Point, Nova Scotia: Fernwood Publishing.

Harris, Jonathan. 1997. “Consumption and the Environment.” Pp. 269-299 in *The Consumer Society.* Edited by Neva R. Goodwin, Frank Ackerman, and David Kiron. Washington, DC: Island Press.

Hart, Stephen. 1996. “The Cultural Dimension of Social Movements: A Theoretical Reassessment and Literature Review.” *Sociology of Religion* 57: 87-100.

Haydu, Jeffrey. 1999. “Counter Action Frames: Employer Repertoires and the Union Menace in the Late Nineteenth Century.” *Social Problems* 46: 313-331.

Hunt, Scott A., Robert D. Benford and David A. Snow. 1994. “Identity Fields: Framing Processes and the Social Construction of Movement Identities.” Pp. 185-208 in *New Social Movements: From Ideology to Identity,* edited by Enrique Larana, Hank Johnston and Joseph R. Gusfield.

Jacques, Peter J., Riley E. Dunlap, and Mark Freeman. 2008. "The Organisation of Denial: Conservative Think Tanks and Environmental Skepticism." *Environmental Politics* 17:349-385.

Jasper, James M. and Jane D. Poulsen. 1995. "Recruiting Strangers and Friends: Moral Shocks and Social Networks in Animal Rights and Anti-Nuclear Protests." *Social Problems* 42: 493-512.

Jenness, Valerie. 1995. "Social Movement Growth, Domain Expansion, and Framing Processes: The Gay/Lesbian Movement and Violence against Gays and Lesbians as a Social Problem." *Social Problems* 42: 145-170.

Johnson, Erik. 2006. "Changing Issue Representation among Major United States Environmental Movement Organizations." *Rural Sociology* 71:132-154.

Jolly, Richard. 1998. *Human Development Review 1998*. United Nations.

Jones, Jeffrey M. 2008. "In the U.S., 28% Report Major Changes to Live "Green"." *Gallup.com*, April 18, 2008. Retrieved June 10, 2008 (http://www.gallup.com/poll/106624/US-28-Report-Major-Changes-Live-Green.aspx).

Jorgenson, Andrew K. 2003. "Consumption and Environmental Degradation: A Cross-National Analysis of the Ecological Footprint." *Social Problems* 50: 374-394.

Koehler, William. 1999. "An Analysis of Web Page and Web Site Constancy and Permanence." *Journal of the American Society for Information Science* 50:162-180.

Krippendorf, Klaus. 2004. *Content Analysis: An Introduction to Its Methodology*. Sage.

Kubal, Timothy J. “The Presentation of Political Self: Cultural Resonance and the Construction of Collective Action Frames.” *The Sociological Quarterly* 39: 539-554.

Lilienfeld, Robert M. and William L. Rathje. 1998. *Use Less Stuff: Environmental Solutions for Who We Really Are*. New York, NY: The Ballantine Publishing Group.

Lock, Ineke C. and Satoshi Ikeda. 2005. “Clothes Encounters: Consumption, Culture, Ecology, and Economy.” Pp. 20-46 in *Consuming Sustainability: Critical Social Analyses of Ecological Change,* edited by Debra Davidson and Kierstin Hatt. Black Point, Nova Scotia: Fernwood Publishing.

Maniates, Michael. 2002a. “Individualization: Plant a Tree, Buy a Bike, Save the World?” Pp. 43-66 in: *Confronting Consumption,* edited by Thomas Princen, Michael Maniates, and Ken Conca. Cambridge, MA: MIT Press.

------. 2002b. “In Search of Consumptive Resistance: The Voluntary Simplicity Movement.” Pp.199-236 in *Confronting Consumption*, edited by Thomas Princen, Michael Maniates, and Ken Conca. Cambridge, MA: MIT Press.

Marullo, Sam, Ron Pagnucco and Jackie Smith. 1996. “Frame Changes and Social Movement Contraction: U.S. Peace Movement Framing After the Cold War.” *Sociological Inquiry* 66:1-28.

Matthews, Emily and Allen Hammond. 1999. *Critical Consumption Trends and Implications: Degrading Earth’s Ecosystems*. World Resources Institute.

McAdam, Doug. 1986. “Recruitment to High-Risk Activism: The Case of Freedom Summer.” *American Journal of Sociology* 92:64-90.

McAdam, Doug and Ronnelle Paulsen. 1993. “Specifying the Relationship between Social Ties and Activism.” *American Journal of Sociology* 98:640-667.

McCright, Aaron M. and Riley E. Dunlap. 2000. “Challenging Global Warming as a Social Problem: An Analysis of the Conservative Movement's Counter-Claims.” *Social Problems* 47: 499-522.

------. 2003. “Defeating Kyoto: The Conservative Movement’s Impact on U.S. Climate Change Policy.” *Social Problems* 50: 348–373.

McMillan, Sally J. 2000. “The Microscope and the Moving Target: The Challenge of Applying Content Analysis to the World Wide Web.” *Journalism & Mass Communication Quarterly* 77:80-98.

Meadows, D., J. Randers, and D. Meadows. 2004. *Limits to Growth: The 30-Year Update* Chelsea Green.

Meadows, D.H., D.L. Meadows, J. Randers, and W.W. Behrens III. 1972. *The Limits to Growth.* New York: Universe Books.

Mertig, Angela G. and Riley E. Dunlap. 2001. “Environmentalism, New Social Movements, and the New Class: A Cross-National Investigation.” *Rural Sociology* 66:113-136.

Mertig, Angela G., Riley E. Dunlap and Denton E. Morrison. 2002. “The Environmental Movement in the United States.” Pp. 448-481 in *Handbook of Environmental Sociology,* edited by Riley E. Dunlap and William Michelson. Greenwood Publishing Group.

Milani, Brian. 2000. *Designing the Green Economy.* Lanham, MD: Rowman and Littlefield.

Mitchell, Mertig and Dunlap. 1992.

Mooney, Patrick H. and Scott A. Hunt. 1996. “A Repertoire of Interpretations: Master Frames and Ideological Continuity in U.S. Agrarian Mobilization.” *Tbe Sociological Quarterly* 37: 177-197.

National Oceanic and Atmospheric Administration. 2006. “Heat – the Number One Non-severe Weather Related Killer in the United States.” *NOAA Magazine*, August 2, 2006. Retrieved June 10 2008 (http://www.magazine.noaa.gov/stories/mag208.htm).

Nepstad, Sharon E. 1997. “The Process of Cognitive Liberation: Cultural Synapses, Links, and Frame Contradictions in the U.S.-Central America Peace Movement.” *Social Inquiry* 67:470-487.

Nisbet, Robert N. 1982. *Prejudices: A Philosophical Dictionary*. Cambridge, MA: Harvard University Press.

Noonan, Rita K. 1995. “Women against the State: Political Opportunities and Collective Action Frames in Chile's Transition to Democracy.” *Sociological Forum* 10: 81-111.

Obach, Brian K. 2004. *Labor and the Environmental Movement: The Quest for Common Ground*. Cambridge, MA: MIT Press.

Oegema, Dirk and Bert Klandermans. 1994. “Why Social Movements Sympathizers Don’t Participate: Erosion and Nonconversion of Support.” *American Sociological Review* 59:703-722.

Oliver, Pamela E. and Hank Johnston. 2000. “What a Good Idea! Ideologies and Frames in Social Movement Research.” *Mobilization: An International Quarterly* 5:37.54.

Oreskes, Naomi. 2004. “The Scientific Consensus on Climate Change.” *Science* 306:1686.

Patz, Jonathan A. and Mahmooda Khaliq. 2002. “Global Climate Change and Health: Challenges for Future Practitioners.” *Journal of American Medical Association* 287:2283-2284.

Patz, Jonathan A., David Engelberg, and John Last. 2000. “The Effects of Changing Weather on Public Health.” *Annual Review of Public Health* 21:271-307.

Pellow, David N. 1999. “Framing Emerging Environmental Movement Tactics: Mobilizing Consensus, Demobilizing Conflict.” *Sociological Forum* 14: 659-683.

Pietrykowski, Bruce. 2004. “You Are What You Eat: The Social Economy of the Slow Food Movement”. *Review of Social Economy* 62: 307-321.

Platt, Gerald M. and Michael R. Fraser. 1998. “Race and Gender Discourse Strategies: Creating Solidarity and Framing the Civil Rights Movement.” *Social Problems* 45: 160-179.

Princen, Thomas. 1999. “Consumption and Environment: Some Conceptual Issues.” *Ecological Economics* 31:347-363.

Princen, Thomas, Michael Maniates, and Ken Conca, eds. 2002. *Confronting Consumption.* Cambridge, MA: MIT Press.

Ritzer, George. 2000. *Enchanting a Disenchanted World: Revolutionizing the Means of Consumption.* Thousand Oaks, CA: Pine Forge.

------. 2007. *The Globalization of Nothing.* Thousand Oaks, CA: Pine Forge.

------. 2008. *The McDonaldization of Society.* Thousand Oaks, CA: Pine Forge.

Roberts, James A. 1996. "Green Consumers in the 1990s: Profile and Implications for Advertising." *Journal of Business Research* 36:217-231.

Rogers, Christine and Sally E. Randolph. 2000. "The Global Spread of Malaria in a Future, Warmer World." *Science* 289:1763-1766.

Rootes, Christopher. 2004. "Environmental Movements." Pp. 608-640 in *The Blackwell Companion to Social Movements,* edited by David A. Snow, Sarah A. Soule, and Hanspeter Kriesi. Malden, MA: Blackwell.

Roper Green Gauge. 2007. "Americans Reach Environmental Turning Point…Companies Need to Catch Up According to Gfk Roper Green Gauge ® Study." *The Corporate Social Responsibility Newswire*, August 22, 2007. Retrieved June 10, 2008 (http://www.csrwire.com/PressRelease.php?id=9473).

Running, Steven W. 2006. "Is Global Warming Causing More, Larger Wildfires?" *Science* 313:927-928.

Schnaiberg, Allan. 1980. *The Environment: From Surplus to Scarcity*. New York: Oxford University Press.

Schnaiberg, Allan and Kenneth A. Gould. 1994. *Environment and Society: The Enduring Conflict*. New York: St. Martin's Press.

Schor, Juliet B. 1998. *The Overspent American: Why We Want What We Don't Need*: Harper Perennial.

Scott, James C. 1990. *Domination and the Arts of Resistance.* New Haven: Yale University Press.

Sellen, Abigail J. and Richard H.R. Harper. 2002. *The Myth of the Paperless Office*. Cambridge, MA: MIT Press.

Shabecoff, Paul. 2003. *A Fierce Green Fire: The American Environmental Movement.* Island Press.

Shellenberger, Michael and Ted Nordhaus. 2004. *The death of environmentalism*. Retrieved from http://www.thebreakthrough.org/

Sherkat, Darren E. and Christopher G. Ellison. 1997. "The Cognitive Structure of a Moral Crusade: Conservative Protestantism and Opposition to Pornography." *Social Forces* 75:957-980.

Snow, David A. and Robert D. Benford. 1988. "Ideology, Frame Resonance, and Participant Mobilization." Pp. 197-218 in *From Structure to Action: Comparing Social Movement Research Across Cultures,* edited by B. Klandermans, H. Kriesi, and S. Tarrow. Greenwich, Conn.: JAI Press.

------. 1992. "Master Frames and Cycles of Protest." Pp. 133-155 in *Frontiers of Social Movement Theory,* edited by A. D. Morris and C. M. Mueller. New Haven: Yale University Press.

Snow, David A., Rochford E. Burke Jr., Steven K. Worden, and Robert D. Benford. 1986. "Frame Alignment Processes, Micromobilization, and Movement Participation." *American Sociological Review* 51:464-481.

Snow, David A., Louis A. Zurcher, Jr., and Sheldon Ekland-Olson. 1980. "Social Networks and Social Movements: A Microstructural Approach to Differential Recruitment." *American Sociological Review* 45:787-801.

Sonnenfeld, David. 2000. “Contradictions of Ecological Modernisation: Pulp and Paper Manufacturing in South-East Asia.” *Environmental Politics* 9:235-256.

Spaargaren, Gert. 2000. “Ecological Modernization Theory and Domestic Consumption.” *Journal of Environmental Policy & Planning* 2:323-335.

------. 2003. “Sustainable Consumption: A Theoretical and Environmental Policy Perspective.” *Society and Natural Resources* 16:687-701.

Spaargaren, Gert and Bas van Vliet. 2000. “Lifestyle, Consumption and the Environment; the Ecological Modernization of Domestic Consumption.” *Environmental Politics* 9:50-76.

Steinberg, Marc W. 1998. “Tilting the Frame: Considerations on Collective Action Framing From a Discursive Turn.” *Theory and Society* 27: 845-872.

Stern, Paul C. 1997. *Environmentally Significant Consumption: Research Directions*. National Academy Press.

Sutton, Philip W. 2004. *Nature, Environment, and Society.* London: Palgrave McMillan.

Szasz, Andrew. 2007. *Shopping Our Way to Safety: How We Changed from Protecting the Environment to Protecting Ourselves.* Minneapolis: University of Minnesota Press.

Tellegen, Egbert and Martin Wolsink. 1998. *Society and its Environment: An Introduction*. Gordon and Breach Publishers, Reading UK.

United Nations Environment Programme. 2007. “Environmental Degradation Triggering Tensions and Conflict in Sudan.” (22 June, 2007). Retrieved 10 June 2008 (http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=512&ArticleID=5621&l=en).

Van de Donk, Wim, Brian D. Loader, Paul G. Nixon, and Dieter Rucht. 2004. "Introduction: Social Movements and ICT." Pp. 1-25 in *Cyberprotest: New Media, Citizens, and Social Movements*, edited by Wim van de Donk et al. Routledge.

Walsh, Edward J. 1981. "Resource Mobilization and Citizen Protest in Communities Around Three Mile Island." *Social Problems* 29:1-21.

Walsh, Edward J. and Rex H. Warland. 1983. "Social Movement Involvement in the Wake of a Nuclear Accident: Activists and Free Riders in the Three Mile Island Area." *American Sociological Review* 48:764-781.

Weare, Christopher and Wan-Ying Lin. 2000. "Content Analysis of the World Wide Web: Opportunities and Challenges." *Social Science Computer Review* 18:272-292.

Wilk, Richard. 2006. "Bottled Water: The Pure Commodity in the Age of Branding." *Journal of Consumer Culture* 6:303-325.

Worcester, Robert M. 2000. "Public and 'Expert' Opinion on Environmental Issues." Pp. 33-45 in *The Daily Globe: Environmental Change, the Public, and the Media*, edited by Joe Smith. London: Earthscan.

York, Richard. 2006. "Ecological Paradoxes: William Stanley Jevons and the Paperless Office." *Human Ecology Review* 13:143-147.

York, Richard, Eugene A. Rosa and Thomas Dietz. 2003. "Footprints on the Earth: The Environmental Consequences of Modernity." *American Sociological Review* 68: 279-300.

APPENDICES

Appendix I: Overview of sample from Brulle (2000) with websites

Environmental Worldview	Brulle (2000) sample	Organizations that have websites
Wise Use	13	American Land Rights Association http://www.landrights.org/ BlueRibbon Coalition http://www.sharetrails.org/ Center for the Defense of Free Enterprise http://www.cdfe.org/ Citizens for a Sound Economy http://www.cse.org/ Conservationists With Common Sense http://www.cwcs.org/ Defenders of Property Rights http://www.yourpropertyrights.org/ Keep America Beautiful http://www.kab.org/site/PageServer?pagename=index
Preservation	18	Appalachian Mountain Club http://www.outdoors.org/ Audubon http://www.audubonnaturalist.org/ Conservation International Foundation http://www.conservation.org/Pages/default.aspx Defenders of Wildlife http://www.defenders.org/index.php Mono Lake Committee http://www.monolake.org/ National Audubon Society http://www.audubon.org/ National Parks & Conservation Association http://www.npca.org/ Nature Conservancy Inc. http://www.nature.org/ North American Bluebird Society http://www.nabluebirdsociety.org/ Save the Redwoods League http://www.savetheredwoods.org/ Sierra Club http://www.sierraclub.org/ Treepeople Inc. http://www.treepeople.org/vfp.dll?OakTree~getPage~&PNPK=1 Wilderness Society http://www.wilderness.org/ Wildlife Conservation Society http://www.wcs.org/ Wildlife Society http://joomla.wildlife.org/?CFID=9310829&CFTOKEN=91789062 World Wildlife Fund http://www.worldwildlife.org/
Deep Ecology	8	Alliance for the Wild Rockies http://www.wildrockiesalliance.org/ Earth First! http://www.earthfirst.org/ Native Forest Council http://www.forestcouncil.org/ Planet Drum http://www.planetdrum.org/ Rainforest Action Network http://www.ran.org/ Sea Shepherd Conservation Society http://www.seashepherd.org/

Worldview	Brulle (2000)	Organizations that have websites
Conservation	8	American Farmland Trust http://www.farmland.org/default.asp American Forests http://www.americanforests.org/ Elm Research Institute http://www.libertyelm.com/ Izaak Walton League of America http://www.iwla.org/ National Arbor Day Foundation http://www.arborday.org/ Rails to Trails Conservancy http://www.railtrails.org/index.html Scenic America http://www.scenic.org/ Trust for Public Land http://www.tpl.org/
Wildlife Management	7	Boone and Crockett Club http://www.boone-crockett.org/ Ducks Unlimited http://www.ducks.org/ National Wildlife Federation http://www.nwf.org/ Quail Unlimited http://www.qu.org/ Rocky Mountain Elk Foundation http://www.rmef.org/ Trout Unlimited http://www.tu.org/site/c.kkLRJ7MSKtH/b.3022897/k.BF82/Home.htm Whitetails Unlimited http://www.whitetailsunlimited.com/session_c425925e6b8f/
Ecofeminism	6	Mothers and Others for a Livable Planet http://www.mothers.org/mothers Women's Environment and Development Organization http://www.wedo.org/ Women's Council on Energy and the Environment http://www.wcee.org/top/about.asp
Environmental Justice	9	Association of Forest Service Employees for Environmental Ethics http://www.fseee.org/ Center for Health, Environment and Justice http://www.chej.org/[38] Government Accountability Project http://www.whistleblower.org/template/index.cfm Morning Star Foundation http://www.themorningstarfoundation.org/Home.html National Tribal Environmental Council http://www.ntec.org/ Native American Fish & Wildlife Society http://www.nafws.org/
Ecotheology	6	Christian Environmental Association http://www.targetearth.org/ Coalition on the Environment and Jewish Life http://www.coejl.org/index.php Evangelical Environmental Network http://www.creationcare.org/ Floresta http://www.floresta.org/ National Religious Partnership for the Environment http://www.nrpe.org/

[38] This used to be the Citizens Clearinghouse for Hazardous Waste as it is listed in Brulle (2000).

Environmental Worldview	Brulle (2000) sample	Organizations that have websites
Reform Environmentalism	31	Air and Waste Management Association http://www.awma.org/ Alliance for the Cheseapeake http://www.alliancechesbay.org/ American Littoral Society http://www.alsnyc.org/ American Rivers Inc. http://www.americanrivers.org/site/PageServer Center for Marine Conservation Inc. http://www.oceanconservancy.org/site/PageServer?pagename=home Chesapeake Bay Foundation http://www.cbf.org/site/PageServer?pagename=homev3 Clamshell Alliance http://www.clamshell-tvs.org/ Clean Water Action http://www.cleanwateraction.org/ Cousteau Society Inc. http://www.cousteau.org/ Earth Island Institute Inc. http://www.earthisland.org/ Environmental Defense http://www.edf.org/ Friends of the Earth http://www.foe.org/ Friends of the Sea Otter http://www.seaotters.org/ Greenpeace http://www.greenpeace.org/usa/ Institute for Local Self-Reliance http://www.ilsr.org/ League of Women Voters http://www.lwv.org/AM/Template.cfm?Section=Home Lighthawk http://www.lighthawk.org/ National Coalition Against the Misuse of Pesticides http://www.beyondpesticides.org/ National Resources Defense Council http://www.nrdc.org/ Population Council http://www.popcouncil.org/ Population Environment Balance http://www.balance.org/ Population Institute http://www.balance.org/ Rachel Carson Council Inc. http://members.aol.com/rccouncil/ourpage/ Sierra Club Legal Defense Fund Inc. http://www.earthjustice.org/ Society of Women Environmental Professionals http://swepweb.com/index.jsp Union of Concerned Scientists http://www.ucsusa.org/ Zero Population Growth Inc. http://www.zpg.org/

Appendix II: Step-By-Step Guidelines

Step 1: Home Page Information

1.1 Using the Website Analysis Coding Sheet (Appendix III), record the following information for each organization:

1. Name of the movement.
2. URL of the movement to the homepage and date accessed
3. Rater ID: First name of the rater.
4. Environmental Worldview based on Brulle (2000) (Appendix I).

1.2 Print and review the homepage. Check if selection criteria discussed for the recording units are met. Accept results ONLY if:

- Page is not a blog or forum post.
- Page is published by an American SMO.
- Page is authored by SMO or its members or representatives.
- Page was published/updated after 2000. Date will be determined either by:

  1) Date listed in document as a posting date or if no posting date is listed.

  2) Right click on page, select properties and find date of last update.
- Document includes information about *individual* or *household* consumption.
- Document has not already been found through a different keyword search.

1.3 Record whether the criteria are met.

1.4 Record which of the following options apply:

a. No mention of consumption on homepage

b. Consumption mentioned on the homepage
    - Individual or household consumption
    - Corporate consumption
    - National consumption
    - Worldwide consumption
    - Any combination of above

Step 2: Web Page Location

2.1 Use website search engine to find results based on the term “consumption”. If website does not include a search feature, use www.google.com and the following command: *consumption* site.www.*organization*.org

2.2 Repeat process for each of the following keywords. If Google search is used replace “consumption” with the keyword used.

a. Consumer
b. Lifestyle
c. Shopping
d. Purchasing
e. Buying

2.3 Check URL listed in search results. If page is two or fewer clicks from homepage as indicated by / marks, go to web page. This means that no URL containing more than two slashes is going to be considered.

2.4 Review page. Check if selection criteria discussed for the recording units are met. Accept results ONLY if:

- Page is part of the website under consideration.
- Page is not a blog or forum post.
- Page is published by an American SMO.
- Page is authored by SMO or its members or representatives.
- Page was published/updated after 2000. Date will be determined either by:

  1) Date listed in document as a posting date or if no posting date is listed

  2) Right click on page, select properties and find date of last update.
- Document includes information about *individual* or *household* consumption.
- Document has not already been found through a different keyword search.

2.5 If these criteria are met, print page, and record an identifying number on both the printed page and Webpage Analysis Coding Sheet (Appendix IV). This identifying number is determined as follows:

- The movement is abbreviated using the capitalized letters from each movement listed in Table 2.
- To identify individual documents, after the letters put a dash and number each document subsequently.
- For example, a particular document originating from the National Resource Defense Council is recorded as follows: NRDC-1; NRDC-2, NRDC-N.

Step 3: Webpage Analysis

3.1 Use Webpage Analysis Coding Sheet (Appendix IV) to record document identifying number, rater ID, document title, URL, date accessed, movement source (research, leadership, publicity/media relations, etc.), and a brief description of the content of the document.

3.2 Create separated, numbered text lines.

a. Copy and paste text (not ads or banners) into a Microsoft Word document.
b. Select Edit →Replace.
c. In find box, enter ". " (period with one space).
d. In replace box, enter "^p".
e. Select Replace All.
f. Select File → Page Setup → Layout.
g. In Apply to box, select Whole document.
h. Select Line Numbers.
i. Select Add line numbering.

3.3 Determine the number of words in article.

a. Select Tools → Word Count
b. Record # of words on Webpage Analysis Coding Sheet (Appendix IV).

3.4 Review each sentence to determine if it reflects diagnostic, prognostic, or motivational framing, using the criteria below. If a sentence contains elements of more than one type, record all that apply. Record the number of sentences that reflect each core framing task on Webpage Analysis Coding Sheet (Appendix IV).

a. **Diagnostic framing** – Focuses on the cause of environmental degradation. Examples of diagnostic framing include:

i. Overpopulation or the population size.

ii. Lifestyle choices related to the purchasing of goods and services (related to specific products and or specific stores). These may include goods and services such as cars, food, clothing, homes or vacations or may include discussion of the total number of material possessions or use of services.

iii. Lack of recycling, reusing, energy conservation, waste control, etc.

iv. Resource extraction and other environmental problems caused by corporations, (including the misuse of technologies, such as poor farming techniques). This includes statements that consumption is problematic because of associated production methods.

v. Government policies that support or reward or do not punish unsustainable consumption choices.

vi. No specific reason is provided, but mention is made that consumption leads to such problems as resource extraction, soil depletion, added pollution, etc. or that consumption is problematic without any further explanation.

vii. Individual or household consumption without stating that it is problematic.

viii. Any combination of the above.

b. **Prognostic framing** – Focuses on proposed changes that would solve, reduce, mitigate or otherwise fight environmental degradation. Indications of prognostic framing would include sentences such as:

i. Individuals need to change their behaviors and lifestyles (culture is also included here).

ii. Corporations need to change their behavior, such as changing production methods.[39]

iii. Governments need to pass legislation that supports environmentally friendly behavior by consumers. (Also includes legislation that punishes unfriendly behavior.)

iv. Changes need to be made at the international community / transnational level.

v. Any combination of the above.

c. **Motivational framing** – Focuses on specific calls to action the movement makes to actors. Prognostic framing goes beyond discussing general solutions. Instead it prescribes specific and concrete steps that actors should take.

i. Individual – Actions an individual should take that primarily impact his / her personal lifestyle or household

1. General motivational calls – <u>Use only if call to action does not fit any other category listed below</u>. Examples might include:

a. Buy less stuff / Only buy essentials / Avoid material goods

[39] Solutions B, C, and D may not lie at the individual or household level, but they are potential solutions to solve the problem of individual and household consumption. The goal is to uncover not just what individuals can do to solve the problem of individual and household consumption, but how this problem can be solved according to the environmental movement.

b. Do-It-Yourself
c. Become self-sustaining
d. Join a movement / local group

2. Food and Drink – Consumption messages dealing with food and drinks
    a. Buy or avoid certain label (such as fair trade)
    b. Buy or avoid products that have low footprint
    c. Buy from farmer's markets
    d. Buy from locally owned grocers
    e. Buy from or avoid / boycott specific stores
    f. Buy or avoid / boycott specific products (e.g., processed food)
    g. Buy or avoid / boycott specific ingredients of a product
    h. Buy or avoid / boycott products made in a certain location
    i. Grow your own food
3. Clothing – Consumption messages dealing with clothing and associated products. Examples might include:
    a. Buy or avoid certain labels (includes fair trade / sweatshop issues)
    b. Buy products that have low footprint (may include specific types of fabric)

c. Buy from locally owned stores

d. Buy secondhand clothes

e. Buy from or avoid / boycott specific stores

f. Buy or avoid / boycott specific products

g. Make your own clothing

4. Transportation - Consumption messages dealing with transit and transportation methods, products and services. Examples might include:

    a. Buy or avoid certain types of cars (hybrid, electric, gas-guzzlers, etc.)

    b. Buy or avoid certain types of fuel (biodiesel, hydrogen, etc.)

    c. Use public transporting

    d. Carpool

    e. Walk

    f. Buy / use bicycle

    g. Avoid planes

5. Housing - Consumption messages dealing with housing selection, design and repair. Examples might include:

    a. Buy smaller houses

    b. Buy houses consistent with green architecture

    c. Build your own house

    d. Make repairs yourself

e. Environment choices in repair and upgrade such as installing a ceiling fan and insulation rather than air conditioning

6. Household Related Products - Consumption messages dealing with household maintenance and energy. Examples might include:
    a. Buy or avoid specific maintenance products such as light bulbs, cleaners, etc.
    b. Buy or avoid specific appliances
    c. Use or avoid specific energy sources such as solar power, wind power or coal
    d. General call to use ‘green’ energy
    e. General call to avoid household toxins
7. Nonpurchasing Activities - Consumption messages dealing with lifestyle habits that do not directly address purchasing. Examples might include:
    a. Conserve energy
    b. Conserve water
    c. Recycle products
    d. Reuse products
    e. Bring your own shopping bag (reject plastic bags)
    f. Bring your own water container
    g. Unplug appliances when not in use

h. Dealing with waste

ii. Corporate – Actions an individual should take to impact choices or behaviors engaged in by corporations or businesses

1. Write businesses or corporations to request a change in behavior
2. Write businesses or corporations to support research and development of specific products
3. Write businesses or corporations to protest unsustainable products
4. Join a movement / group that mobilizes in response to corporate action
5. Sign a petition aimed at a corporation
6. Donate money
7. Participate in a boycott of a specific corporation or product

iii. Legislative or governmental – Actions an individual should take to address, support or oppose pending legislation, government agendas and priorities, or policies. Examples might include:

1. Write politicians asking for support or opposition to proposed policy or legislation
2. Write politicians asking for punishment or rewards for specific corporate behavior
3. Join a movement / group that mobilizes in response to government action

4. Sign a petition aimed at politicians / legislative body
5. Donate money
6. Participate in a protest
7. Vote for or against a specific candidate or motion
8. Run for office

Step 4: Webpage Resource Analysis

4.1 Use Webpage Resource Analysis Coding Sheet (Appendix V) and record the Document Identifying Number as well as the Rater ID.

4.2 Record the location on the document in which a resource was listed. If a resource is located in a particular sentence record that sentence number from the document. If a resource is found elsewhere on the page (for example a banner), identify it as such.

4.3 Record the type of resource. Resources are text or other media that further expands on or elaborates the topic of individual or household consumption. The following is a (non-exhaustive) list of resources:

a. (non-governmental) organizations or groups
b. governmental / legislative bodies (nation/international/transnational)
c. Links to documents, toolkits, guides, handbooks and other written sources
d. Government reports
e. Media reports
f. Video clips
g. Other

4.4 Record information if relevant.

Step 5: Totals

5.1 After each of the documents have been analyzed on a particular organization's website, there is one last step to be done and that is to add up the totals. The totals need to be recorded on the SMO Website Analysis Coding Sheet (see Appendix III) and come from either the Webpage Analysis Coding Sheets (see Appendix IV) or the Resource Analysis Coding Sheet (see Appendix V).

5.2 Record the total number of words devoted to consumption by adding up the number of words of the documents that were analyzed.

5.3 Record total number of sentences devoted to the core framing tasks by adding up the number of sentences from each of the documents that were analyzed that relate to diagnostic, prognostic, and motivational framing.

5.4 Record the total number of resources that are provided in each document.

After this, move to the next organization's website and repeat steps 1-6 until all thirty movements have been analyzed.

Appendix III: SMO Website Analysis Coding Sheet

Name of the Movement: Rater ID:

URL: Date accessed:

Environmental Worldview:

Print the homepage

Criteria met: [ ] Yes [ ] No, because:

Consumption mentioned on the homepage?

[ ] No
[ ] Yes, individual or household consumption
[ ] Yes, corporate consumption
[ ] Yes, consumption of a country
[ ] Yes, worldwide consumption
[ ] Yes, any combination of the above

Results after using search terms:

Search Term	**# of Results**	**# After elimination**
Consumption		
Consumer		
Lifestyle		
Shopping		
Self sustaining		

	Site[40]	Diagnostic Framing	Prognostic Framing	Motivational Framing
# of words				
# of sentences				
# of resources				
TOTAL				

Notes:

[40] This is the aggregate of all the documents together for this particular website.

Appendix IV: Webpage Analysis Coding Sheet

Document Identifying Number:	Rater ID:
Title of document:	
URL:	Date accessed:
Section of movement:	

Description of the document:

	Document	Diagnostic Framing	Prognostic Framing	Motivational Framing
# of words				
# of sentences				
# of resources				
TOTAL				

Sentence	Diagnostic	Prognostic	Motivational
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

Sentence	Diagnostic	Prognostic	Motivational
17			
18			
19			
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30			
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Appendix V: Webpage Resource Analysis Coding Sheet

Document Identifying Number:	Rater ID:

Resource Number	Location	Type of Resource	More Information (If applicable)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
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Appendix VI: Overview of Results

Org.		#	D1a	D1b	D1c	D2	D3	D4	D5	D6	D	P1	P2	P3	P4	P5	P6	P7	P	M1	M2	M3	M4	M5	M6	M7	M	Total
API	#d	37	25	3	1	13	0	1	9	0	**29**	0	7	3	0	5	5	13	**22**	29	16	16	15	4	0	1	**35**	**36**
	#s	1778	278	53	5	40	0	2	87	0	**465**	0	12	6	0	11	24	52	**105**	67	89	78	46	10	0	6	**296**	**866**
VfA	#d	1	0	0	0	0	0	0	0	0	**0**	1	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	**0**	**1**
	#s	21	0	0	0	0	0	0	0	0	**0**	1	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	**0**	**1**
IWL	#d	4	0	0	0	0	0	0	1	0	**1**	0	0	0	3	1	0	1	**4**	1	0	0	0	1	1	0	**3**	**4**
	#s	103	0	0	0	0	0	0	5	0	**5**	0	0	0	3	4	0	3	**10**	2	0	0	0	4	13	0	**19**	**34**
TPL	#d	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	**0**
	#s	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	**0**
EF!	#d	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	**0**
	#s	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	**0**
RAN	#d	11	0	0	0	0	0	0	0	0	**0**	0	3	0	1	1	0	0	**5**	4	7	3	2	2	3	1	**11**	**11**
	#s	596	0	0	0	0	0	0	0	0	**0**	0	23	0	2	2	0	0	**27**	16	72	17	22	62	118	20	**327**	**354**
WVE	#d	8	0	3	1	0	0	0	0	0	**3**	0	0	0	0	0	0	0	**0**	7	1	2	2	1	1	0	**8**	**8**
	#s	1086	0	35	5	0	0	0	0	0	**40**	0	0	0	0	0	0	0	**0**	70	1	19	99	3	15	0	**207**	**247**
WCEE	#d	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	**0**
	#s	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	**0**
CEJL	#d	35	2	4	9	2	5	5	0	0	**15**	2	6	6	9	2	2	3	**15**	11	6	8	2	12	10	4	**27**	**35**
	#s	2638	7	20	37	7	23	50	0	0	**144**	10	18	63	64	2	5	19	**181**	48	18	37	3	376	259	53	**794**	**1119**
NRPE	#d	17	0	0	3	0	1	7	0	0	**9**	0	0	0	6	0	0	0	**6**	5	1	1	3	3	3	0	**9**	**17**
	#s	962	0	0	7	0	2	27	0	0	**34**	0	0	0	36	0	0	0	**36**	23	5	2	6	12	11	0	**52**	**115**
BP	#d	63	1	25	1	5	0	0	6	2	**29**	1	7	3	0	0	0	3	**13**	38	21	30	15	0	3	2	**56**	**63**
	#s	1832	1	264	3	18	0	0	23	44	**353**	1	48	10	0	0	0	4	**63**	69	45	102	32	0	18	71	**337**	**753**
CHEJ	#d	14	0	8	2	0	0	0	0	0	**8**	0	2	1	0	1	2	0	**4**	9	7	9	5	2	0	0	**14**	**14**
	#s	610	0	54	6	0	0	0	0	0	**58**	0	9	2	0	3	4	0	**16**	63	57	85	124	11	0	0	**322**	**384**
AFSEE	#d	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	**0**
	#s	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	**0**
NTEC	#d	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	**0**
	#s	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	**0**
AWR	#d	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	**0**
	#s	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	**0**
KAB	#d	6	0	0	2	0	0	0	1	0	**3**	0	0	0	3	0	0	0	**3**	2	0	0	0	4	1	0	**6**	**6**
	#s	335	0	0	17	0	0	0	2	0	**19**	0	0	0	107	0	0	0	**107**	28	0	0	0	97	5	0	**130**	**256**

Org.		#	D1a	D1b	D1c	D2	D3	D4	D5	D6	D	P1	P2	P3	P4	P5	P6	P7	P	M1	M2	M3	M4	M5	M6	M7	M	Total
DW	#d	15	2	4	2	2	3	0	0	0	**8**	0	0	0	0	2	0	0	**2**	8	3	5	3	2	1	1	**12**	**15**
	#s	404	3	24	4	7	5	0	0	0	**43**	0	0	0	0	8	0	0	**8**	34	31	68	14	8	3	3	**161**	**212**
NAS	#d	23	1	1	7	0	2	3	2	0	**13**	1	3	0	3	1	1	0	**7**	14	6	8	3	6	5	3	**20**	**23**
	#s	1025	11	7	103	0	7	6	26	0	**160**	3	26	0	10	7	2	0	**48**	100	27	80	3	98	127	111	**546**	**754**
NC	#d	14	0	1	2	0	0	0	0	0	**3**	0	0	0	1	0	0	0	**1**	11	2	5	3	5	4	1	**14**	**14**
	#s	833	0	4	4	0	0	0	0	0	**8**	0	0	0	5	0	0	0	**5**	135	31	84	10	161	100	2	**523**	**536**
SC	#d	64	7	12	22	7	11	10	4	3	**37**	6	13	3	13	9	6	8	**34**	35	12	18	5	8	16	5	**49**	**64**
	#s	5065	44	183	726	26	152	228	6	10	**1375**	61	289	14	142	27	123	79	**735**	340	108	298	14	60	341	195	**1356**	**3466**
WS	#d	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	**0**
	#s	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	**0**
WWF	#d	76	6	2	15	0	3	4	4	0	**29**	2	0	0	4	6	6	3	**18**	32	1	19	5	8	10	1	**60**	**75**
	#s	3437	10	28	64	0	4	9	7	0	**122**	4	0	0	9	19	13	3	**48**	222	4	554	140	220	475	35	**1650**	**1820**
EDF	#d	62	3	11	8	2	8	0	2	0	**24**	2	12	0	8	5	5	0	**21**	41	15	28	11	20	20	0	**53**	**59**
	#s	3394	14	154	41	14	38	0	7	0	**268**	2	118	0	23	21	36	0	**200**	316	90	488	47	250	382	0	**1573**	**2041**
NRDC	#d	31	0	7	8	2	3	1	2	0	**15**	2	6	0	3	0	5	2	**14**	20	6	14	2	9	6	0	**28**	**31**
	#s	1953	0	35	60	5	10	4	8	0	**122**	3	14	0	31	0	38	10	**96**	148	57	517	5	185	188	0	**1100**	**1318**
FoE	#d	17	3	10	5	4	1	0	2	0	**13**	1	0	0	0	1	2	3	**6**	6	4	1	0	0	0	0	**7**	**17**
	#s	719	44	92	31	10	1	0	3	0	**181**	1	0	0	0	1	3	12	**17**	33	20	1	0	0	0	0	**54**	**252**
PC	#d	1	0	0	1	0	1	0	0	1	**1**	0	0	1	1	0	0	0	**1**	1	0	0	0	0	0	0	**1**	**1**
	#s	53	0	0	10	0	12	0	0	1	**23**	0	0	1	7	0	0	0	**8**	1	0	0	0	0	0	0	**1**	**32**
NWF	#d	24	2	2	7	0	0	1	1	0	**10**	1	1	1	2	1	2	1	**6**	11	4	7	0	4	8	2	**23**	**24**
	#s	1376	14	15	50	0	0	3	8	0	**90**	5	9	2	4	5	4	3	**32**	63	14	121	0	68	740	160	**1166**	**1288**
WCS	#d	2	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	1	1	0	**2**	**2**
	#s	47	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	3	34	0	**37**	**37**
Total	**#d**	**525**	**52**	**93**	**96**	**37**	**38**	**32**	**34**	**6**	**250**	**19**	**60**	**18**	**57**	**35**	**36**	**37**	**183**	**285**	**112**	**174**	**76**	**92**	**93**	**21**	**438**	**520**
	#s	**28267**	**426**	**968**	**1173**	**127**	**254**	**329**	**182**	**55**	**3510**	**91**	**566**	**98**	**443**	**110**	**252**	**185**	**1743**	**1778**	**669**	**2551**	**565**	**1628**	**2829**	**656**	**10651**	**15885**

Appendix VII: Overview Document Coding

N	#	1a	1b	1c	2	3	4	5	6	D	1	2	3	4	5	6	7	P	1	2	3	4	5	6	7	M
API	1	13			3					**16**		1						**1**	1							**1**
	2	31	3	5						**39**		3	1					**4**	1	2	2	3	3			**11**
	3	37			3			1		**41**		2						**2**			2	3	3			**8**
	4	19						12		**31**								**0**	4	2	6	10			6	**28**
	6	2								**2**								**0**	1	11	3	2	1			**18**
	7	5			2			1		**8**		1					2	**3**	4		1	1				**6**
	8	12								**12**							1	**1**	2	2						**4**
	9	18								**18**								**0**								**0**
	10	7	2		1					**10**							1	**1**	3	5						**8**
	11	11						7		**18**		1	3		4			**8**	3			1				**4**
	13							41		**41**		3				1		**4**	1							**1**
	14	2								**2**					1			**1**	2	3		6				**11**
	16				3			21		**24**		1				7		**8**	2	3						**5**
	17									**0**					4		13	**17**	1							**1**
	18	2								**2**							2	**2**		2						**2**
	19				1					**1**							5	**5**	2	9	2					**13**
	20									**0**								**0**	3	5	2	6				**16**
	21	6			2			1		**9**						1	3	**4**			1					**1**
	22	15			1					**16**						13	13	**26**	1							**1**
	23									**0**								**0**	6		29					**35**
	24									**0**								**0**	3		15					**18**
	25	15								**15**							1	**1**	2							**2**
	26	7			3					**10**						2		**2**	1							**1**
	27									**0**								**0**	1		4					**5**
	29									**0**								**0**	1		4					**5**
	30									**0**								**0**								**0**
	34	16	48		15		2			**81**			2				1	**3**	2	6	1	3				**12**
	35	16			4					**20**								**0**				1				**1**
	36									**0**					1		4	**5**	5	10						**15**
	37	9			1					**10**							3	**3**			2					**2**
	38	3								**3**							3	**3**	3	6						**9**
	39				1					**1**								**0**	5	8						**13**
	41	7						2		**9**								**0**	1			1				**2**
	43	11						1		**12**					1			**1**	1			2				**3**
	45	4								**4**								**0**	2	4		3				**9**
	46	5								**5**								**0**		11	1	3	3			**18**
	47	5								**5**								**0**	3		3	1				**7**
BP	1	1	10		1					**12**								**0**		1	1					**2**
	2		23		8			2		**33**							1	**1**								**0**
	3		2							**2**							2	**2**	1							**1**
	4		10							**10**								**0**	2							**2**
	6									**0**								**0**		3	1	1				**5**
	7		11							**11**								**0**	1							**1**
	10		9		1					**10**		2					1	**3**	1							**1**
	11		34							**34**		2						**2**								**0**

Org	Doc	1a	1b	1c	2	3	4	5	6	D	1	2	3	4	5	6	7	P	1	2	3	4	5	6	7	M
BP	13		5							**5**								**0**	2	2	3					**7**
	17		7							**7**								**0**	1			3				**4**
	18		9							**9**								**0**	2		1					**3**
	20									**0**		24						**24**	8	3	15					**26**
	23		4							**4**		3						**3**	2							**2**
	25		12		2			4		**18**								**0**	1							**1**
	27									**0**								**0**	1	1	3					**5**
	29								36	**36**		4						**4**	2							**2**
	35		8							**8**								**0**	1							**1**
	37							14		**14**			5					**5**	1							**1**
	39		5					1		**6**								**0**	2			2		9		**13**
	40		12							**12**								**0**								**0**
	43		12							**12**	1							**1**	1			2		1		**4**
	45		5					1		**6**								**0**	2	2				8		**12**
	47									**0**								**0**	1		1					**2**
	48		2							**2**								**0**								**0**
	50									**0**								**0**		1		1				**2**
	51		30							**30**								**0**	1	7		1				**9**
	52									**0**								**0**	1							**1**
	54									**0**								**0**	2	4						**6**
	55									**0**								**0**			3					**3**
	56		2							**2**			1					**1**								**0**
	57									**0**								**0**	2			2				**4**
	58		13							**13**								**0**								**0**
	59									**0**								**0**	1							**1**
	62							1		**1**								**0**			1					**1**
	63		1						8	**9**			4					**4**	2							**2**
	69				6					**6**								**0**	2		22	7				**31**
	73		19							**19**								**0**								**0**
	76									**0**								**0**	1		1	1				**3**
	77									**0**								**0**	1	1		1				**3**
	78									**0**								**0**	1		1					**2**
	79									**0**								**0**		3						**3**
	80									**0**								**0**	1		6					**7**
	81									**0**								**0**	1			1				**2**
	83									**0**								**0**		1	1					**2**
	84									**0**								**0**		2	1					**3**
	86									**0**		2						**2**	9							**9**
	87									**0**								**0**	3			5				**8**
	88		18							**18**								**0**			16					**16**
	89									**0**								**0**			3					**3**
	90									**0**								**0**	1	2	2					**5**
	91									**0**								**0**			1					**1**
	93									**0**								**0**		2	1					**3**
	94									**0**								**0**		2	1					**3**
	95									**0**								**0**	1	2	2					**5**
	96									**0**								**0**	1						70	**71**

Org	Doc	1a	1b	1c	2	3	4	5	6	D	1	2	3	4	5	6	7	P	1	2	3	4	5	6	7	M
BP	98									**0**								**0**	1	1	4	3				**9**
	99									**0**								**0**		2	1					**3**
	100									**0**								**0**	3		1					**4**
	101									**0**								**0**			2					**2**
	102		1	3						**4**		11						**11**			2	1				**3**
	103									**0**								**0**			2				1	**3**
CEJL	1			1						**1**		3	3	5				**11**			4		11		2	**17**
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	11			3		3			2	**8**		48						**48**								**0**
	12									**0**								**0**							144	**144**
	13	6				4		3		**13**								**0**	2	8	16	1	2	4		**33**
	14		1	1						**2**		9						**9**		1						**1**
	15			2			25			**27**			12					**12**	1	13	1			1		**16**
	16		2	4						**6**								**0**	1	10	5					**16**
	17			7			6			**13**				4				**4**	3							**3**
	18									**0**								**0**		23						**23**
	19									**0**								**0**							24	**24**
	20				2	18				**20**		17					6	**23**	1					33		**34**
	21	2	1	7		1				**11**				33				**33**						34		**34**
	22	4	7	5		3	11			**30**		2		1		5		**8**	41		3	1		1		**46**
	23									**0**								**0**	8							**8**
	24	5	66	19	3	7			4	**104**	5	42		14	6	28		**95**	29	10	79	3				**121**
	25									**0**		4						**4**	8	1	33			11	4	**57**
	26		2			1				**3**								**0**	1							**1**
	27		40							**40**								**0**								**0**
	28					38				**38**				2			6	**8**								**0**
	29			7						**7**	1							**1**								**0**
	30			4						**4**								**0**								**0**
	31		3	24						**27**								**0**			2					**2**
	32						8			**8**								**0**	2							**2**
	33									**0**								**0**	6	4	15			3	11	**39**
	35			2			5			**7**								**0**								**0**
	36			1						**1**								**0**	2				8			**10**
	37				1					**1**		15				24		**39**	2							**2**
	38		1		12			1		**14**								**0**								**0**
	40									**0**		87				17		**104**	2							**2**
	41									**0**								**0**	125							**125**
	42								4	**4**								**0**	8		6			42		**56**
	44									**0**		37					8	**45**								**0**
	45			1						**1**								**0**	14		3			19		**36**
	46									**0**	11							**11**								**0**
	48									**0**								**0**	4		8					**12**
	49									**0**					1			**1**								**0**
	50									**0**								**0**			2					**2**
	51									**0**	3							**3**								**0**
	52		9	5	5		9			**28**								**0**	12	16			3			**31**
	53									**0**								**0**			55					**55**
	54							1		**1**				4				**4**								**0**
	55									**0**								**0**	4		14					**18**

Org	Doc	1a	1b	1c	2	3	4	5	6	D	1	2	3	4	5	6	7	P	1	2	3	4	5	6	7	M
S	58									**0**				15				**15**	3				1			**4**
	59									**0**								**0**			19					**19**
	60									**0**	14							**14**								**0**
	61									**0**							2	**2**	1							**1**
	62									**0**								**0**	3	4				17		**24**
	63									**0**								**0**	3				32			**35**
	64			5						**5**				14				**14**		12						**12**
	65		14							**14**								**0**			14					**14**
	66							1		**1**		7						**7**	3					34		**37**
	68									**0**								**0**	18				6	43		**67**
	69									**0**					1			**1**			7			61		**68**
	71				2					**2**								**0**							12	**12**
	72									**0**								**0**						24		**24**
VA	1									**0**	1							**1**								**0**
WCS	1									**0**								**0**					3			**3**
	2									**0**								**0**						34		**34**
WVE	1		8							**8**								**0**	3							**3**
	2		17	5						**22**								**0**	8	1	3	2	3	15		**32**
	3		10							**10**								**0**	3							**3**
	4									**0**								**0**	23							**23**
	7									**0**								**0**	3							**3**
	10									**0**								**0**	10							**10**
	18									**0**								**0**			16					**16**
	19									**0**								**0**	20			97				**117**
WWF	2									**0**								**0**	8							**8**
	4					2	3			**5**								**0**						9		**9**
	5									**0**				1				**1**	9							**9**
	8									**0**								**0**	4				16			**20**
	10									**0**				1				**1**								**0**
	11									**0**								**0**						91		**91**
	12			1			2			**3**						1		**1**								**0**
	13	1								**1**								**0**								**0**
	14									**0**								**0**						34		**34**
	15			2						**2**					1			**1**	20							**20**
	17			1						**1**								**0**	2							**2**
	21									**0**						1		**1**	5		2					**7**
	23									**0**								**0**			22					**22**
	24			2						**2**					1			**1**								**0**
	25									**0**				4				**4**	1							**1**
	26									**0**								**0**	1		2					**3**
	27			1						**1**								**0**	1							**1**
	28			1						**1**							1	**1**								**0**
	29									**0**					1			**1**					35			**35**
	30			1		1				**2**								**0**								**0**
	31			1						**1**								**0**								**0**
	32					1				**1**				3				**3**	6							**6**
	33									**0**								**0**	6						35	**41**

Org	Doc	1a	1b	1c	2	3	4	5	6	D	1	2	3	4	5	6	7	P	1	2	3	4	5	6	7	M
WWF	34									**0**								**0**	11				1			**12**
	36									**0**								**0**			48					**48**
	40	1								**1**								**0**								**0**
	47	1		1						**2**					1			**1**	29					1		**30**
	48									**0**								**0**						96		**96**
	50							1		**1**								**0**					31			**31**
	51	1								**1**								**0**		4		24				**28**
	52									**0**								**0**					72			**72**
	53			5						**5**								**0**					13			**13**
	54									**0**								**0**	3							**3**
	55									**0**								**0**	4							**4**
	56									**0**								**0**	6							**6**
	58									**0**								**0**	2		12					**14**
	59							2		**2**					12			**12**								**0**
	62							3		**3**								**0**								**0**
	67						2			**2**						4		**4**								**0**
	68									**0**								**0**			9					**9**
	69									**0**								**0**			21					**21**
	70									**0**								**0**			36					**36**
	72									**0**								**0**				56				**56**
	73									**0**								**0**	7							**7**
	74									**0**								**0**	4		4	52				**60**
	77		24							**24**							1	**1**	4							**4**
	80									**0**								**0**	4		14					**18**
	81							1		**1**							1	**1**								**0**
	84	2					2			**4**								**0**								**0**
	86			13						**13**	1					2		**3**	3							**3**
	90									**0**								**0**	5		1					**6**
	91		4							**4**								**0**	5							**5**
	92									**0**	3					3		**6**	6							**6**
	93			6						**6**								**0**	19							**19**
	94									**0**								**0**			28					**28**
	95									**0**								**0**	9							**9**
	96									**0**								**0**	13							**13**
	98			2						**2**								**0**								**0**
	102									**0**								**0**								**0**
	103									**0**								**0**			28					**28**
	104									**0**								**0**						48		**48**
	105									**0**								**0**	5				24			**29**
	108			1						**1**								**0**	4		5					**9**
	109									**0**								**0**			112					**112**
	113			26						**26**								**0**								**0**
	114									**0**								**0**			29					**29**
	115									**0**								**0**			147					**147**
	116	4								**4**								**0**	5		10					**15**
	118									**0**								**0**	11					79		**90**
	119									**0**								**0**						51		**51**

Org	Doc	1a	1b	1c	2	3	4	5	6	D	1	2	3	4	5	6	7	P	1	2	3	4	5	6	7	M
WWF	121									**0**								**0**						44		**44**
	122									**0**								**0**				6				**6**
	123									**0**								**0**					28			**28**
	124									**0**								**0**						22		**22**
	128									**0**								**0**			24					**24**
	130									**0**					3	2		**5**				2				**2**

Appendix VIII: Overview Resource Coding

Org	Doc	Total	Gov.	Acad.	Mov.	Org.	Corp.	Oth.
API	1	2	1		1			
	2	4	4					
	3	5	4	1				
	4	7	1		1			5
	6	3			3			
	8	3	1		2			
	9	24	9	9	1	3		2
	10	3	1		2			
	11	3			2	1		
	13	2				2		
	14	1				1		
	16	4	2			2		
	19	3	1		1	1		
	20	2			1	1		
	21	5	3			2		
	22	2	1			1		
	23	8				1	7	
	25	1			1			
	26	2				2		
	27	1						1
	29	1			1			
	30	5	5					
	34	6	5					1
	37	3	3					
	38	7	5		2			
	39	3	1		2			
	46	1			1			
	47	4			4			

Res.	#	Total
Gov.	16	47
Acad.	2	10
Mov.	15	25
Org.	11	17
Corp.	1	7
Other	4	9
Total	**49**	**115**

Org	Doc	Total	Gov.	Acad.	Mov.	Org.	Corp.	Oth.
CHEJ	1	1				1		
	6	3			3			
	9	2					2	
	11	2				2		
	12	1			1			
	15	6			1		5	
	17	3	1		1	1		
	20	11			11			
	21	4			3	1		

Res.	#	Total
Gov.	1	1
Acad.	0	0
Mov.	6	20
Org.	4	5
Corp.	2	7
Other	0	0
Total	**13**	**33**

Org	Doc	Total	Gov.	Acad.	Mov.	Org.	Corp.	Oth.
DW	1	6	3			3		
	6	1	1					
	9	9			9			
	10	3	2		1			
	12	2	2					
	14	1		1				
	19	1				1		
	20	3			3			

Res.	#	Total
Gov.	4	8
Acad.	1	1
Mov.	3	13
Org.	2	4
Corp.	0	0
Other	0	0
Total	**10**	**26**

Org	Doc	Total	Gov.	Acad.	Mov.	Org.	Corp.	Oth.
BP	1	5	4	1				
	2	4	2	2				
	3	4	3	1				
	4	3				1	1	1
	6	3	3					
	7	1	1					
	10	1		1				
	11	2	1			1		
	13	6	1	2	3			
	17	1	1					
	18	4	1		3			
	20	5			3	2		
	23	3		1	2			
	25	2	1			1		
	27	1				1		
	29	3		1	2			
	35	5			1	4		
	37	4			1	2		1
	39	6		5	1			
	40	3		3				
	45	2	1		1			
	47	1				1		
	48	2			1	1		
	51	2		2				
	52	1				1		
	55	2			1	1		
	57	1			1			
	58	10	1	8				1
	59	1			1			
	98	1				1		

Res.	#	Total
Gov.	12	20
Acad.	11	27
Mov.	13	21
Org.	12	17
Corp.	1	1
Other	3	3
Total	**52**	**89**

Org	Doc	Total	Gov.	Acad.	Mov.	Org.	Corp.	Oth.
CEJL	2	2		2				
	6	1			1			
	9	1	1					
	11	6	1	2	1	1		1
	14	1			1			
	21	3	1		2			
	22	5				5		
	25	1			1			
	35	6			1	5		
	36	1			1			
	37	18						18
	39	3	3					
	40	1				1		
	42	1						1
	44	2	1			1		
	46	2			2			

Res.	#	Total
Gov.	5	7
Acad.	2	4
Mov.	8	10
Org.	5	13
Corp.	0	0
Other	3	20
Total	**23**	**54**

Org	Doc	Total	Gov.	Acad.	Mov.	Org.	Corp.	Oth.
EDF	1	14			14			
	5	6	2	2		2		
	12	8	3		5			
	14	10	6		4			
	15	18	9		4	5		
	19	2	1	1				
	20	2	1			1		
	22	1					1	
	23	3		2		1		
	25	1	1					
	26	1						1
	29	3	1					2
	35	1		1				
	36	16		10		5		1
	43	2	2					
	44	1						1
	46	1			1			
	47	10	2	1	2	4		1
	49	2			1		1	
	50	2	2					
	53	2						2
	63	7	1			3		3
	68	4						4

Res.	#	Total
Gov.	12	31
Acad.	6	17
Mov.	7	31
Org.	7	21
Corp.	2	2
Other	8	15
Total	**42**	**117**

Org	Doc	Total	Gov.	Acad.	Mov.	Org.	Corp.	Oth.
FOE	8	10	5	3			2	
	11	2	1			1		
	13	1			1			
	19	5			5			
	21	9	1			8		
	23	3	1			1	1	
	28	1		1				
	29	2	1	1				
	30	2				1	1	

Res.	#	Total
Gov.	5	9
Acad.	3	5
Mov.	2	6
Org.	4	11
Corp.	3	4
Other	0	0
Total	**17**	**35**

Org	Doc	Total	Gov.	Acad.	Mov.	Org.	Corp.	Oth.
IWL	1	2	2					

Res.	#	Total
Total	**1**	**2**

Org	Doc	Total	Gov.	Acad.	Mov.	Org.	Corp.	Oth.
KAB	1	1	1					
	7	1				1		

Res.	#	Total
Gov.	1	1
Org.	1	1
Total	**2**	**2**

Org	Doc	Total	Gov.	Acad.	Mov.	Org.	Corp.	Oth.
NC	1	21	19	2				
	7	1	1					
	12	1	1					
	13	1						1
	17	23						23

Res.	#	Total
Gov.	3	21
Acad.	1	2
Other	2	24
Total	**6**	**47**

Org	Doc	Total	Gov.	Acad.	Mov.	Org.	Corp.	Oth.
NAS	2	8	6	2				

Res.	#	Total
Gov.	1	6

	5	3				3		
	10	1				1		
	17	12		1		11		
	18	1				1		
	19	1				1		
	27	6		2	2	2		

Acad.	3	5
Mov.	1	2
Org.	6	19
Corp.	0	0
Other	0	0
Total	**11**	**32**

Org	Doc	Total	Gov.	Acad.	Mov.	Org.	Corp.	Oth.
NRDC	6	3	3					
	9	3			3			
	13	8			1			7
	17	2			2			
	18	7	2		2	3		
	26	7			7			
	31	2			2			
	35	10						10
	36	4	1	1	2			
	43	3			3			
	47	2			2			
	50	1			1			

Res.	#	Total
Gov.	3	6
Acad.	1	1
Mov.	10	25
Org.	1	3
Corp.	0	0
Other	2	17
Total	**17**	**52**

Org	Doc	Total	Gov.	Acad.	Mov.	Org.	Corp.	Oth.
NRPE	1	1				1		
	8	2				2		
	10	2			2			

Res.	#	Total
Mov.	1	2
Org.	2	3
Total	**3**	**5**

Org	Doc	Total	Gov.	Acad.	Mov.	Org.	Corp.	Oth.
NWF	3	7			4	3		
	9	2			2			
	31	1			1			

Res.	#	Total
Mov.	3	7
Org.	1	3
Total	**4**	**10**

Org	Doc	Total	Gov.	Acad.	Mov.	Org.	Corp.	Oth.
PC	1	1			1			

Res.	#	Total
Total	**1**	**1**

Org	Doc	Total	Gov.	Acad.	Mov.	Org.	Corp.	Oth.
RAN	2	2				2		
	3	2			2			
	5	2		1		1		

Res.	#	Total
Acad.	1	1
Mov.	1	2
Org.	2	3
Total	**4**	**6**

Org	Doc	Total	Gov.	Acad.	Mov.	Org.	Corp.	Oth.
WVE	1	4	1	1	1	1		
	2	10	1		8		1	
	3	9	1		5	3		
	4	19	2		10	7		
	19	3		1		2		

Res.	#	Total
Gov.	4	5
Acad.	2	2
Mov.	4	24
Org.	4	13
Corp.	1	1
Total	**15**	**45**

Org	Doc	Total	Gov.	Acad.	Mov.	Org.	Corp.	Oth.
S	2	1		1				
	3	22	9	5		3	1	4
	4	5			1	4		
	6	4						4
	7	2						2
	8	3			1			2
	10	4			1	3		
	14	8			1			7
	15	3	1	2				
	22	1				1		
	24	27	5	1		20		1
	26	2			2			
	27	2		2				
	28	4		4				
	31	2			1	1		
	37	2		2				
	41	61		14		13		34
	42	6	3		1	2		
	52	3			2			1
	58	2			2			
	60	1	1					

Res.	#	Total
Gov.	5	19
Acad.	8	31
Mov.	9	12
Org.	8	47
Corp.	1	1
Other	8	55
Total	**39**	**165**

Org	Doc	Total	Gov.	Acad.	Mov.	Org.	Corp.	Oth.
WWF	55	3			2	1		
	67	2				2		
	77	1			1			
	81	1	1					
	91	1				1		
	102	2					2	

Res.	#	Total
Gov.	1	1
Mov.	2	3
Org.	3	4
Corp.	1	2
Total	**7**	**10**

Appendix IX: Absolute and Relative Framing in Documents

Org	Doc	#s	#fram.	D	P	M	%fram.	%D	%P	%M
API	1	20	18	16	1	1	90	80	5	5
	2	60	54	39	4	11	90	65	7	18
	3	56	51	41	2	8	91	73	4	14
	4	124	59	31	0	28	48	25	0	23
	6	24	20	2	0	18	83	8	0	75
	7	22	17	8	3	6	77	36	14	27
	8	29	17	12	1	4	59	41	3	14
	9	77	18	18	0	0	23	23	0	0
	10	26	19	10	1	8	73	38	4	31
	11	36	30	18	8	4	83	50	22	11
	13	54	46	41	4	1	85	76	7	2
	14	19	14	2	1	11	74	11	5	58
	16	90	37	24	8	5	41	27	9	6
	17	15	18	0	17	1	120	0	113	7
	18	15	6	2	2	2	40	13	13	13
	19	26	19	1	5	13	73	4	19	50
	20	45	16	0	0	16	36	0	0	36
	21	17	14	9	4	1	82	53	24	6
	22	48	43	16	26	1	90	33	54	2
	23	73	35	0	0	35	48	0	0	48
	24	22	18	0	0	18	82	0	0	82
	25	20	18	15	1	2	90	75	5	10
	26	18	13	10	2	1	72	56	11	6
	27	18	5	0	0	5	28	0	0	28
	29	24	5	0	0	5	21	0	0	21
	30	437	0	0	0	0	0	0	0	0
	34	129	96	81	3	12	74	63	2	9
	35	26	21	20	0	1	81	77	0	4
	36	31	20	0	5	15	65	0	16	48
	37	17	15	10	3	2	88	59	18	12
	38	24	15	3	3	9	63	13	13	38
	39	30	14	1	0	13	47	3	0	43
	41	16	11	9	0	2	69	56	0	13
	43	23	16	12	1	3	70	52	4	13
	45	25	13	4	0	9	52	16	0	36
	46	21	23	5	0	18	110	24	0	86
	47	21	12	5	0	7	57	24	0	33
		1778	**866**	**465**	**105**	**296**	**49**	**26**	**6**	**17**
BP	1	18	14	12	0	2	78	67	0	11
	2	43	34	33	1	0	79	77	2	0
	3	21	5	2	2	1	24	10	10	5
	4	15	12	10	0	2	80	67	0	13
	6	22	5	0	0	5	23	0	0	23
	7	15	12	11	0	1	80	73	0	7
	10	25	14	10	3	1	56	40	12	4

Org	Doc	#s	#fram.	D	P	M	%fram.	%D	%P	%M
BP	11	46	36	34	2	0	78	74	4	0
	13	30	12	5	0	7	40	17	0	23
	17	27	11	7	0	4	41	26	0	15
	18	26	12	9	0	3	46	35	0	12
	20	78	50	0	24	26	64	0	31	33
	23	19	9	4	3	2	47	21	16	11
	25	34	19	18	0	1	56	53	0	3
	27	37	5	0	0	5	14	0	0	14
	29	89	42	36	4	2	47	40	4	2
	35	18	9	8	0	1	50	44	0	6
	37	29	20	14	5	1	69	48	17	3
	39	27	19	6	0	13	70	22	0	48
	40	26	12	12	0	0	46	46	0	0
	43	29	17	12	1	4	59	41	3	14
	45	33	18	6	0	12	55	18	0	36
	47	33	2	0	0	2	6	0	0	6
	48	30	2	2	0	0	7	7	0	0
	50	23	2	0	0	2	9	0	0	9
	51	53	39	30	0	9	74	57	0	17
	52	31	1	0	0	1	3	0	0	3
	54	46	6	0	0	6	13	0	0	13
	55	28	3	0	0	3	11	0	0	11
	56	23	3	2	1	0	13	9	4	0
	57	21	4	0	0	4	19	0	0	19
	58	25	13	13	0	0	52	52	0	0
	59	18	1	0	0	1	6	0	0	6
	62	15	2	1	0	1	13	7	0	7
	63	37	15	9	4	2	41	24	11	5
	69	36	37	6	0	31	103	17	0	86
	73	20	19	19	0	0	95	95	0	0
	76	27	3	0	0	3	11	0	0	11
	77	21	3	0	0	3	14	0	0	14
	78	31	2	0	0	2	6	0	0	6
	79	24	3	0	0	3	13	0	0	13
	80	20	7	0	0	7	35	0	0	35
	81	33	2	0	0	2	6	0	0	6
	83	42	2	0	0	2	5	0	0	5
	84	20	3	0	0	3	15	0	0	15
	86	16	11	0	2	9	69	0	13	56
	87	35	8	0	0	8	23	0	0	23
	88	43	34	18	0	16	79	42	0	37
	89	23	3	0	0	3	13	0	0	13
	90	23	5	0	0	5	22	0	0	22
	91	22	1	0	0	1	5	0	0	5
	93	31	3	0	0	3	10	0	0	10
	94	18	3	0	0	3	17	0	0	17
	95	22	5	0	0	5	23	0	0	23

Org	Doc	#s	#fram.	D	P	M	%fram.	%D	%P	%M
BP	96	73	71	0	0	71	97	0	0	97
	98	32	9	0	0	9	28	0	0	28
	99	24	3	0	0	3	13	0	0	13
	100	18	4	0	0	4	22	0	0	22
	101	32	2	0	0	2	6	0	0	6
	102	36	18	4	11	3	50	11	31	8
	103	20	3	0	0	3	15	0	0	15
		1832	**744**	**353**	**63**	**328**	**41**	**19**	**3**	**18**
CEJL	1	103	29	1	11	17	28	1	11	17
	2	143	100	46	9	45	70	32	6	31
	3	87	25	5	20	0	29	6	23	0
	4	109	15	0	15	0	14	0	14	0
	6	58	4	4	0	0	7	7	0	0
	7	96	2	0	2	0	2	0	2	0
	8	236	20	0	20	0	8	0	8	0
	9	184	30	5	25	0	16	3	14	0
	11	60	34	12	21	1	57	20	35	2
	14	332	24	12	11	1	7	4	3	0
	16	36	22	7	15	0	61	19	42	0
	17	33	43	1	1	41	130	3	3	124
	19	157	33	0	0	33	21	0	0	21
	21	75	34	0	0	34	45	0	0	45
	22	38	37	0	0	37	97	0	0	97
	23	29	4	0	0	4	14	0	0	14
	24	35	13	3	2	8	37	9	6	23
	25	28	25	0	0	25	89	0	0	89
	27	82	82	0	0	82	100	0	0	100
	29	57	57	0	0	57	100	0	0	100
	30	64	47	0	0	47	73	0	0	73
	32	122	122	6	0	116	100	5	0	95
	33	12	11	0	0	11	92	0	0	92
	34	77	77	0	0	77	100	0	0	100
	35	25	31	0	0	31	124	0	0	124
	36	18	17	0	0	17	94	0	0	94
	37	23	21	0	0	21	91	0	0	91
	39	40	29	25	4	0	73	63	10	0
	40	33	14	0	1	13	42	0	3	39
	41	11	8	3	0	5	73	27	0	45
	42	19	17	0	0	17	89	0	0	89
	44	100	44	11	24	9	44	11	24	9
	45	35	6	3	0	3	17	9	0	9
	46	31	32	0	0	32	103	0	0	103
	47	50	10	0	0	10	20	0	0	20
		2638	**1119**	**144**	**181**	**794**	**42**	**5**	**7**	**30**
CHEJ	1	16	14	0	0	14	88	0	0	88
	2	75	29	2	0	27	39	3	0	36
	6	49	43	0	0	43	88	0	0	88

Org	Doc	#s	#fram.	D	P	M	%fram.	%D	%P	%M
CHEJ	9	58	13	5	3	5	22	9	5	9
	11	32	9	4	1	4	28	13	3	13
	12	28	5	2	0	3	18	7	0	11
	15	112	109	2	0	107	97	2	0	96
	17	54	31	4	6	21	57	7	11	39
	20	22	19	0	0	19	86	0	0	86
	21	48	5	0	2	3	10	0	4	6
	22	43	18	15	0	3	42	35	0	7
	23	18	19	16	0	3	106	89	0	17
	27	55	55	0	0	55	100	0	0	100
		610	**369**	**50**	**12**	**307**	**60**	**8**	**2**	**50**
DW	1	32	14	12	1	1	44	38	3	3
	3	48	8	1	7	0	17	2	15	0
	4	23	1	0	0	1	4	0	0	4
	6	10	7	6	0	1	70	60	0	10
	7	34	32	0	0	32	94	0	0	94
	9	15	20	11	0	9	133	73	0	60
	10	54	15	2	0	13	28	4	0	24
	12	21	3	3	0	0	14	14	0	0
	13	26	26	0	0	26	100	0	0	100
	14	40	31	3	0	28	78	8	0	70
	15	13	10	0	0	10	77	0	0	77
	16	23	11	0	0	11	48	0	0	48
	17	19	14	0	0	14	74	0	0	74
	19	18	5	5	0	0	28	28	0	0
	20	28	15	0	0	15	54	0	0	54
		404	**212**	**43**	**8**	**161**	**52**	**11**	**2**	**40**
EDF	1	56	55	0	0	55	98	0	0	98
	2	34	0	0	0	0	0	0	0	0
	3	71	47	0	0	47	66	0	0	66
	4	43	23	13	0	10	53	30	0	23
	5	29	4	4	0	0	14	14	0	0
	6	28	0	0	0	0	0	0	0	0
	7	34	0	0	0	0	0	0	0	0
	9	50	19	0	9	10	38	0	18	20
	11	56	30	28	1	1	54	50	2	2
	12	133	17	0	0	17	13	0	0	13
	14	53	56	31	0	25	106	58	0	47
	15	66	68	33	0	35	103	50	0	53
	18	46	11	1	6	4	24	2	13	9
	19	35	17	0	3	14	49	0	9	40
	20	31	31	0	0	31	100	0	0	100
	21	192	23	0	0	23	12	0	0	12
	22	47	25	11	0	14	53	23	0	30
	23	31	8	8	0	0	26	26	0	0
	24	18	15	13	0	2	83	72	0	11
	25	37	29	2	2	25	78	5	5	68

Org	Doc	#s	#fram.	D	P	M	%fram.	%D	%P	%M
EDF	26	32	26	12	8	6	81	38	25	19
	28	40	38	0	37	1	95	0	93	3
	29	106	39	19	13	7	37	18	12	7
	30	49	9	0	9	0	18	0	18	0
	32	45	45	0	0	45	100	0	0	100
	33	68	22	11	2	9	32	16	3	13
	35	18	13	2	11	0	72	11	61	0
	36	128	90	15	2	73	70	12	2	57
	38	55	55	0	0	55	100	0	0	100
	39	20	18	5	6	7	90	25	30	35
	41	12	10	1	9	0	83	8	75	0
	42	11	13	2	1	10	118	18	9	91
	43	158	74	25	30	19	47	16	19	12
	44	76	74	11	24	39	97	14	32	51
	45	18	17	0	0	17	94	0	0	94
	46	140	124	2	1	121	89	1	1	86
	47	72	66	0	0	66	92	0	0	92
	48	16	12	0	0	12	75	0	0	75
	49	109	55	6	0	49	50	6	0	45
	50	102	7	0	0	7	7	0	0	7
	51	40	39	0	0	39	98	0	0	98
	52	114	21	0	0	21	18	0	0	18
	53	71	69	0	0	69	97	0	0	97
	55	49	49	0	0	49	100	0	0	100
	56	41	35	0	0	35	85	0	0	85
	57	18	17	5	12	0	94	28	67	0
	58	28	27	0	0	27	96	0	0	96
	59	60	58	0	0	58	97	0	0	97
	60	20	15	0	0	15	75	0	0	75
	61	38	33	0	0	33	87	0	0	87
	62	63	24	0	0	24	38	0	0	38
	63	10	8	0	0	8	80	0	0	80
	65	50	47	0	0	47	94	0	0	94
	66	13	12	0	6	6	92	0	46	46
	67	85	5	0	0	5	6	0	0	6
	68	128	114	0	0	114	89	0	0	89
	69	99	98	0	0	98	99	0	0	99
	72	26	21	0	0	21	81	0	0	81
	73	26	26	8	8	10	100	31	31	38
	74	40	27	0	0	27	68	0	0	68
	75	10	10	0	0	10	100	0	0	100
		3394	**2040**	**268**	**200**	**1572**	**60**	**8**	**6**	**46**
FoE	3	69	4	2	0	2	6	3	0	3
	4	22	6	6	0	0	27	27	0	0
	6	18	1	0	1	0	6	0	6	0
	8	131	17	17	0	0	13	13	0	0
	9	33	29	5	1	23	88	15	3	70

Org	Doc	#s	#fram.	D	P	M	%fram.	%D	%P	%M
FoE	11	48	4	4	0	0	8	8	0	0
	13	36	25	21	4	0	69	58	11	0
	17	70	1	1	0	0	1	1	0	0
	19	17	4	0	0	4	24	0	0	24
	20	33	7	0	0	7	21	0	0	21
	21	29	16	10	1	5	55	34	3	17
	23	23	13	10	0	3	57	43	0	13
	27	18	5	5	0	0	28	28	0	0
	28	38	29	25	4	0	76	66	11	0
	29	84	71	65	6	0	85	77	7	0
	30	29	10	10	0	0	34	34	0	0
	34	21	10	0	0	10	48	0	0	48
		719	**252**	**181**	**17**	**54**	**35**	**25**	**2**	**8**
IWL	1	30	25	5	7	13	83	17	23	43
	2	20	3	0	1	2	15	0	5	10
	4	30	1	0	1	0	3	0	3	0
	7	23	5	0	1	4	22	0	4	17
		103	**34**	**5**	**10**	**19**	**33**	**5**	**10**	**18**
KAB	1	135	133	9	102	22	99	7	76	16
	2	31	18	8	4	6	58	26	13	19
	3	44	43	0	0	43	98	0	0	98
	4	56	21	0	0	21	38	0	0	38
	7	36	18	2	1	15	50	6	3	42
	9	33	23	0	0	23	70	0	0	70
		335	**256**	**19**	**107**	**130**	**76**	**6**	**32**	**39**
NAS	1	63	59	0	0	59	94	0	0	94
	2	43	35	9	4	22	81	21	9	51
	5	76	46	41	3	2	61	54	4	3
	6	68	96	1	0	95	141	1	0	140
	7	5	5	5	0	0	100	100	0	0
	8	32	20	0	0	20	63	0	0	63
	10	68	47	15	13	19	69	22	19	28
	11	32	30	30	0	0	94	94	0	0
	12	46	45	0	0	45	98	0	0	98
	13	52	17	10	5	2	33	19	10	4
	14	50	3	0	3	0	6	0	6	0
	15	27	26	11	13	2	96	41	48	7
	16	40	10	0	7	3	25	0	18	8
	17	84	15	3	0	12	18	4	0	14
	18	20	18	0	0	18	90	0	0	90
	19	33	30	25	0	5	91	76	0	15
	22	107	107	0	0	107	100	0	0	100
	24	21	20	2	0	18	95	10	0	86
	25	66	65	0	0	65	98	0	0	98
	26	22	14	1	0	13	64	5	0	59
	27	26	25	0	0	25	96	0	0	96
	28	29	8	0	0	8	28	0	0	28

Org	Doc	#s	#fram.	D	P	M	%fram.	%D	%P	%M
	29	15	13	7	0	6	87	47	0	40
		1025	**754**	**160**	**48**	**546**	**74**	**16**	**5**	**53**
NC	1	100	2	0	0	2	2	0	0	2
	2	56	51	0	0	51	91	0	0	91
	3	35	32	1	0	31	91	3	0	89
	4	46	69	0	0	69	150	0	0	150
	5	14	8	0	0	8	57	0	0	57
	7	159	131	3	5	123	82	2	3	77
	8	42	41	0	0	41	98	0	0	98
	11	27	3	0	0	3	11	0	0	11
	12	44	7	0	0	7	16	0	0	16
	13	40	3	0	0	3	8	0	0	8
	15	67	45	0	0	45	67	0	0	67
	17	115	89	0	0	89	77	0	0	77
	22	23	2	0	0	2	9	0	0	9
	25	65	53	4	0	49	82	6	0	75
		833	**536**	**8**	**5**	**523**	**64**	**1**	**1**	**63**
NRDC	1	17	5	0	0	5	29	0	0	29
	5	33	33	2	1	30	100	6	3	91
	6	32	12	4	0	8	38	13	0	25
	7	58	53	2	2	49	91	3	3	84
	8	134	132	0	0	132	99	0	0	99
	9	9	5	0	5	0	56	0	56	0
	10	47	27	0	0	27	57	0	0	57
	12	19	18	0	0	18	95	0	0	95
	13	99	8	0	0	8	8	0	0	8
	15	75	52	18	0	34	69	24	0	45
	16	203	189	23	0	166	93	11	0	82
	17	28	14	10	1	3	50	36	4	11
	18	40	23	12	5	6	58	30	13	15
	22	29	3	0	3	0	10	0	10	0
	26	48	43	4	12	27	90	8	25	56
	29	58	56	0	0	56	97	0	0	97
	30	26	3	0	1	2	12	0	4	8
	31	76	21	3	2	16	28	4	3	21
	32	122	17	1	3	13	14	1	2	11
	33	52	52	0	0	52	100	0	0	100
	35	107	94	11	0	83	88	10	0	78
	36	40	35	22	10	3	88	55	25	8
	38	94	28	0	7	21	30	0	7	22
	39	68	23	5	18	0	34	7	26	0
	40	140	137	2	0	135	98	1	0	96
	41	43	41	0	0	41	95	0	0	95
	43	42	36	0	0	36	86	0	0	86
	47	60	57	0	0	57	95	0	0	95
	48	32	25	0	0	25	78	0	0	78
	49	85	43	0	0	43	51	0	0	51

Org	Doc	#s	#fram.	D	P	M	%fram.	%D	%P	%M
	50	37	33	3	26	4	89	8	70	11
		1953	**1318**	**122**	**96**	**1100**	**67**	**6**	**5**	**56**
NRPE	1	49	1	1	0	0	2	2	0	0
	2	41	9	0	0	9	22	0	0	22
	3	48	26	8	12	6	54	17	25	13
	4	322	1	1	0	0	0	0	0	0
	5	25	1	1	0	0	4	4	0	0
	7	15	1	0	1	0	7	0	7	0
	8	50	6	0	0	6	12	0	0	12
	9	34	3	2	1	0	9	6	3	0
	10	54	13	9	0	4	24	17	0	7
	11	35	11	1	0	10	31	3	0	29
	12	36	2	1	1	0	6	3	3	0
	13	74	5	0	0	5	7	0	0	7
	14	26	1	0	0	1	4	0	0	4
	15	25	8	0	8	0	32	0	32	0
	16	75	8	0	7	1	11	0	9	1
	17	30	1	1	0	0	3	3	0	0
	18	23	1	0	0	1	4	0	0	4
		962	**98**	**25**	**30**	**43**	**10**	**3**	**3**	**4**
NWF	1	23	15	10	0	5	65	43	0	22
	2	25	18	13	5	0	72	52	20	0
	3	71	70	15	5	50	99	21	7	70
	4	25	19	0	0	19	76	0	0	76
	5	17	15	13	0	2	88	76	0	12
	7	22	21	8	3	10	95	36	14	45
	8	36	17	5	10	2	47	14	28	6
	9	20	25	14	7	4	125	70	35	20
	13	148	148	0	0	148	100	0	0	100
	14	160	158	0	0	158	99	0	0	99
	15	20	2	0	0	2	10	0	0	10
	16	23	23	0	0	23	100	0	0	100
	17	67	67	0	0	67	100	0	0	100
	18	200	197	0	0	197	99	0	0	99
	19	56	56	0	0	56	100	0	0	100
	20	12	10	0	0	10	83	0	0	83
	21	31	30	0	0	30	97	0	0	97
	22	25	22	1	2	19	88	4	8	76
	23	82	80	2	0	78	98	2	0	95
	25	98	97	0	0	97	99	0	0	99
	26	31	30	0	0	30	97	0	0	97
	27	103	102	0	0	102	99	0	0	99
	28	42	42	0	0	42	100	0	0	100
	31	39	24	9	0	15	62	23	0	38
		1376	**1288**	**90**	**32**	**1166**	**94**	**7**	**2**	**85**
PC	1	53	32	23	8	1	60	43	15	2
RAN	2	25	13	0	12	1	52	0	48	4

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RAN	3	45	8	0	2	6	18	0	4	13
	4	32	6	0	2	4	19	0	6	13
	5	39	25	0	9	16	64	0	23	41
	6	58	46	0		46	79	0	0	79
	8	56	19	0	2	17	34	0	4	30
	9	21	13	0	0	13	62	0	0	62
	11	49	34	0	0	34	69	0	0	69
	13	62	61	0	0	61	98	0	0	98
	19	52	26	0	0	26	50	0	0	50
	20	104	103	0	0	103	99	0	0	99
		596	**386**	**23**	**35**	**328**	**65**	**4**	**6**	**55**
S	1	20	13	1	8	4	65	5	40	20
	2	43	39	21	15	3	91	49	35	7
	3	982	923	821	102	0	94	84	10	0
	4	87	70	22	20	28	80	25	23	32
	5	57	44	19	1	24	77	33	2	42
	6	50	43	17	25	1	86	34	50	2
	7	40	38	0	27	11	95	0	68	28
	8	40	30	2	14	14	75	5	35	35
	9	18	17	0	17	0	94	0	94	0
	10	41	34	32	1	1	83	78	2	2
	11	70	56	8	48	0	80	11	69	0
	12	145	144	0	0	144	99	0	0	99
	13	55	46	13	0	33	84	24	0	60
	14	27	12	2	9	1	44	7	33	4
	15	57	55	27	12	16	96	47	21	28
	16	24	22	6	0	16	92	25	0	67
	17	20	20	13	4	3	100	65	20	15
	18	24	23	0	0	23	96	0	0	96
	19	26	24	0	0	24	92	0	0	92
	20	75	77	20	23	34	103	27	31	45
	21	83	78	11	33	34	94	13	40	41
	22	91	84	30	8	46	92	33	9	51
	23	12	8	0	0	8	67	0	0	67
	24	424	320	104	95	121	75	25	22	29
	25	62	61	0	4	57	98	0	6	92
	26	25	4	3	0	1	16	12	0	4
	27	63	40	40	0	0	63	63	0	0
	28	475	46	38	8	0	10	8	2	0
	29	71	8	7	1	0	11	10	1	0
	30	55	4	4	0	0	7	7	0	0
	31	56	29	27	0	2	52	48	0	4
	32	14	10	8	0	2	71	57	0	14
	33	64	39	0	0	39	61	0	0	61
	35	145	7	7	0	0	5	5	0	0
	36	15	11	1	0	10	73	7	0	67
	37	47	42	1	39	2	89	2	83	4

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S	38	66	14	14	0	0	21	21	0	0
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	41	126	125	0	0	125	99	0	0	99
	42	63	60	4	0	56	95	6	0	89
	44	55	45	0	45	0	82	0	82	0
	45	113	37	1	0	36	33	1	0	32
	46	15	11	0	11	0	73	0	73	0
	48	21	12	0	0	12	57	0	0	57
	49	42	1	0	1	0	2	0	2	0
	50	88	2	0	0	2	2	0	0	2
	51	97	3	0	3	0	3	0	3	0
	52	85	59	28	0	31	69	33	0	36
	53	56	55	0	0	55	98	0	0	98
	54	23	5	1	4	0	22	4	17	0
	55	20	18	0	0	18	90	0	0	90
	58	19	19	0	15	4	100	0	79	21
	59	21	19	0	0	19	90	0	0	90
	60	16	14	0	14	0	88	0	88	0
	61	31	3	0	2	1	10	0	6	3
	62	28	24	0	0	24	86	0	0	86
	63	40	35	0	0	35	88	0	0	88
	64	33	31	5	14	12	94	15	42	36
	65	38	28	14	0	14	74	37	0	37
	66	46	45	1	7	37	98	2	15	80
	68	75	67	0	0	67	89	0	0	89
	69	70	69	0	1	68	99	0	1	97
	71	16	14	2	0	12	88	13	0	75
	72	31	24	0	0	24	77	0	0	77
		5065	**3466**	**1375**	**735**	**1356**	**68**	**27**	**15**	**27**
VA	1	21	1	0	1	0	5	0	5	0
WCS	1	12	3	0	0	3	25	0	0	25
	2	35	34	0	0	34	97	0	0	97
		47	**37**	**0**	**0**	**37**	**79**	**0**	**0**	**79**
WVE	1	18	11	8	0	3	61	44	0	17
	2	190	54	22	0	32	28	12	0	17
	3	59	13	10	0	3	22	17	0	5
	4	54	23	0	0	23	43	0	0	43
	7	7	3	0	0	3	43	0	0	43
	10	615	10	0	0	10	2	0	0	2
	18	16	16	0	0	16	100	0	0	100
	19	127	117	0	0	117	92	0	0	92
		1086	**247**	**40**	**0**	**207**	**23**	**4**	**0**	**19**
WWF	2	17	8	0	0	8	47	0	0	47
	4	22	14	5	0	9	64	23	0	41
	5	31	10	0	1	9	32	0	3	29
	8	34	20	0	0	20	59	0	0	59
	10	25	1	0	1	0	4	0	4	0

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WWF	11	91	91	0	0	91	100	0	0	100
	12	48	4	3	1	0	8	6	2	0
	13	71	1	1	0	0	1	1	0	0
	14	35	34	0	0	34	97	0	0	97
	15	27	23	2	1	20	85	7	4	74
	17	28	3	1	0	2	11	4	0	7
	21	36	8	0	1	7	22	0	3	19
	23	28	22	0	0	22	79	0	0	79
	24	483	3	2	1	0	1	0	0	0
	25	42	5	0	4	1	12	0	10	2
	26	11	3	0	0	3	27	0	0	27
	27	55	2	1	0	1	4	2	0	2
	28	13	2	1	1	0	15	8	8	0
	29	44	36	0	1	35	82	0	2	80
	30	18	2	2	0	0	11	11	0	0
	31	15	1	1	0	0	7	7	0	0
	32	40	10	1	3	6	25	3	8	15
	33	43	41	0	0	41	95	0	0	95
	34	73	12	0	0	12	16	0	0	16
	36	49	48	0	0	48	98	0	0	98
	40	14	1	1	0	0	7	7	0	0
	47	36	33	2	1	30	92	6	3	83
	48	97	96	0	0	96	99	0	0	99
	50	36	32	1	0	31	89	3	0	86
	51	33	29	1	0	28	88	3	0	85
	52	75	72	0	0	72	96	0	0	96
	53	19	18	5	0	13	95	26	0	68
	54	46	3	0	0	3	7	0	0	7
	55	103	4	0	0	4	4	0	0	4
	56	63	6	0	0	6	10	0	0	10
	58	19	14	0	0	14	74	0	0	74
	59	12	14	2	12	0	117	17	100	0
	62	18	3	3	0	0	17	17	0	0
	67	14	6	2	4	0	43	14	29	0
	68	22	9	0	0	9	41	0	0	41
	69	22	21	0	0	21	95	0	0	95
	70	36	36	0	0	36	100	0	0	100
	72	58	56	0	0	56	97	0	0	97
	73	63	7	0	0	7	11	0	0	11
	74	76	60	0	0	60	79	0	0	79
	77	39	29	24	1	4	74	62	3	10
	80	24	18	0	0	18	75	0	0	75
	81	36	2	1	1	0	6	3	3	0
	84	17	4	4	0	0	24	24	0	0
	86	36	19	13	3	3	53	36	8	8
	90	22	6	0	0	6	27	0	0	27
	91	40	9	4	0	5	23	10	0	13

Org	Doc	#s	#fram.	D	P	M	%fram.	%D	%P	%M
WWF	92	59	12	0	6	6	20	0	10	10
	93	29	25	6	0	19	86	21	0	66
	94	29	28	0	0	28	97	0	0	97
	95	39	9	0	0	9	23	0	0	23
	96	15	13	0	0	13	87	0	0	87
	98	22	2	2	0	0	9	9	0	0
	102	81	0	0	0	0	0	0	0	0
	103	31	28	0	0	28	90	0	0	90
	104	48	48	0	0	48	100	0	0	100
	105	32	29	0	0	29	91	0	0	91
	108	15	10	1	0	9	67	7	0	60
	109	49	112	0	0	112	229	0	0	229
	113	30	26	26	0	0	87	87	0	0
	114	31	29	0	0	29	94	0	0	94
	115	147	147	0	0	147	100	0	0	100
	116	31	19	4	0	15	61	13	0	48
	118	93	90	0	0	90	97	0	0	97
	119	53	51	0	0	51	96	0	0	96
	121	45	44	0	0	44	98	0	0	98
	122	6	6	0	0	6	100	0	0	100
	123	29	28	0	0	28	97	0	0	97
	124	22	22	0	0	22	100	0	0	100
	128	25	24	0	0	24	96	0	0	96
	130	21	7	0	5	2	33	0	24	10
		3437	**1820**	**122**	**48**	**1650**	**53**	**4**	**1**	**48**
TOTAL		**28267**	**15875**	**3516**	**1741**	**10618**	**56**	**12**	**6**	**38**

VITA

Jan-Martijn Meij

Candidate for the Degree of

Doctor of Philosophy

Thesis: FRAMING ENVIRONMENTAL DEGRADATION: THE MODERN AMERICAN ENVIRONMENTAL MOVEMENT AND CONSUMPTION

Major Field: Sociology

Biographical:

Education:
Completed the requirements for the Doctor of Philosophy in Sociology at Oklahoma State University, Stillwater, Oklahoma in May 2009.

Professional Memberships:
American Sociological Association (Section on Environment & Technology)
Southwestern Sociological Association
Phi Kappa Phi
Alpha Kappa Delta

Name: Jan-Martijn Meij Date of Degree: May 2009

Institution: Oklahoma State University Location: Stillwater, Oklahoma

Title of Study: FRAMING ENVIRONMENTAL DEGRADATION: THE MODERN AMERICAN ENVIRONMENTAL MOVEMENT AND CONSUMPTION

Pages in Study: 230 Candidate for the Degree of Doctor of Philosophy

Major Field: Environmental Sociology

Scope and Method of Study: An online content analysis of modern American environmental movement websites' treatment of the three core framing tasks on individual and household consumption. A mixture of both quantitative and qualitative methods was used to test four hypotheses.

Findings and Conclusions: A total of 525 documents were found on the 28 environmental movement organizations' websites in the sample. These documents had over 28,000 sentences and close to 16,000 of these contained framing. The framing analysis uncovered that consumption is problematic because it has negative health effects, due to materialistic lifestyles, changed consumer behavior, legal problems, as well as consumer awareness. The solutions and calls to action were larged framed in positive and optimistic language such as calling to support a store, product, ingredient, movement, law, politician, policy et cetera. Counter to Benford (2007) who argued that movements spend more attention on describing the problem (diagnostic framing) rather than the other core framing tasks this study reveals that the environmental movement spends a lot more attention on calling people to do something about the problem. The different organizations belonging to the different discursive communities offer a variety of frames. The problems associated with our lifestyles are addressed by both large, more mainstream organizations as well as the smaller more radical organizations.

ADVISER'S APPROVAL: Beth Caniglia