UNDERSTANDING ANTI-ENVIRONMENTALISM:
CONTENT ANALYZING THE BLOGOSPHERE FOR INSIGHT INTO
OPPOSITION TO ENVIRONMENTALISM

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We accept this thesis as conforming
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Abstract

Environmentalism, like any other noteworthy social movement, has been met with some resistance. Opposition to this movement has come both from the general public and from organized anti-environmental groups. The closeness, or lack thereof, between the organized groups' messages and those of the public has yet to be clearly defined. Given that organized groups are often more capable of getting their message out to a larger audience, it is important to know to what extent the thoughts and ideas they put forward are representative of those of the public. Without examining this relationship, responding to anti-environmental sentiment in the public will be difficult.

In an effort to understand opposition towards environmentalism in the general public, this project examined the blogosphere. Anti-environmental weblog (blog) postings were subjected to a content analysis in order to reveal common themes present within them. The specific focus of the analysis was on the manner in which environmentalism was portrayed by its opponents, as opposed to points of factual disagreement. Comparisons were then made to the arguments of the organized anti-environmentalism factions, and a more complete picture of the opposition toward environmentalism was constructed. From this basis, recommendations for a response to anti-environmental sentiment from leaders in the area of sustainable development were given.

Introduction

Anti-environmentalism stands directly in the path of the success of the environmental movement. As the environmental movement promotes the institutionalization of practices that make preserving the health of the planet central to societal goals, anti-environmentalism stands squarely ahead, pushing back with efforts to slow, halt or reverse gains made by the pro-environmental movement. Even without such resistance, achieving the lofty goals of environmentalism and sustainable development will be an enormous task. For these reasons, listening to, understanding, and responding to the sentiment expressed by the anti-environmental side is important to the progress of environmentalism and sustainable development.

The goals of the anti-environmental movement can be most readily heard through the voices of organized groups and published authors that have a public platform to state their objectives. Organized groups such as the Wise Use movement and authors of books arguing against environmentalism, such as Lomborg (2001), Horner (2008), Murray (2008), and Plimer (2009), are examples of some of these voices. However, hearing and understanding anti-environmental sentiment amongst the general public is a more difficult process. The many voices of the public generally do not have a forum available to them for expressing their opinions to a widespread audience, and

therefore those opinions are usually summarized, at best, by public polling,

or by attempting to read into the results of democratic elections. As a result,

there is a lack of a clear understanding of the anti-environmental sentiment

in the public, and also of the relationship that sentiment has with the

messages being offered by organized groups.

One avenue available for filling this void of information is an

examination of the blogosphere. The blogosphere exists as an open forum for

the expression of opinions on virtually all matters. Any person with a

computer and access to the Internet can place his or her opinion on the World

Wide Web, making it available to millions of others around the world

instantaneously. This makes the blogging public an excellent resource for

public opinion gathering on a variety of topics, including anti-

environmentalism. By analyzing opinions expressed in blogs, a greater

understanding of anti-environmental sentiment can be gained, as well as its

relationship with the organized, more public voices of the movement.

Combing through the vast amount of information found in the

blogosphere, and then articulating the commentary into understandable

messages and themes, can be an enormous task. That task is made easier,

though, through the process of content analysis. A content analysis study is a

method of making valid inferences from texts (Krippendorff, 2004). Through

this research method, small and large bodies of texts (written and verbal

forms) can be analyzed in a manner that identifies and highlights some of the

main points found throughout them. These messages can then be

summarized into a succinct format and presented to others in order to

provide an overview of the content contained within the texts. This research

utilized the content analysis research methodology with anti-

environmentalism commentary found in the blogosphere in order to provide

such an overview.

The content analysis of blogs that was conducted was designed with a

specific objective. The objective of the analysis was to identify descriptive

language used by bloggers in their commentaries criticizing aspects of the

environmental movement that revealed the manner in which bloggers

portrayed the movement. The focus was not placed on comments that dealt

with factual matters, unless of course those comments included the type of

descriptive language being analyzed. Instead, specific points of factual debate

were overlooked in favour of extraneous words and phrases that more fully

expressed the bloggers' feelings about environmentalism. By focusing on

descriptive language, the image of environmentalism that members of the

blogging public held and expressed was revealed. That image was then

compared and contrasted with messages and themes expressed by organized

anti-environmentalism so that a better understanding of the message(s)

being expressed by all of those that oppose environmental initiatives could be

gained.

The final stage of the research involved taking the summarized opinions expressed in the blogosphere, along with those expressed by organized anti-environmentalist groups, and discussing their impact on the promotion of environmentalism and sustainable development. Having a more complete and accurate portrayal of the public's feelings about environmentalism, as expressed through their blogs, is of fundamental importance when attempting to overcome anti-environmental sentiment. An extension of this discussion that dealt with overall approaches to responding to critics of environmentalism was also included in order to place the findings of the content analysis into a greater framework for dealing effectively with the issue. From this, recommendations based on the findings were offered.

Definitions and Terminology Usage

As the discussion of environmental matters is a growing and evolving one, so too is the terminology used in the conversations that cover the topic. As such, different words and terms can be used at different times to have relatively similar meanings. Furthermore, the broad spectrum of issues the environmental debate covers along with the varied support from the various parties discussing the issues sometimes makes drawing direct contrasts between opposing sides of the debate rather difficult. For example, the term "anti-environmentalist", which will be used several times throughout this paper, suggests complete opposition to all possible environmental initiatives,

when in fact this is not always the case. Therefore, clarification of some

possibly unclear terms used throughout this paper has been provided below.

Anti-environmentalism:

The International Encyclopedia of Environmental Politics (2002, p.19)

defines anti-environmentalism in this way:

> Anti-environmentalism refers to the way that corporations and
>
> conservative groups have sought to counter the gains made by
>
> environmentalists, to redirect and diminish public concern about the
>
> environment, to attack environmentalists, and to persuade politicians
>
> against increased environmental regulations.

From this definition, the terms anti-environmentalism and anti-

environmentalist can generally be understood to refer to the opposition by

people and organizations to many or all of the environmental initiatives

commonly forwarded by environmentalists. The consistency, depth and

determination shown in some examples of anti-environmentalism also

suggests that it is based not only on disagreements around specific actions

and policies, but also sometimes on the underlying principles, ideology, and

core beliefs upon which the environmentalism agenda is based. These

variations in cause and type of anti-environmentalism mean that the term

may mean different things at different times.

Organized Anti-environmentalism:

The term "organized" anti-environmentalism in the context of this paper refers to individuals and organizations that spend significant amounts of time, finances and effort to counter the efforts and initiatives made by those promoting environmentalism. Generally speaking, organized anti-environmentalism will also garner considerably more public recognition for the arguments made on its behalf than those offered by the common person. Examples of this type of organized environmentalism include authors of published books and articles that take direct aim at environmentalism in a concerted effort to weaken its support. Other examples of organized anti-environmentalism include groups such as those that act under the auspices of the Wise Use movement, whose affiliated organizations act in a concerted manner to obstruct environmental initiatives (Echeverria & Eby, 1995). Though the line between what is considered to be organized or otherwise will not always be clear cut, generally speaking, those considered to be part of organized anti-environmentalism will be publicly recognized as offering some form of leadership in the movement.

Environmentalism and Sustainable Development:

This paper will use the terms environmentalism and sustainable development intermittently. Though the two terms are not entirely synonymous, their numerous shared objectives often makes the use of either

term appropriate when discussing certain matters. The primary focus of

this paper will be on matters related to environmentalism, but the larger

umbrella term sustainable development will also be suitable at times.

Opposition to Environmentalism

The environmental movement has made significant strides in recent

years in garnering awareness and support from both the general public and

political leadership around the world. In reference to the public support and

awareness in the American context, Guber (2003) notes that phrases such as

"global warming" and practices such as recycling, which are now mainstays

in modern developed societies, were generally unknown and unpracticed by

the majority of the public just a few decades ago. The level of political

recognition of environmental and sustainable development efforts is also

evidenced by the international cooperation and treaties such as the Kyoto

Protocol, and more recently, the 2009 Climate Conference in Copenhagen.

Though these efforts have not been entirely successful in achieving their

goals, they do represent significant international cooperation and focus in

forwarding environmental causes.

Like any social movement would that requires the types of broad and

fundamental changes to human behaviour that sustainable development (SD)

does, the SD movement has of course been met with considerable resistance.

In fact, a movement that opposes many of environmentalism's main

initiatives, often referred to as the "anti-environmental" movement, has

grown into a significant opposing force. Outspoken leaders of this anti-

environmental movement have written volumes arguing the weaknesses,

misguidedness, and even the evils of the environmental movement. Lomborg,

Horner, Murray, and Plimer, to name a few, have articulated their opposition

quite clearly, and some would argue, quite strongly. The ideas these leaders

express that frame environmentalism as fanatical, socialist, conspiratorial, or

in some other negative light, leave doubt in the minds of potential

environmental supporters, while strengthening the opposition to the

movement of those predisposed to holding such opposition.

Some Common Themes

There are several common themes that can be gleaned relatively easily

even through a cursory examination of organized anti-environmental

rhetoric. Of those, five stand out as particularly common and prominent in

the debate. The first theme frequently expressed, with varying degrees of

contempt and venom, is that the environmental movement is founded upon

and driven by deceit. This can be seen in the language commonly used in

anti-environmental writings. Lomborg uses terms like "blatantly false claims"

(2001, p.12) and "the great fable" (p.327) to suggest that deliberate attempts

to deceive are an intricate part of environmentalism. Simon (1999) expresses

the same sentiment even more clearly in *Hoodwinking the Nation* by using

words like "scam" and "lies", as in the title of Chapter 2 - "The Vanishing

Farmland *Scam*", and Chapter 7 - "Damn *Lies*, Statistics and Doomsday".

Horner makes the argument of deceit clear on the very front page with his

2008 book's title, "Red Hot *Lies*". The theme imbued upon the reader by such

strong and accusatory language is not merely incorrectness of fact in the

environmentalists' argument, but that of intentional deceit by those who wish

to deceive.

A second, and related theme commonly expressed by anti-

environmentalists is that the environmental movement is guilty of using

hyperbolic language in the course of fear-mongering. As noted previously, in

the Chapter 2 heading of his book Simon uses the word "doomsday" in

reference to the ominous picture of the future painted by environmentalists,

inferring a deliberate (and assumedly unnecessary) attempt to scare the

world into accepting environmentalism messages. Horner devotes much of

Chapter 2 in his book to what he calls "alarmist scare tactics", and Murray,

also frequently refers to alarmism as a much-utilized technique in

environmentalists' tactics. From this, anti-environmentalists build a case

either explicitly or implicitly, similar to that of the deceit discussed above,

that environmentalists are being less than honest in their claims. By

implication, proponents of environmentalism are portrayed as manipulative

and morally corrupt.

Another theme commonly found in anti-environmental writings is that environmentalists regularly use intimidation tactics to suppress opposition to their movement. Similar to the hyperbolic fear-mongering discussed above, yet different in its context, this intimidation refers to that of the scientific and political supporters of AGW theories using intimidation to suppress the voices of those who question or challenge established theories. Horner, in particular, devotes a considerable amount of effort to establishing this as a pervasive characteristic of the environmental movement. This representation further reinforces the image of deceit and ill-intent as being a prevalent element of environmentalism, as it suggests that the truth negating environmentalists' arguments is out there, and known, but that the environmental movement's ulterior (and malicious) motives are blocking the public from hearing it.

A fourth theme commonly pronounced in organized anti-environmentalism is one that draws a correlation between environmentalism and religious zeal. Anti-environmentalists often depict environmentalism as being based not on rationality or any perceived secular benefits to humanity, but instead upon faith and worship of Earth, or "Gaia". Murray, in *The Really Inconvenient Truth* (2008), uses the term Ecopaganism to frame environmentalism in this light. This and other terms associated with religiousness are scattered throughout organized anti-environmental texts, thereby creating an image of a cultish and somewhat radical movement. This

framing of environmentalism as radical and based on worship not only

draws association between environmentalism and irrational thought, it

depicts environmentalism as a religion that could challenge established

religions if its ideals are widely adopted.

A fifth theme often found in anti-environmental texts is one that

paints environmentalism as a means of eroding personal freedoms and

establishing greater government control over citizens' lives. This theme can

be seen in varying degrees, from an unfortunate and unintended consequence

of adopting environmental policies, to one of a worldwide plot hatched by left-

leaning ideologues intent on gaining world domination. Plimer, in reference

to the losses of freedom incurred and other ill effects of adopting

environmentalism ideals, calls policy responses to perceived global warming

"the greatest global threat…" (2009, p.435) to be seen in his lifetime. Horner

also devotes significant effort to establishing the idea that big government is

the goal and the result of environmentalism. And Murray, apparently feeling

that the association between environmentalism and leftist ideologies is firmly

enough established, points out communism's poor environmental record,

indicating that the leftist ideologies and policies upon which

environmentalism is based are doomed to be counterproductive to the goal of

environmental quality. These and other related arguments put forward by

anti-environmentalists frame the debate over environmentalism as a left vs.

right battle, which places environmentalism firmly on the left.

Anti-Environmental Organizations

No discussion of organized anti-environmentalism would be complete without mention of one of its most well-known and vocal opponents, the Wise Use movement. This movement is a loosely-knit group of organizations sharing some common anti-environmental ideals and objectives (Helvarg, 1994). Ron Arnold, one of the organization's founders, articulated the movement's goals quite clearly in the below statement.

Our goal is to destroy, to eradicate the environmental movement. We're mad as hell. We're not going to take it anymore. We're dead serious- we're going to destroy them. Environmentalism is the new paganism. Trees are worshipped and humans sacrificed at its altar. It is evil. And we intend to destroy it. No one was aware that environmentalism was a problem until we came along (Boston, 1999).

In a more tempered, yet still very critical commentary of the environmental movement, Arnold's 1996 essay, "Overcoming Ideology", echoed several of the themes discussed earlier in its use of terms such as "eco-ideologists" and "eco-socialism". The essay goes on to suggest that environmentalists are elitists and hypocrites for occupying offices in places like New York and Washington, while he portrays supporters of the Wise Use movement as the long-time occupants and stewards of the areas environmentalists claim to want to protect.

One of the many organizations that falls under the umbrella of the Wise Use movement is the Center for the Defense of Free Enterprise. This organization is headed by Wise Use founders, Ron Arnold and Alan Gottlieb. The organization's website, http://www.cdfe.org/, offers a variety of avenues to explore anti-environmental opinions and ideas. Amongst those avenues is a section entitled "Green Tracking Library" that provides descriptions of over 100 environmental organizations, as written by the Center. The Center's description of the Sierra Club begins by describing the club as a "Lobbying and outdoor group attacking private property rights and free enterprise in the name of saving nature. The group's sole effort is to centralize control of land and the economy in an authoritarian state" (Center for the Defense of Free Enterprise, n.d.). The description of the World Wildlife Fund includes this segment – "WWF influences global economic policy away from free markets toward government control through numerous programs dealing with global warming, sustainable development, habitat designation, macroeconomics and much more." The repeated themes coming from these and other passages is that environmentalism opposes and harms free enterprise, and that it is a tool for establishing greater government centralized control.

The individual organizations that fall under the umbrella of Wise Use are many and varied. The success they have achieved in gaining support can be explained largely by their ability to portray themselves as grassroots

movements seeking to protect the common person and his/her common

values (Helvarg, 1994). Groups like the Oregon Lands Coalition, through

their slogan - "Putting people back into the environmental equation"

(Associated Oregon Loggers, n.d.) – portray themselves as defenders of

forestry workers' jobs as they fight against the restrictions to deforestation

advocated by environmentalists. The American Farm Bureau

(http://www.fb.org/) presents itself as the protector of the average farmer by

fighting for his/her right to use public lands for grazing, in direct opposition

to environmentalists' attempts to limit access to such lands in an effort to

protect nature, wildlife and wetlands. And groups like the Heritage

Foundation (http://www.heritage.org/) seek broad protection of policies that

ensure unrestrained free enterprise in the face of various environmentalist

causes that would hinder that freedom.

Each of these organizations, whether explicitly or implicitly, opposes

environmentalist causes on various fronts. Yet, as Helvarg illustrates, they

often do so in a manner that portrays them as friends both to the

environment and the common man. This is part of the brilliance of the Wise

Use movement. However, the lack of blatant, outright opposition to

environmentalism in these groups affects the language they use and makes

focussing on them troublesome for this research, as it specifically focuses on

the "anti" type of language described earlier.

The above are just a few examples of the many organizations that represent anti-environmentalism in some respect. There are a great many other active organizations that express varying degrees of anti-environmentalism, and varying degrees of organization. There are also organizations whose main focus is not environmental issues, yet often express opposition toward environmental initiatives. The advent of the Internet means that organizing and promoting such organizations (or virtually any type of organization) is easy enough that it would be extremely cumbersome, if not impossible, to provide a complete and concise examination of an evolving anti-environmental movement. Suffice to say, there is more than enough opposition to environmentalism to suggest concern for its effects on the promotion of environmentalism and sustainable development ideals is warranted.

Significance of the Anti-environmentalism Movement

Anti-environmentalists Being Heard

A study by Haas (2001) that examined the news media's usage of Heritage Foundation education-related documents found that the think tank was regularly being used as a source of expert information in media stories. This is true despite the fact that there is a general consensus that the organization is an advocacy think tank, and not an academic think tank (Weaver & McGann, 2000). As the media has no reason to limit such usage to

matters solely related to education, it is likely that the message of the

Heritage Foundation and other similar groups is being spread in other

realms, including matters related to the environment. This suggests that the

messages being presented in the news media by groups such as the Heritage

Foundation are often being given an equal platform to those of the pro-

environmental movement. Furthermore, with the continuous growth of

Internet service and usage, anti-environmental messages can easily be

spread around the world at any moment, regardless of whether mainstream

media chooses to carry them. It is therefore important to acknowledge that

pro-environmental messages are in direct competition with anti-

environmental messages on several fronts.

Listening to the Public

Like any social movement being promoted in a democratic society, the

long-term success of the sustainable development movement depends on its

ability to gain widespread support from the public. Considering the need for

what the Brundtland Commission referred to as "monumental political and

institutional changes" (IPCC, n.d.), this need for widespread support can be

seen as particularly true with the issue of sustainable development. The

battle for support taking place is one occurring in the minds and hearts of

individuals, and the tools being used are the messages each side presents.

With this in mind, logic suggests that paying careful attention to the

presentation of these messages is vital to winning the battle for public support.

In *Let the People Judge* (1995), Echeverria and Eby offer an analysis of anti-environmentalism in the Wise Use movement. In their analysis, Echeverria and Eby state that efforts to combat the Wise Use movement will depend upon environmentalists' understanding of the appeal of the Wise Use message, and also on their understanding of how their own message is perceived by the public. This statement likely holds true in all aspects of the environmentalism debate, not just with regards to the Wise Use movement. Listening to the public discourse on this topic is therefore extremely relevant to the matter of promoting environmentalism and overall sustainability.

The Blogosphere: A Forum for Public Discourse

Prevalence of Blogging in Society

The Internet and the World Wide Web have become common fixtures in modern society. A recent International Trade Union study showed that in 2008, 72.8% of Canadians and 71.8% of American were Internet users (ITU, 2010). These and the millions of others around the world regularly connecting to the World Wide Web have a tremendous source of both information and communication at their fingertips. One means of communication made available by the existence of the Internet is blogging.

Cambridge Dictionaries Online defines a blog (weblog) as "a [diary](#) (a regular record of your thoughts, opinions and experiences) that you put on the Internet for other people to read" (n.d.). Setting up one of these online diaries/blogs is a relatively quick and easy process, with free registration offered through such websites as Blogger (https://www.blogger.com/), Sosblog (http://www.sosblog.com/), and blog.ca (http://www.blog.ca/), to name a few. A 2008 study (Smith) showed that 12% of Americans (9% of adults) had taken advantage of such websites and created their own blog, while 42% of study participants (32% of adults) said they had read a blog at one time, and 11% responded that they did so regularly. These figures indicate that millions of blogs expressing a multitude of opinions are readily available for those that have access to the Internet.

The Blogosphere as a Source of Public Opinion

The fact that blogs act as diaries and contain records of people's thoughts makes them ideal sources for exploring public opinion on various issues. Blogs have even been called "a platform for ideal speech situations" (Burg, 2004, p.6). Such situations meet the criteria of providing equal opportunity to start discussions, no power differences between parties involved, and truthful communication between parties. These characteristics provide for the type of honest and open communication that can truly represent the thoughts of the individuals involved.

Similar to writing a diary, blogging is a completely voluntary and willful act. It is a one-person activity where bloggers are guided and limited only by the thoughts in their head and their ability to use the writing template in front of them. Controlled experiments, such as surveys, focus groups and interviews, on the other hand, necessitate the involvement of outside elements to prod participants into offering their thoughts on a given issue. Those outside sources, by their very design, guide and control the experiment, and therefore hold the potential of introducing errors into the data being analyzed (Krippendorff, 2004). In contrast, the voluntary, self-initiating quality of blogging eliminates the need for such external prompts and the potential for any undue influence they might generate. Furthermore, the non-intrusive nature of analyzing blogs subsequent to their writing, and without the writer having any prior knowledge of the analysis, adds additional assurances that the writer is not being influenced by the evaluator. Therefore, a content analysis of blogs offers some distinct advantages over several traditional means of assessing public opinion.

In the parallel drawn by the Cambridge Dictionary definition of a blog being analogous to a diary there is one noteworthy difference. That is the fact that blogging is by design an act done in a very public forum and written with the intention of sharing one's thoughts with the public at large. In contrast, writing a diary is generally a much less public activity. However, this differentiating feature does not detract from the quality of the blogosphere as

a resource for analyzing opinion. The fact that blogging is a voluntary and

proactive act, not a reactive response or one made in a pressured

environment, means that there is little to no reason for bloggers to

voluntarily express anything but their true thoughts. To do so would defeat

the purpose of blogging. Therefore, the public nature of blogging should not

adversely impact its ability to provide a reliable source for genuine opinion.

In assessing the blogosphere it is important to note that blogging is not

only a reflection of public opinion, it is increasingly playing a role in shaping

that opinion. Drezner and Ferrell (2004) discuss the considerable crossover

between mainstream media and the blogosphere that has occurred in recent

years, leading to a circumstance where bloggers, like the mainstream media

itself, have often become sources of information for the public, not just

reactive respondents to it. Drezner and Farrell note such newspapers as the

Washington Post and the New York Times quoting and interviewing bloggers,

along with the fact that prominent voices such as Noam Chomsky and Greg

Easterbrook have taken to the art of blogging. From examples such as this it

becomes clear that blogging is not just a fringe activity unworthy of

consideration. Blogging is a convenient and accessible means of

communicating ideas that is gaining recognition and a level of credibility,

thereby making it a significant factor in the realm of informing the public

and shaping its opinion.

Content Analysis

The Analytical Approach and its Usages

Different definitions of content analysis have been provided by people working in the field throughout the years. Berelson (1952, p.18) defines content analysis as "…a research technique for the objective, systematic and quantitative description of the manifest content of communication." Weber (1990, p.9) calls it "…a research method that uses a set of procedures to make valid inferences from text", and Krippendorff (2004, p. 18) defines content analysis as "…a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use." Though each of these definitions differs from the others somewhat in their wording, they all describe a scientific method used to discover and highlight inferences in communication that might otherwise not be obvious.

As a form of scientific research, content analysis has been used for a wide variety of purposes in a wide variety of mediums. Krippendorff (2004) traces its first usage (although at the time not referred to as content analysis) back to the inquisitorial pursuits of the church in the 17th century. Other examples of its usage since then Krippendorff offers include, among many others; historians' examination of documents in efforts to reconstruct and make sense of history; psychologists' attempts to infer psychological variables on the writers of texts; and commercial usages that utilize word association

experiments to infer consumers' associations with proposed brand names.

One relatively early and telling example Krippendorff cites as evidence of the usefulness of content analysis is that of the U.S. Federal Communications Commission's analysis of German propaganda in the media during WWII. This analysis is credited with predicting several major Nazi military and political campaigns, most notably that of the deployment of German V weapons against Great Britain (p.9). Such examples have helped establish content analysis as a useful and commonly-practiced form of scientific investigation.

Content analyses can take different approaches and seek to achieve different overall goals. Neuendorf (2002) designates four different approaches to content analysis, two of which will play a role in this paper's research. These two approaches are descriptive, and inferential content analysis. Each approach sets out with a somewhat different objective, and therefore employs different procedures and techniques. A descriptive content analysis seeks simply to highlight the existence of elements within the text(s) it examines, and not to draw any conclusions about the source of the message. However, as Neuendorf points out, such analyses, though not having inferences as their stated objective, may in fact be motivated by the desire to infer characteristics to the sources. Inferential analyses take their stated objective that one step further and do in fact try to draw inferences about the source(s)

of the text they examine. Though this research takes a descriptive

approach, as Neuendorf suggests, inferences to the source will inevitably be

implied.

Research Methodology

Overall Approach

The primary intent of analyzing blogs is to provide a clearer

understanding of how members of the blogging public opposed to

environmentalism portray the movement they oppose. The openness of the

blogosphere to any member of the public makes it an ideal forum for

presenting unsolicited, unobstructed and uncensored opinion. The direct

access to opinion blogs provide makes them a Type A, First-Order Linkage

resource in which the message being analyzed comes directly from the source

under study (Neuendorf, 2002). For these reasons and other reasons

previously discussed, the blogosphere served as the sole source of texts

analyzed in this research.

The key component of this investigatory research involved performing

a content analysis of comments posted in blogs that express anti-

environmentalism sentiment. The analysis seeks to answer the questions,

"What are the common messages and overall themes expressed in these

blogs?", and "Are the messages expressed in the blogosphere reflective of

those conveyed by organized anti-environmentalism?" Because this is an

examination that focuses specifically on anti-environmentalism, only blog

entries that clearly express views critical of environmentalism and

environmentalists were subjected to analysis. This restriction on context

follows the recommendations of Krippendorff (2004) for ensuring that the

analytical constructs of a content analysis are such that the texts examined

"…are processed in reference to what is known about their use" (p.36). This

approach ensured the realization of results that are relevant to the main

focus of the analysis.

A key aspect of this research that guided the selection of quotations

upon which the findings were based was the particular focus on sentiment, as

opposed to unemotional disagreements over factual matters. This

distinguishing characteristic caused the research to focus specifically on

language of a descriptive and emotive nature. The focus on descriptive and

emotive language allowed the research to draw attention to the manner in

which environmentalism is being portrayed by those that oppose it and the

sentiment upon which that portrayal is based. The common usage of certain

types of descriptive language then produced an overall picture of the message

being presented in the blogosphere.

As a process, this content analysis involved four major components.

These components followed a loose sequential order of stages in which the

process of investigation required frequent revisits to previous stages in order

to provide completeness and cohesion to the overall analysis. A primary

component of the analysis involved a search of the blogosphere for blogs

containing relevant anti-environmentalism commentary. A secondary stage

required the isolation and noting of specific quotations within the blogs that

expressed anti-environmentalism sentiment. A third step involved

categorizing and grouping the quotations that expressed related messages.

And the fourth and final stage involved combining the messages found in the

third stage into overarching messages that could better summarize the major

themes of anti-environmentalism found throughout the analysis.

Individual Components

Selection of Blogs

As discussed above, only blogs that clearly expressed criticism of the

environmental movement were subjected to the content analysis. This

approach of focusing solely on texts that contribute to answering the research

question(s) follows a relevance (also called purposive) sampling approach

(Krippendorff, 2004). Blogs that possessed the relevant characteristics were

located through a variety of means.

A primary method of finding relevant blog entries involved performing

keyword searches in blog hosting sites such as Blogger (www.blogger.com).

Words and phrases such as "environmentalism", "anti-environmentalism"

and "global warming" were entered into the search fields of blog hosting sites

and searches were performed. Several of the large number of blogs that resulted from those initial searches were read and analyzed in order to decipher whether or not they met the primary criterion of being critical of the environmental movement. Those entries that clearly expressed opposition to environmentalism were copied into a suitable document format that allowed the computer-aided analysis (discussed later) to be completed. These blogs also served as the basis for the secondary forms of searches, as described below.

Once the group of anti-environmentalism blog entries began to grow as a result of the initial stage of keyword searches, it was then possible to move forward with a snowball sampling methodology, wherein a network of associated blogs could be revealed based upon the initial blog sources. This was made possible by the existence of two common characteristics of the blogosphere. The first useful characteristic was the commonly held practice of placing hyperlinks within a blog's text that lead to a sourcing blogger's entry, or to an entry that expresses similar views. Because the purpose of these hyperlinks quite often is to support the arguments made within the blog, there is a high probability that the blogs the hyperlinks lead to will also be suitable sources of text for analysis. This proved to be true in many instances with the anti-environmentalism blogs examined in this research, and therefore this form of snowball sampling provided several sources of relevant text to be examined.

A second form of snowball sampling that became possible through the initial relevance sampling was one that utilized blogrolls. A blogroll is a "…list of links to other blogs or websites that the author of the blog regularly likes to read" (blogossary.com, n.d.). As such, blogrolls found in sites that contain anti-environmental sentiment often lead to sites expressing similar sentiment, and so on, and so on. Through this form of snowball sampling, a large number of relevant blog entries were found. Again, however, each blog entry was subject to the rule that it must express criticism of the environmental movement, thereby ensuring that subsequent texts analyzed would not corrupt the overall findings.

From the above techniques, a large number of blogs expressing opposition to environmentalism was discovered and compiled. In total, 83 blog entries comprised the body of text subjected to the content analysis. Searches for additional blogs ceased after continuous searches proved only to reinforce the existence of a few common anti-environmental messages, and not to offer any new direction for further analysis. Because this research holds as its primary objective the revelation of common themes (plural) amongst anti-environmentalism blogs, and does not place emphasis on exactness in proportion of the individual themes, the size and range of texts that were analyzed proved to be more than sufficient in meeting this objective.

Designation of Quotations

        The smallest units of analysis (quotations) measured for frequency in the content analysis were adverbs, adjectives and descriptive nouns. All of these descriptive words held a derogatory meaning (at least in the tone of the blog) and were directed by bloggers at environmentalism and its supporters. In order to provide a simplistic model of analysis with clarity of meaning in its quotations, the vast majority of quotations were comprised of individual words, with two-part words only being added when specific and clearly relevant examples were found. There were no instances of three-word, or larger phrases being included as quotations.

        The specific words designated as quotations to be included in the quantitative analysis were selected on the basis of their usage in the blogs that were found during the relevant and snowball sampling searches. Additional synonymic words were subsequently added to the pool of quotations in order to provide a more complete source of quotations for detecting common themes. Synonymic words were found by looking in various thesauruses, and also by using the Visuwords™ online graphical dictionary (http://www.visuwords.com/), a resource that utilizes Princeton University's WordNet opensource database (Visuwords, n.d.). From these word-gathering techniques, a total of 166 words or stems of words (see Appendix A), comprised the group of relevant quotations used as search keys.

Designation of Codes

As relevant quotations were discovered and added to the pool for analysis, they were separated into synonymic categories with same, similar or closely related meanings, referred to as codes. The groups of quotations represent the primary messages relayed by the writer of the blog through the use of the quotations in their context. A total of eight codes were created through this process of separating quotations into synonymic codes. These eight codes represent threads of meaning that link the total body of text analyzed into related messages expressing criticism of the environmental movement.

Designation of Families

A final stage in the process involved grouping the codes into families of related messages. These families represent the common themes of anti-environmentalism commentary expressed in the blogosphere that this research sought to uncover and examine. The formation of the families was based upon finding commonalities in the core of the messages expressed in the codes of the preceding stage of analysis. This was a process that involved logic, but also one that was open to interpretation and not intended to be exclusive to other interpretations.

Computer-aided Software

This research utilized Atlas.ti® 5.0, a computer-aided text analysis (CATA) software program to aid in the processes of content analyses. Atlas.ti is a workbench for qualitative analysis of text (User's Manual for Atlas.ti, 2004). The software served as the primary physical tool for searching relevant words in texts, compartmentalizing words into categories, and generating summary reports displaying analysis results.

The Atlas.ti software's search function allowed for the searching of multiple relevant words and phrases (quotations) at one time. Quotations containing only the stems of words could also be searched, leading to the discovery of all words containing the selected word stem. By searching in batches comprised of the total number of quotations in each category, each search revealed the entire amount of quotations in the chosen category throughout the whole body of text. These categories could then be saved as codes (the Atlas.ti terminology for such categories) and manipulated through the various options the software offers. The latter stages of combining codes into umbrella groups with similar meanings was made easy by the software's ability to merge codes into families. Producing output that displayed the results of each of these steps was also a simple process of utilizing the various functions the software offered. Such capabilities made the Atlas.ti software an invaluable tool in terms of ensuring accuracy and efficiency in the mechanical, non-intuitive aspects of the analysis.

Sampling Size

As Krippendorff (2004, p.322) points out, sampling theory does not offer a simple test to determine whether a sampling size fairly represents the phenomena of which the texts analyzed are chosen to represent. Appropriateness of sampling in the case of this research is further complicated by the uncertainty in size of the total body of texts available in the blogosphere (the total population). That is to say, exactly how many blogs are available to be examined, or more specifically, how many blogs expressing anti-environmentalism sentiment exist to be analyzed is unknown.

As described by Neuendorf (2002), this content analysis takes a summarizing approach. The form of investigation is nomothetic (seeking to generate generalizable conclusions) instead of idiographic (focusing on a full and precise conclusions). The focus here is on the search for links between organized anti-environmentalism and anti-environmentalism in the blogosphere, and also on revealing other themes in anti-environmentalism that might not be represented by organized anti-environmentalism. The aim is not to draw finite conclusions expressing quantity or proportion. The research will utilize quantitative functions, and numbers and percentages will be shown in order to provide substance and context to the analysis, as virtually all content analyses do, but the summary of findings will not hinge on or stress the specific quantities the analysis arrives at. In the end, all

themes discovered will be recognized, but their importance will be in their

existence, not in their quantitative values.

Results

Total Quotations and Grouping of Codes

The content analysis performed on the 83 blogs revealed a total of 768

instances in which a relevant quotation was used within the total body of text

(See Appendix B for a complete list of instances of quotations). Each instance

represents a word or phrase recorded in a blog that refers to the

environmental movement in a derogatory manner. These quotations were

separated through the search function into eight codes based on sameness or

closeness in meaning in the context of their usage. A breakdown of categories

is shown in Table 1 below (also in pie chart form in Appendix C), listing the

codes with the most to least frequently cited quotations from top to bottom.

Table 1

Frequency of Quotations Per Code

Code	Frequency of Quotations	Percentage of Total Quotations
Deceitful	180	24%
Coercive	156	20%
Religious	118	15%
Controlling	99	13%
Hyperbolic	91	12%
Harmful	73	10%
Irrational	48	6%
Superstitious	3	0%

Breakdown of Codes

As explained previously, the grouping of quotations into codes was based on relatedness in meanings in the context of the blog's topic matter and the overall message the blog expressed. As the analysis revealed repetition of quotations with same or very similar meaning, messages that expressed common ideas became apparent. As such, the grouping of quotations into categories expressing similar thoughts became possible. As a result, eight categories of messages were established and given adjectives as headings that describe the associated quotations' denunciation of environmentalism. It is important to emphasize, however, the categories chosen here are not exclusive, and the appropriate choice of grouping is open to interpretation. The categories designated in this research (described below) were those that offered clear and logical rationale for grouping given the context in which the quotations were uttered.

Deceitful

As the heading suggests, this group of quotations implies a lack of honesty from the environmentalist camp in their statements and actions. Very direct words such as "dishonest" and "deceive" were used to describe this sentiment, while other less direct words such as "disregard" and "misuse" suggested deceitfulness through their use in the context of the blog commentary. In total, 180 such quotations, accounting for almost a quarter of

the entirety, were found in the body of text analyzed. This indicates that

there is a substantial number of bloggers that feel that the voices of the

environmental movement are not offering the whole truth about

environmental issues to the general public.

Coercive

This category describes thoughts expressed by bloggers that the

environmental movement is using coercion and pressure to stave off any

opposition that might otherwise speak out. Words such as "force" and "threat"

bluntly revealed this frame of thought, while others such as "withhold" and

"jail" did so more through the context in which they were used. The total

number of 156 quotations of this type, equaling 20% of the total blogs

analyzed, suggests that this type of sentiment is also a common message

expressed by bloggers critical of environmentalism.

Religious

The quotations in this category are those which associate

environmentalism with a form of religious belief. Words such as "church",

"faith" and "sin" were used to draw this type of association. In the context

that such words were used, the message implied was that environmentalists

are guided not (at least entirely) by rational thought, but rather by the

worship of Gaia. At 118 quotations and 15% of the total texts analyzed, the

relationship drawn between environmentalism and religious worship of the

earth is also noteworthy.

Controlling

The type of control that this heading refers to is generally that of

government control. More specifically, controlling in the context of the anti-

environmentalism blogs analyzed generally refers to bloggers' feelings that

environmentalism is an attack on personal and market freedoms. The use of

such words as "totalitarian" and "dictatorship" reveal the association with

strong-arm control by government, and quotations such as "communism" and

"Marxism" indicate an association between leftist forms of government that

function with greater control over the marketplace. At 99 quotations,

amounting to 13% of the total blog entries, the concern over greater

government control and losses of freedoms is also a significant aspect of

opposition to environmentalism in the blogosphere.

Hyperbolic

Hyperbolic quotations are those which express a feeling amongst

bloggers that claims made by environmentalists are significantly

exaggerated. Such quotations totaled 91, and accounted for 12% of the total.

A good example of a word that describes this sense of exaggeration is the

word "alarmist". This word alone accounted for 24 instances of hyperbolic

language being found in blogs analyzed. Its frequency of use reflects the fact

that it is commonly used as a label for environmentalists, particularly in

the context of global warming.

Harmful

This is a broad category that groups quotations together that imply

environmentalism will cause significant harm in one manner or another. It is

important to clarify that this category does not include general arguments

made about possible negative impacts environmental initiatives might cause,

such as possible harmful effects to the economy. Rather, this group of

quotations includes words such as "war", "murder" and "misery" that imply

ramifications of environmentalism that even most supporters of

environmentalism would likely find abhorrent and counter to the intent of

the movement. These types of quotations total 73, which accounts for 10% of

the total body of text.

Irrational

Words such as "crazy", "lunacy" and "nonsense" are found in this

category. The obvious implication with the use of these words is that

environmentalism is not based on rational thought and environmentalists are

not entirely rational people. There were 48 of this type of quotation found,

accounting for 6% of total body of text.

Superstitious

This category only included three quotations, which amounts to less

than 1% of the overall total. Although the total number of quotations is

relatively insignificant, the category is noted here because it will play a role

in the subsequent stage of this research. The word "superstition" itself was

used twice in the blogs analyzed to relate environmentalism to superstition.

Breakdown of Families

The grouping of codes into families involved a further step of analytical

interpretation. This step required combining the main messages observed in

the above eight codes into a few broad categories that shared common

underlying themes. This additional step was taken for the purpose of

presenting, in as concise a manner as possible, the main anti-environmental

themes found in the analysis of the blogosphere. By doing so, some of the key

areas where the environmental movement is being questioned can be

highlighted and addressed.

From the eight codes created in the previous stage, four families of

codes were formed. These four families were given headings, which all begin

with the word "lacking", that summarize the common themes found in the

combined codes. The term lacking was made a part of each family's heading

because it expresses the sense of deficiency in the environmental movement

that each theme possesses. The four families are displayed in Table 2 below

(also in pie chart form in Appendix D), from the largest number of quotes in

each family to the smallest.

Table 2

Frequency of Quotations in Families, as Combined Codes

Families	Frequency of Quotations	Percentage of Total Quotations
Lacking Truth	271	35%
Lacking Autonomy	255	33%
Lacking Rationale	169	22%
Lacking Benefits	73	10%

Lacking Truth

As its name suggests, this heading denotes the theme found in anti-

environmentalism that implies environmentalists are not presenting entirely

honest arguments. Cambridge Dictionaries Online defines the truth as "the

real facts about a situation, event or person" (n.d.). The word "real" in this

definition indicates that an untruth can be evidenced by the telling of false

facts, by omitting pertinent information, or by exaggerating facts to a point

where the truth is no longer clear. As such, the Lacking Truth family

encompasses this entire range of possible meanings.

Based upon the above definition, two codes that implied a lack of truth

were combined into one family. The combined codes were the Deceitful and

Hyperbolic categories. Deceit, by definition, is a means of "…keeping the

truth hidden" and hyperbole is a means of making "…someone or something

sound bigger, better, more, etc., than they are" (Cambridge Dictionaries

Online). These two groups of quotations can therefore both be seen as

expressing the opinion that the environmental movement is lacking in truth,

at least to a certain extent.

Lacking Autonomy

The Lacking Autonomy family represents a combination of the

Controlling and Coercion codes. The Controlling code, as described

previously, represents the feeling expressed in the blogosphere that the

environmental movement is associated with the erosion of personal and

market freedoms, and therefore a loss of autonomy. The inclusion of the

Coercion code is explained by the perceived loss of autonomy amongst

individuals who wish to speak out freely against arguments made in the

name of environmentalism. Though this is a less outright loss of autonomy

from any form of regulation, and one driven more perhaps by fear of

castigation or isolation, it does still represent a loss of autonomy in an open

and democratic society.

Lacking Rationality

The Lacking Rationality family was created to include all implications

found in anti-environmental blogs that suggested environmentalism is based

on and/or inspired by something other than rational thought. Of course, were

this to be proven true, as it might easily be, it would not necessarily be

considered a severe criticism by those who profess a heartfelt concern for

the planet as their inspiration for promoting environmentalism. However, in

the context of people expressing criticism of environmentalism, highlighting a

lack of rationality can be a valuable means of undercutting the legitimacy of

the movement as it promotes environmentalism and sustainability as

rational choices for the planet.

The three groups of quotations that comprise the Lack of Rationality

family are the Irrational, Religious and Superstitious codes. The reason for

including the Irrational code in this family can be considered obvious, and

therefore not in need of any further explanation. The inclusion of

Superstitious may be somewhat less obvious, but can be explained by the

definition of superstition as a "belief which is not based on human reason or

scientific knowledge… (Cambridge Dictionaries Online, n.d.). The "not based

on human reason" portion of the definition suggests that superstition is based

on something other than rational thought, and therefore explains its

inclusion in this family.

The inclusion of the Religious code may be the least obvious of the

three codes that make up the Lack of Rationality family. However, the reason

for its inclusion is also revealed by its definition. Religion is defined as "the

belief in and worship of a god or gods, or any such system of belief and

worship" (Cambridge Dictionaries Online, n.d.). This definition suggests a

belief and worship of someone or something outer-worldly, and as such,

requires a leap of faith beyond the observable world in order to

substantiate that belief. This form of belief and worship exists in a different

realm than that of empirical evidence supporting rational claims made in

Western secular societies. The references to religiousness found in the blogs

analyzed therefore imply that the arguments of environmentalists are not

founded, at least entirely, upon rational thought.

Lacking Benefits

In order to follow the pattern of the other three family headings, this

family gets its name from the inverse meaning of the word harmful, but with

the addition of the word "lack" in order to maintain its original meaning.

There were no additions or modifications made to the original group of

quotations, which now dually exists as both a code entitled "Harmful" and a

family entitled "Lacking Benefits". As they do in their original carnation as

components of a code, these quotations present a contrasting picture to that

made by environmentalists who extol the benefits of environmental

initiatives.

Due to two main reasons, the Lack of Benefits family will no longer

significantly factor into the discussions of this research. The first reason for

this exclusion is that this group of quotations accounts for the smallest

portion (10%) of the total quotations coded, and therefore can be considered a

relatively minor theme in anti-environmental sentiment. The second reason

is that the conversation about harms and benefits delves more closely into

the debate over the pros and cons of specific environmental actions and

initiatives. The focus of this research is on the descriptive framing of the

environmental movement by those that oppose the movement, not on the

specific actions either side claims to be beneficial or harmful, so discussion

related to harms and benefits are peripheral to the overall research.

Summary of Content Analysis Findings

In summary, this research has found three major themes expressed in

anti-environmentalism blogs. These themes are displayed by the headings of

three of the four families of quotations - Lack of Truth, Lack of Autonomy,

and Lack of Rationality. These families were created by combining the eight

codes formed during the initial stages of analysis. Together, these notions

that environmentalism lacks in truth, autonomy and rationality represent

significant stumbling blocks in gaining full support for environmental

initiatives.

An important point to note before moving on, but that will also be

discussed more fully later, is the type of issues each of the above themes

addresses. There is no mention here of the number of trees being cut down

each year, the parts per million of carbon dioxide in the stratosphere, or the

erosion of soil quality due to pesticide usage. Each of the points highlighted

as relevant to this research deal with fundamental values and human

perceptions – truth, freedom and rational thought. These are points that

are not only easily understood on a broad scale, but that also tap into the core

thoughts and emotions of the thinking, feeling human being.

Discussion and Recommendations

Concurrence with Organized Anti-environmentalism

This paper has stated as one of its primary objectives to examine

whether or not the arguments made by organized anti-environmentalism

concur with those expressed by members of the public. The criticisms of

environmentalism made by its organized opposition were summarized in five

main groupings previously. These groupings included, a) an opinion that

deceit is commonly used by environmentalists to promote their agenda; b)

intimidation tactics are used to suppress dissenting voices in the

environmental debate; c) hyperbolic language is intentionally used to

exaggerate aspects of the debate and scare people into supporting the

environmental movement; d) environmentalism is tantamount to a form of

religious belief, and therefore guided not entirely by ration; and e)

environmentalism is associated with greater government control and losses to

personal and market freedoms.

The results of the content analysis performed on the anti-

environmental blogs indicate quite clearly that there are very strong

correlations between the arguments made by organized anti-

environmentalism and those expressed by the public in the blogosphere. The

five messages of organized anti-environmentalism listed above correspond

directly to five of the eight codes revealed through the groupings of

quotations in the content analysis. The later grouping of codes into three

families also included these five points as messages within the overall

themes. Therefore, it can be stated with confidence that the arguments

highlighted as commonly forwarded by organized anti-environmentalism are

in fact representative of arguments asserted by the members of the public

that harbour opposition to environmentalism, and vice versa.

Substance to the Arguments?

Up to this point, the issue of whether or not the arguments put forward

by anti-environmentalists are valid has not been discussed. That is because it

is clearly not the intention of this paper to make those types of

determinations. However, the issue of validity is intricately connected to the

issue of how these stumbling blocks in the road to sustainability can

effectively be addressed. Because this paper does address the issue of dealing

with the anti-environmental themes observed, and also seeks to offer insight

as to where some of the roots of anti-environmentalism lie, a brief look at the

possible perception of validity of the arguments behind these themes is

necessary.

With regards to the issue of whether environmentalists are being entirely truthful in all of their claims, Horner's provocatively titled book, *Red Hot Lies* (2008), deals head on with this issue. Horner points to several instances of what he feels is hypocrisy amongst environmentalist leaders, usages of hyperbole to mislead the public into supporting environmental initiatives, and examples of inaccurate predictions being deliberately ignored. Though his book lacks the smoking gun "lie" that its title suggests, his arguments certainly make a case strong enough to be believed by some.

There have also been several publicized incidents recently that call into question the forthrightness of environmental leaders. The so-called "climategate" incident, where hackers exposed several climate scientist emails, which appeared to many to indicate that scientists were being less than completely honest with the public on climate change findings (Coyne, Jan. 07, 2010), is one very clear example of this. Add to that the fact that the IPCC's claims regarding rates of glaciers melting in the Himalayan Mountains was roundly criticized as "wildly inaccurate" and "not plausible" by respected scientists (Bagla, P. Dec. 05, 2009) and it becomes easier to understand the reasons behind a lack of trust in environmental leaders.

The argument that environmentalism is associated with a lack of autonomy is one that is also relatively easy to assert, at least to a certain extent. Virtually all matters related to improving the environment, whether they involve cutting down on pollution, reducing greenhouse gases, or saving

endangered species, necessitate some sort of change in society that is not happening on its own. If not for this lack of and need for change, these causes would not need to be discussed. The changes therefore require a certain level of prompting by some influential force, which in many cases comes in the form of government intervention. This intervention can be in the form of a tax, a restriction on an activity, or even a restriction on the use of land. These occasions of government interference, particular as they increase in number, can easily be interpreted as obstructions to the autonomy of individuals and markets.

The issue of lack of rationality is one that is somewhat more difficult to prove or disprove. With regards to a lack of rationality in environmentalism being linked to a religious belief system, Murray (2008, p.84) boldly declares that in the U.S. "…environmentalism has begun to replace liberal Christianity as the Left's motivating force." Murray goes on to liken environmentalism to ancient Indo-European religions where a Weather God and Earth Mother were worshipped. By making such a statement, Murray has depicted environmentalists as pagans, and at the same time shown them as a threat to Christianity. This is a message that at least some, particularly those on the Christian right, could be very receptive to.

The point to be recognized from this brief discussion on validity is not that the assertions of anti-environmentalists *are* or *are not* valid. Rather, the point is that they *can be* accepted as legitimate by those that are exposed to

them. Given a particular proclivity for believing such arguments, or a

vested interest in doing so, such arguments are even more likely to be

accepted as fact. It could be argued, too, that with the significant changes

required of humanity in order to achieve sustainable lifestyles, humanity

itself has a vested interest in believing any argument that suggests such

change is not necessary.

Significance of Findings

The basic premise underpinning the relativity of this research to the

cause of supporting sustainable development is that recognizing, accepting as

legitimate, and dealing appropriately with concerns amongst the public about

environmentalism is fundamental to advancing the goals of the movement.

The logic behind that premise stems from the reality that movements are

forwarded by people, that sustainable development requires significant

actions to be taken by people, and that greater support from people, whether

it be in quantity or quality, can only result in more and greater successes.

And, conversely, less support will lead to less, slower and more fragile

achievements.

Stern, Paul, Dietz, Abel, Guagnano and Kalof (1999) argue that public

support is one of the most important resources for overcoming cultural inertia

and the powerful actors that oppose social movements. Specifically in the

context of the environmental movement, Stern's paper points directly to

general public support as one of its most important resources. These types

of statements serve only to support a commonsensical policy that dictates any

social movement in a democratic society, including environmentalism, will in

the long run be more successful at achieving its objectives by having the full

weight of the public behind it. Gaining that full weight, of course, involves

convincing those that are firmly against the movement, or even just leaning

toward the other side, to change their stance.

An important step in attempting to win over cohorts is to understand

how they perceive the issue at hand and the messages being presented by

either side. Lakoff (2004) speaks of the issue of perception and the

importance of what he refers to as "frames". He describes frames as "mental

structures that shape the way we see the world" (p.xv). Lakoff goes on to

discuss how our frames shape our social policies, and sums up the importance

of thinking in terms of frames by stating simply, "Reframing is social change"

(p.xv).

Some of the key building blocks of the frames Lakoff refers to are the

messages presented by the proponents of social change. However, in a case

where opposition to social change exists, such as in the anti-environmental

movement, one must also take notice of the messages the opposition is

presenting. An understanding of these messages is the basis for dealing with

them effectively. Providing a greater level of understanding of those

messages is the primary intent of this paper.

Creating an Effective Response

Potential Pitfalls

Though not directly related to the findings of this research, as part of a discussion about ways to overcome anti-environmentalism a few points of caution should be made about approaches that have sometimes been taken. One dangerous and arrogant approach to dealing with anti-environmentalism is to simply not deal with it at all. That is to say, to ignore the opposition as not worthy of engaging in debate. Particularly with regards to global warming, the word "consensus" has sometimes been employed as a "get out of debate free" card. It is used to suggest the debate has been decidedly won, and the opinions of skeptics are therefore unworthy of being heard. Winstanley (2000) laments this type of aversion to skepticism and calls it a detriment to the future of science. Such scientific and socially relevant issues as climate change would be better served by offering full and convincing responses to skeptics than by offering one-word answers and deaf ears.

Another dangerous trap environmental supporters can fall into is to feel that maligning the motives of their opposition is sufficient substance to defeat their arguments. Several authors, such as Beder (1997) and Helvarg (1994), have done excellent work in exposing some of the more outspoken and successful anti-environmentalists as being backed by large industry, thereby highlighting likely ulterior motives behind their efforts. Though valid and

worthwhile as points in the debate, such points are also limited in their effect and can easily deteriorate into personal attacks that circumvent the issue at hand. Furthermore, the argument works both ways - if a person associated with the coal mining industry opposes air pollution regulations and is therefore labeled biased due to that association, then what of the supporter of the pollution regulations that has a vested interest in solar panels or electric cars? Are both such people considered guilty by association, and therefore not deserving of a voice? This seems neither fair nor effective in dealing with the points made by opponents of environmental initiatives, and in fact is likely counterproductive in many cases.

The Truth, the Whole Truth, and Nothing but the Truth

One of the aspects of the environmental movement that was shown through this research to be an Achilles' heel of the movement is the lack of, or the appearance of a lack of, complete and open honesty. The organized anti-environmentalists, bloggers and news sources cited in this paper are just a few of the many examples available showing this type of sentiment in the anti-environmentalism camp. For a movement with as noble a cause as the sustainable development movement, giving the perception of being less than honest runs directly counter to the type of image it should be trying to project.

Included in the theme of truthfulness is the matter of repeated uses of hyperbolic language. Gruber (2003) refers to exaggerated claims and doomsday warnings as the politics of Chicken Little and points out that such claims lead to a loss of credibility in the movement. The example of the Himalayan glaciers is one clear illustration of how a dramatic prediction, later shown as greatly exaggerated, undermines the credibility of the movement as a whole. In such cases, the actual scientists that make or record the predictions largely remain unnamed and unseen by the general public. However, the movement in which they play a role suffers a significant damage in image.

The lesson to be learned by this is that following a path of straightforward honesty and prudence in times of uncertainty is the best approach to presenting the environmental argument. Certainly, a need for stressing possible negative impacts is important for giving people the whole range of possibilities and the entire picture. However, if extreme predictions repeatedly prove to be much less than extreme, or even outright false, citizens will begin to turn a deaf ear on environmentalism, and even small successes will be lost.

Lack of Control

As discussed earlier, environmentalism does often require change and that change sometimes is not possible without being prompted by a governing

body. Even though regulations or taxes put in place in the name of helping

the environment may seem small in comparison to their intended positive

effects, such increased taxation and regulation can be viewed as significant to

those that oppose them, both in terms of their actual impact and as a matter

of principle. It is therefore crucial that proposed government incursions on

citizens' lands, taxes, liberties, etc., be handled with care and a sensitive ear

to the concerns of those that object to them on point or principle.

There are several ways in which a real or perceived increase in

government control/lack of autonomy can be minimalized. When governments

take actions in the name of environmental stewardship that result in

personal losses to property, income (e.g. through higher taxes), or liberties,

finding possible ways to alleviate those losses should always be part of the

plan from the onset. For example, if restrictions are put on a property owner's

land due to the habitation of a protected species, some sort of compensation

in land or in finances should be offered to the owner. If taxes are instituted

for environmental purposes (e.g. a carbon tax), then other taxes should be

lowered (e.g. income or sales tax), with clarity and fanfare ushering in those

offsetting decreases in taxation. If personal liberties are restricted in one

aspect or area, limiting those incursions as much as possible while offering

relief in other areas should be a starting point for policy makers. Though the

specific issues and solutions are numerous and often complicated the main

theme that should always be brought to the negotiating table is the need to

counter any real or perceived losses suffered as a consequence of policy

with a balancing benefit to ease the pain and create a positive mindset about

the policy at hand.

A similar approach can also be taken in the marketplace. Restrictions

on aspects of the free market can be balanced by offering new opportunities.

Regulations placed on polluting industries should be offset by aid and

assistance for moving toward more environmentally friendly ways of

producing the same or similar products. Furthermore, the unique benefits

offered by such industries as the renewable resources industry, which

provides opportunities to the little(r) guy and a chance to move away from

semi-monopolistic markets, need to be touted as strong evidence that a

movement toward environmentally sound practices adds fresh fuel to a free

marketplace, not the opposite. Any policy made to direct the market away

from one area needs to be coupled with a relatively easy and clearly

presented path to its alternative(s). Though, again, such solutions can be

extremely complex and cumbersome, ideas that lack a vision from start to

finish and options for overcoming the hurdles along the way are incomplete

and they require a leap in faith from potential converts. Consequently, such

approaches are more prone to failure.

The overriding theme for invalidating any sense that

environmentalism is a threat to autonomy and a hindrance to personal and

market freedoms, is that there is a need to provide new opportunities for

every instance where government action on the environment is deemed

necessary. Environmental initiatives should not be implemented in a manner

that they can be seen as avenues for the controlling hand of government to

take hold. Instead, careful steps should be taken to present environmental

initiatives as sources of countless new opportunities for individuals and

businesses alike.

Being Rational

The third and final theme that this research found to be a source for

anti-environmental sentiment is the idea that environmentalism is guided by

something other than rational thought. This is such a subjective issue based

on each individual's opinion about what is considered rational, radical,

religious or otherwise, that it is impossible to suggest a format that will

totally eliminate this type of thought. It is also questionable as to whether

eliminating irrationality is completely desirable. Is basing support for the

environment on a love of the planet or an emotional concern for future

generations, as opposed to cold, hard science or economics, necessarily a bad

thing? And is it even irrational? These are all questions that can likely

reasonably be answered by saying "It depends", which is precisely where this

research will leave the debate on this issue. Each environmental issue can

inspire different thoughts and emotions in different people, along with

different possible approaches to finding solutions. Therefore, the need for

rationality and the perception of its use will depend on the unique

circumstances of the situation and the parties involved. To be brief, this is

one area where no satisfactory solution will be offered from this research.

The Big Picture

There has been an overriding premise to this paper that supersedes

and encompasses the three main themes revealed in the content analysis of

the blogosphere. That premise holds that the specific points of the debate

between the pro and anti-environmentalism camps are of considerably less

importance, and may in fact be a distraction at times to the greater

philosophical, ideological and emotional aspects of the debate. To put it

figuratively, people fighting to win support for environmentalism sometimes

cannot see the forest for the trees. The trees in this case are the specific

scientific and factual points in the environmental debate, and the forest is the

greater ideological and emotional elements with humans that push them to

support, or not support a cause.

In discussing the relative achievements of Bjorn Lomborg in creating a

convincing argument against environmental initiatives, Jamison (2004)

reveals how the heavy reliance on scientific arguments in the environmental

debate was used adeptly by Lomborg as a tool to undermine the arguments

made by the pro-environmentalism side. Jamison shows how Lomborg

essentially only needed to find disagreements amongst scientists about

environmental matters, and then frame those disparities in a manner that suited his argument best. In doing so, point by point, the appearance of any sort of conclusive and coherent findings in the scientific community was gradually eroded. This approach has lifted Lomborg into the position of being one of the most recognized figures in the environmental debate, while providing an element of legitimacy to anti-environmentalism that can only be gained by having the weight of a "scientific" argument.

The sources for building such anti-environmental arguments as Lomborg and others have made, unfortunately for environmentalists, are plentiful. Predictions about future environmental consequences are just that, "predictions". Until they are proven tomorrow to be true, they will not necessarily be believed today. Furthermore, the likelihood of 100% agreement amongst all scientists about all environmental matters is likely close to nil. Therefore, the approach taken by Lomborg and others will always serve to undermine scientific support for the environmentalism cause.

Environmentalism is, to a certain extent, also a battle of overcoming human nature. Even when facts are airtight, convincing people to listen, understand and believe them is another step that cannot be assumed to naturally follow. Expecting long-term forecasts for generations to come to be accepted and to override personal interests and short-term views is naïve. With every hot summer recorded one year in one location, there will always be a cool summer in some other place that allows people to slip back into

their comfort zone of believing that the scientific predictions have been

wrong and all is well in their rampant consumerism society.

　Myerson and Rydin (1996) make a strong case that environmental

arguments are cultural arguments. If this is true, it means that the issue

calls for a different approach to finding solutions than one based largely on

writing peer-reviewed scientific articles. As Myerson and Rydin point out,

cultural arguments are not won or lost solely by logic. From this standpoint,

environmentalists must be sure to also speak to the important cultural and

personal elements environmentalism embodies, not just the "facts" of the

debate.

The issue of what drives people to support a movement is discussed by

Stern et al. in A Value-Belief Norm Theory of Support for Social Movements

(1999). These authors discuss the importance of such matters as a sense of

personal obligation, self-expectations, and values being the foundation for

support of a social movement. Like the theme of culture discussed by

Myerson and Rydin, the aspects Stern et al. point to are very personal

matters that relate to the core happiness and sense of self-being that drives

human action. These are matters quite distant from that of cold, scientific

debate.

In summary, there are two separate, but closely related messages that

this paper wishes to offer. The first message is that the debate over

environmentalism is one that stretches beyond issues of science and fact. It is

an issue that crosses over into the realms of philosophy, ideology, emotions, culture, values and other aspects of humanity that cannot be won entirely by logical arguments. The environmental movement is exactly that - a movement - and a movement requires strong buy-in from people. Therefore, carving an argument supported by solid logical arguments, but also very sensitive to the greater personal elements that will factor significantly into growing its support, is crucial to the progress of the environmentalism and sustainability.

The second point to be made is that there are some common anti-environmentalism themes repeatedly asserted by both organized anti-environmentalism and the blogging public. These themes suggest that a segment of the population believes environmentalism is sometimes lacking in truth and rationality, and that it is associated with a lack of autonomy. Perceptions such as these serve as stumbling blocks in the forward motion of environmentalism and sustainability. These messages can be ignored and allowed to fester, or they can be recognized and dealt with head on. The decision made in this regard will have a significant impact on the success of sustainability efforts.

Appendix A

Content Analysis Quotation Search Words

Deceitful

obstruct*, misrepresent*, omit*, suspect*, manipulate*, exaggerat*, fals*, scam, circumspect, misuse, debunk, deny, deni*, disregard, fraud*, myth*, dishonest*, withhold*, hide, block*, prevent*, stym*, imped*, deter*, hinder*, boondoggle*, hogwash, conceal*, discredit*, whitewash*, con-game, hoax, bogus, propaga*, disguise*, crock, ruse, faux, fiction*, dishonest*, fake, deceive, deception, ignore, disregard, trick*, façade, fudge,

Hyperbolic

Alarmist, catastroph*, apocalyp*, callous*, *monger, disaster*

Coercive

jail*, withhold*, scorn*, suppress*, dissent*, villif*, stonewall*, scare*, fear*, threat*, doom*, bully, impose*, fright*, strong-arm, force*

Harmful

abus*, death, misery, murder*, kill*, war, extermina*, fiend, cripple*, fatal*, ill*, pain*, vandal*, crime, crimin*, devasta*, diminish*, destruct*,

Religious

sin*, priest*, evangel*, cult*, church*, minister*, faith*, orthodox*, scriptur*, worship*, nun, disciple, evil, crusad*, heretic*, conjugal, apost*, pagan*, gospel*, zealot, holy, sacred, puritan*, spirit*, pious, divin*, god, religio*, rite, doctrin*, indoctrin*,

Controlling

dictator*, fascis*, totalitar*, authoritar*, centraliz*, tyran*, collectivist, control*, progressivism, marx*, nazi*, prolet*, oligar*, globalist*, , commun*

Superstitious

superstit*, tea leave, crystal ball, myster*

Irrational

craz*, mad, reasonless, incoherent, illogical*, loon*, lunacy, lunatic*, fanatic*, radical, hyster*, senseless, enamour*, bizarre, panic, idiot*, idiocy, irrational*, blind*, oblivious*, unreasonable, silly, absurd*, foolish*, nonsense*, insan*, mindless*, wild

Note: Asterisk (*) symbol indicates stem of word used a search key.

Appendix B

Quotations Found in Blogs

Note: Numbers before quotation sequential order of blog examined (before colon) and sequential order of quotation per individual blog (after the colon). Numbers in parenthesis are not significant to finds (CATA data).

1:1 disasters (145:145)
1:2 disaster (145:145)
1:3 propaganda (3:3)
1:4 exaggeration (145:145)
1:5 ignore (205:205)
1:6 communism (130:130)
2:1 alarmist (34:34)
2:2 alarmist (37:37)
2:3 alarm (40:40)
2:4 criminals (40:40)
2:5 debunk (13:13)
2:6 scam (19:19)
2:7 fake (22:22)
2:8 fake (25:25)
2:9 fake (43:43)
2:10 myth (46:46)
3:1 threat (6:6)
3:2 false (8:8)
3:3 faked (8:8)
3:4 manipulated (8:8)
3:5 hide (8:8)
3:6 deniers (10:10)
4:1 fear (10:10)
4:2 Tyranny (3:3)
5:1 hoax (4:4)
5:2 hides (14:14)
5:3 centralized (6:6)
5:4 control (6:6)
6:1 scare (6:6)
6:2 dissent (8:8)
6:3 destructive (8:8)
6:4 propaganda (6:6)
7:1 catastrophic (8:8)
7:2 catastrophic (18:18)
7:3 fears (10:10)
7:4 frighten (12:12)
7:5 fear (12:12)
7:6 scare (20:20)
7:7 criminals (6:6)
7:8 illegally (24:24)
7:9 exaggerated (12:12)
7:10 falsehood (16:16)
7:11 hoax (16:16)
7:12 fraudulent (18:18)
7:13 hoax (20:20)
8:1 catastrophic (14:14)

8:2 catastrophic (16:16)
8:3 scare (12:12)
8:4 crime (6:6)
8:5 con-game (10:10)
8:6 con-game (14:14)
8:7 scam (14:14)
8:8 fraudulently (14:14)
8:9 manipulated (14:14)
8:10 propaganda (14:14)
8:11 myths (14:14)
8:12 fiction (20:20)
8:13 fake (22:22)
8:14 control (12:12)
8:15 control (14:14)
8:16 radical (12:12)
9:1 abuses (6:6)
9:2 criminal (6:6)
9:3 criminal (8:8)
9:4 criminal (10:10)
9:5 frauds (6:6)
9:6 fraudulent (8:8)
9:7 fraud (10:10)
9:8 fraud (12:12)
10:1 fears (24:24)
10:2 Whitewash (3:3)
10:3 faked (8:8)
10:4 propaganda (10:10)
10:5 ignore (24:24)
10:6 tricky (32:32)
10:7 blinders (24:24)
11:1 Fraud (3:3)
12:1 alarmists (18:18)
12:2 alarmists (26:26)
12:3 fraud (8:8)
12:4 tricks (8:8)
12:5 manipulate (24:24)
13:1 disaster (32:32)
13:2 disaster (36:36)
13:3 Threat (3:3)
13:4 threat (8:8)
13:5 doomsday (34:34)
13:6 fear (36:36)
13:7 destruction (30:30)
13:8 painful (52:52)
13:9 debunk (16:16)
14:1 myth (5:5)

14:2 ignore (6:6)
14:3 authoritarian (5:5)
14:4 silly (4:4)
15:1 fraudulent (3:3)
15:2 myth (3:3)
15:3 fraud (5:5)
15:4 fraud (8:8)
15:5 fake (9:9)
15:6 bogus (10:10)
15:7 bogus (11:11)
16:1 alarmists (5:5)
16:2 catastrophic (7:7)
16:3 catastrophe (11:11)
16:4 catastrophist (11:11)
16:5 alarmists (11:11)
16:6 alarmist (16:16)
16:7 jail (5:5)
16:8 jail (5:5)
16:9 jail (5:5)
16:10 jail (8:8)
16:11 threat (9:9)
16:12 withholding (10:10)
16:13 scorn (13:13)
16:14 suppressed (13:13)
16:15 force (16:16)
16:16 crime (13:13)
16:17 abusive (14:14)
16:18 deniers (7:7)
16:19 deny (7:7)
16:20 false (11:11)
16:21 obstructionism (13:13)
16:22 misrepresentation (14:14)
16:23 suspected (16:16)
16:24 orthodoxy (11:11)
16:25 orthodoxy (13:13)
16:26 orthodoxy (16:16)
16:27 orthodoxy (16:16)
16:28 orthodoxy (16:16)
16:29 Church (16:16)
16:30 Church (16:16)
16:31 orthodoxy (17:17)
16:32 totalitarian (17:17)
16:33 looniest (5:5)
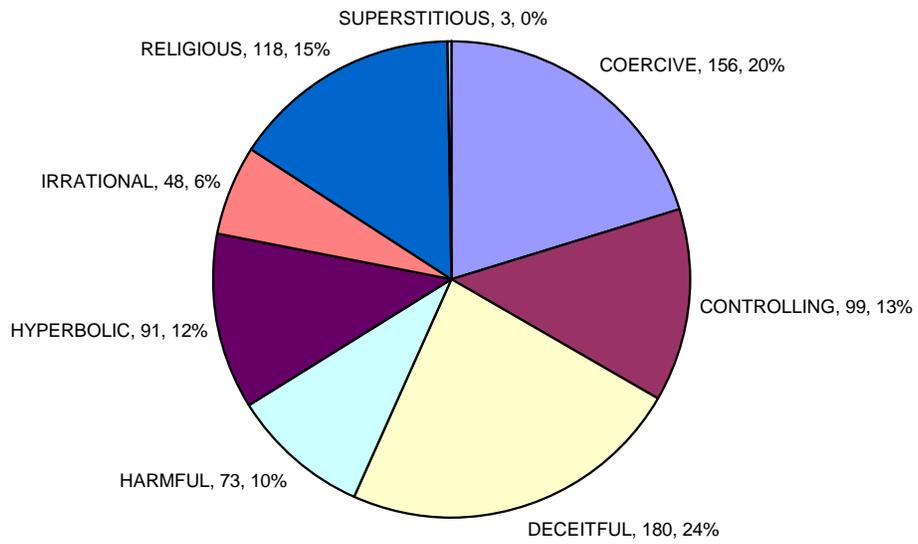17:1 fearmongering (43:43)
17:2 war (12:12)
17:3 destruction (23:23)

17:4 death (37:37)
17:5 extermination (42:42)
17:6 scam (15:15)
17:7 sin (14:14)
17:8 holy (14:14)
17:9 totalitarianism (3:3)
17:10 authority (5:5)
17:11 authoritative (7:7)
17:12 authoritative (9:9)
17:13 authority (11:11)
17:14 authority (13:13)
17:15 tyrannical (13:13)
17:16 authoritative (23:23)
17:17 mad (16:16)
17:18 crazy (18:18)
17:19 irrational (21:21)
17:20 radical (23:23)
17:21 wild (25:25)
17:22 nonsense (28:28)
17:23 crazy (36:36)
17:24 insane (38:38)
17:25 mad (39:39)
17:26 insane (43:43)
18:1 falsified (7:7)
18:2 deception (8:8)
18:3 falsification (9:9)
18:4 falsely (12:12)
18:5 totalitarian (34:34)
19:1 disaster (6:6)
19:2 apocalyptic (6:6)
19:3 catastrophe (6:6)
19:4 alarmists (6:6)
19:5 apocalypse (6:6)
19:6 catastrophe (6:6)
19:7 Fear (3:3)
19:8 fear (3:3)
19:9 doom (6:6)
19:10 doom (6:6)
19:11 threat (6:6)
19:12 deceive (6:6)
19:13 fiction (6:6)
19:14 trick (6:6)
19:15 myths (6:6)
19:16 myths (6:6)
19:17 Marx (6:6)
19:18 Marx (6:6)
19:19 Marx (6:6)
19:20 Communist (6:6)
19:21 control (6:6)
19:22 Marx (6:6)
19:23 hysteria (6:6)
19:24 hysteria (6:6)
20:1 disasters (27:27)
20:2 suppress (9:9)
20:3 withholding (22:22)
20:4 forced (25:25)
20:5 hide (4:4)
20:6 manipulated (8:8)
20:7 denied (9:9)

20:8 manipulate (14:14)
20:9 trick (15:15)
20:10 hide (15:15)
21:1 apocalyptic (5:5)
21:2 bullying (32:32)
21:3 dissenters (32:32)
21:4 dissenters (33:33)
21:5 dissenters (33:33)
21:6 dissenters (33:33)
21:7 fatally (32:32)
21:8 fraud (4:4)
21:9 deny (32:32)
21:10 totalitarian (33:33)
21:11 control (33:33)
21:12 absurd (5:5)
22:1 boondoggle (6:6)
22:2 hide (6:6)
22:3 hide (15:15)
22:4 discredit (15:15)
22:5 fraud (25:25)
22:6 radical (23:23)
23:1 catastrophic (16:16)
23:2 doomsayer (5:5)
23:3 force (9:9)
23:4 scaremongers (12:12)
23:5 criminals (7:7)
23:6 criminal (18:18)
23:7 criminally (18:18)
23:8 Fraud (3:3)
23:9 fraud (5:5)
23:10 fraud (13:13)
23:11 fraud (14:14)
23:12 fraud (14:14)
23:13 faked (15:15)
23:14 hide (16:16)
23:15 fraud (17:17)
23:16 obstruct (18:18)
23:17 evangelizing (5:5)
24:1 controlling (3:3)
24:2 authority (7:7)
25:1 concealing (11:11)
26:1 apocalypticism (37:37)
26:2 catastrophic (41:41)
26:3 forced (44:44)
26:4 killing (40:40)
26:5 crime (41:41)
26:6 fraud (12:12)
26:7 discredited (31:31)
26:8 exaggeration (33:33)
26:9 deniers (35:35)
26:10 false (42:42)
26:11 evil (11:11)
26:12 dictatorship (11:11)
26:13 superstition (35:35)
26:14 absurdly (31:31)
26:15 idiotic (41:41)
27:1 forces (4:4)
27:2 doomed (4:4)
27:3 threat (4:4)

27:4 Nazism (4:4)
27:5 Nazi (4:4)
27:6 Nazis (4:4)
27:7 authority (4:4)
27:8 Nazism (4:4)
27:9 totalitarianism (4:4)
27:10 Nazis (4:4)
28:1 boondoggle (11:11)
29:1 alarms (17:17)
29:2 fears (15:15)
29:3 threat (15:15)
29:4 scare (17:17)
29:5 scare (19:19)
29:6 scare (19:19)
29:7 scare (26:26)
29:8 scare (28:28)
29:9 scare (32:32)
29:10 myth (3:3)
29:11 propaganda (23:23)
29:12 hide (24:24)
29:13 whitewashes (30:30)
29:14 orthodoxy (13:13)
29:15 faith (26:26)
29:16 faith (30:30)
29:17 panic (23:23)
29:18 absurd (32:32)
30:1 feared (8:8)
30:2 impose (8:8)
30:3 force (8:8)
31:1 disaster (12:12)
31:2 suppress (5:5)
31:3 suppression (6:6)
31:4 doomsday (10:10)
31:5 force (11:11)
31:6 jail (13:13)
31:7 Crime (3:3)
31:8 destruction (5:5)
31:9 crime (7:7)
31:10 destructive (8:8)
31:11 crime (9:9)
31:12 criminals (14:14)
31:13 manipulate (5:5)
31:14 hoax (7:7)
31:15 false (8:8)
31:16 ignore (10:10)
31:17 propaganda (10:10)
31:18 exaggerations (10:10)
31:19 bogus (13:13)
31:20 false (14:14)
31:21 faith (6:6)
31:22 faithful (6:6)
31:23 cult (10:10)
31:24 cult (10:10)
31:25 cult (10:10)
31:26 indoctrinate (14:14)
31:27 fooled (12:12)
32:1 catastrophic (7:7)
32:2 death (19:19)
32:3 misery (19:19)

32:4 suspect (9:9)
32:5 deny (16:16)
33:1 withhold (7:7)
33:2 suppressing (9:9)
33:3 dissent (9:9)
33:4 suppression (11:11)
33:5 Death (3:3)
33:6 murderer (4:4)
33:7 killer (6:6)
33:8 war (6:6)
33:9 extermination (6:6)
33:10 killed (6:6)
33:11 death (9:9)
33:12 fatal (9:9)
33:13 illness (9:9)
33:14 kill (11:11)
33:15 manipulated (7:7)
33:16 exaggerated (7:7)
33:17 debunk (15:15)
33:18 disregarded (15:15)
33:19 fraud (16:16)
33:20 ignore (16:16)
33:21 myths (16:16)
33:22 worship (11:11)
33:23 sinful (11:11)
33:24 evil (11:11)
33:25 priests (15:15)
33:26 crusade (15:15)
33:27 centralized (11:11)
33:28 authority (11:11)
33:29 mysteries (13:13)
33:30 lunacy (11:11)
33:31 fanatical (11:11)
33:32 radical (11:11)
33:33 hysteria (15:15)
34:1 destruction (4:4)
34:2 fool (5:5)
35:1 radical (11:11)
36:1 disaster (8:8)
36:2 alarmist (13:13)
36:3 threat (13:13)
36:4 threat (15:15)
36:5 propaganda (10:10)
37:1 deception (5:5)
37:2 pious (16:16)
37:3 evil (35:35)
37:4 hysteria (5:5)
39:1 fear (14:14)
39:2 Myth (18:18)
40:1 Scare (5:5)
40:2 nonsense (13:13)
41:1 forced (13:13)
41:2 threat (15:15)
41:3 destruction (5:5)
41:4 vandalise (15:15)
41:5 vandalism (17:17)
41:6 vandalism (17:17)
41:7 vandalism (17:17)
41:8 myths (15:15)

42:1 faiths (5:5)
42:2 Marxism (3:3)
42:3 Marxism (5:5)
42:4 Marxism (5:5)
42:5 Marxist (7:7)
42:6 Marxian (16:16)
42:7 Marxian (16:16)
42:8 Marxian (19:19)
42:9 Marx (21:21)
42:10 Marxian (23:23)
42:11 Marxist (27:27)
42:12 authoritarian (27:27)
42:13 Marxism (27:27)
42:14 Dictator (29:29)
42:15 bizarre (16:16)
43:1 apocalyptic (7:7)
44:1 scares (5:5)
44:2 misuse (9:9)
44:3 nonsense (7:7)
45:1 impose (16:16)
45:2 frightening (30:30)
45:3 communists (16:16)
45:4 communists (16:16)
45:5 communist (16:16)
45:6 Authority (21:21)
46:1 alarm (45:45)
46:2 disaster (48:48)
46:3 scare (27:27)
46:4 dissenting (30:30)
46:5 fears (36:36)
46:6 fears (42:42)
46:7 hoax (13:13)
46:8 hoax (13:13)
46:9 mythical (48:48)
46:10 hoax (48:48)
46:11 gospel (10:10)
46:12 control (45:45)
46:13 hysteria (13:13)
46:14 nonsense (45:45)
47:1 disaster (49:49)
47:2 disaster (49:49)
47:3 forces (13:13)
47:4 fear (19:19)
47:5 fear (19:19)
47:6 threat (19:19)
47:7 fear (21:21)
47:8 fear (21:21)
47:9 threat (21:21)
47:10 frightens (21:21)
47:11 fear (21:21)
47:12 threat (21:21)
47:13 feared (21:21)
47:14 fear (23:23)
47:15 fear (23:23)
47:16 frightened (23:23)
47:17 fear (43:43)
47:18 fear (45:45)
47:19 fear (45:45)
47:20 destruction (21:21)

47:21 hoax (37:37)
47:22 false (37:37)
47:23 Holy (3:3)
47:24 Paganism (3:3)
47:25 pagan (9:9)
47:26 rite (9:9)
47:27 worship (9:9)
47:28 worship (9:9)
47:29 worship (9:9)
47:30 God (9:9)
47:31 worship (11:11)
47:32 paganism (11:11)
47:33 faith (13:13)
47:34 pagan (13:13)
47:35 rite (13:13)
47:36 sin (13:13)
47:37 pagan (13:13)
47:38 rite (13:13)
47:39 paganism (13:13)
47:40 evil (13:13)
47:41 paganism (15:15)
47:42 Paganism (17:17)
47:43 indoctrinated (23:23)
47:44 Church (29:29)
47:45 God (29:29)
47:46 Paganism (31:31)
47:47 Church (31:31)
47:48 paganism (31:31)
47:49 paganism (31:31)
47:50 worship (33:33)
47:51 worship (33:33)
47:52 church (35:35)
47:53 Paganism (35:35)
47:54 doctrine (37:37)
47:55 Gospel (47:47)
47:56 Church (47:47)
47:57 God (51:51)
47:58 control (19:19)
47:59 controlled (21:21)
47:60 control (23:23)
47:61 oligarchy (39:39)
47:62 oligarchy (39:39)
47:63 oligarchy (39:39)
47:64 control (43:43)
47:65 control (45:45)
48:1 fears (4:4)
48:2 doomsday (7:7)
48:3 dissenting (8:8)
48:4 scaremongering (9:9)
48:5 scare (13:13)
48:6 fear (15:15)
48:7 fear (16:16)
48:8 fear (18:18)
48:9 Fear (19:19)
48:10 kill (18:18)
48:11 exaggeration (16:16)
48:12 irrational (15:15)
49:1 frightening (10:10)
49:2 destruction (22:22)

71:6 catastrophe (12:12)
71:7 catastrophe (13:13)
71:8 disaster (13:13)
71:9 catastrophe (15:15)
71:10 catastrophe (15:15)
71:11 disaster (15:15)
71:12 disaster (15:15)
71:13 catastrophic (20:20)
71:14 catastrophes (27:27)
71:15 doom (15:15)
71:16 doom (15:15)
71:17 doomed (17:17)
71:18 death (11:11)
71:19 death (17:17)
71:20 crime (24:24)
71:21 war (25:25)
71:22 fraudulently (17:17)
71:23 fraud (24:24)
71:24 tricked (24:24)
71:25 collectivist (12:12)
71:26 Marxism (25:25)
71:27 fools (27:27)
72:1 catastrophic (15:15)
72:2 War (15:15)
72:3 War (16:16)
72:4 fraudulence (18:18)
72:5 fraudulent (19:19)
72:6 evil (17:17)
72:7 Evil (19:19)
72:8 authority (14:14)
72:9 Marxists (17:17)
72:10 Marxists (17:17)
72:11 Marx (17:17)
72:12 Communism (17:17)
72:13 communism (18:18)
72:14 communist (18:18)
73:1 Church (10:10)
74:1 alarm (9:9)
74:2 threat (9:9)
74:3 threat (9:9)
74:4 apostle (9:9)
74:5 holy (9:9)
74:6 sacred (9:9)
75:1 alarmists (9:9)
75:2 bully (9:9)
75:3 bullying (10:10)
75:4 deniers (8:8)
76:1 bully (12:12)
76:2 evil (7:7)
76:3 churches (10:10)
76:4 evil (10:10)
76:5 evil (11:11)
76:6 evil (11:11)
76:7 Church (12:12)
76:8 church (12:12)
76:9 sinful (12:12)
77:1 forces (16:16)
77:2 propagandists (12:12)
78:1 catastrophic (37:37)

78:2 threat (15:15)
78:3 frightening (37:37)
78:4 war (15:15)
78:5 death (15:15)
78:6 misery (15:15)
78:7 painful (21:21)
79:1 catastrophic (9:9)
79:2 catastrophic (9:9)
79:3 kills (19:19)
80:1 ALARMIST (15:15)
80:2 alarmist (21:21)
80:3 alarm (21:21)
80:4 catastrophists (23:23)
80:5 alarmists (33:33)
80:6 alarmist (33:33)
80:7 dissent (23:23)
80:8 dissenters (23:23)
80:9 dishonest (23:23)
80:10 deniers (23:23)
80:11 bogus (29:29)
80:12 faith (35:35)
81:1 apocalyptic (12:12)
81:2 war (12:12)
81:3 Communist (18:18)
82:1 threat (16:16)
82:2 sin (10:10)
82:3 faith (16:16)
83:1 apocalypticism (7:7)
83:2 fears (9:9)
83:3 war (7:7)
83:4 exaggerated (9:9)
83:5 myth (9:9)
83:6 propagandists (10:10)
83:7 false (10:10)
83:8 spiritual (5:5)
83:9 god (5:5)
83:10 God (5:5)
83:11 worship (5:5)
83:12 worship (10:10)

64:11 frightening (27:27)
64:12 fear (36:36)
64:13 scared (37:37)
64:14 ignore (37:37)
64:15 control (36:36)
65:1 force (25:25)
65:2 pain (9:9)
65:3 crime (25:25)
65:4 ruse (9:9)
65:5 faux (9:9)
65:6 fiction (9:9)
65:7 fiction (9:9)
65:8 hide (12:12)
65:9 False (28:28)
65:10 fraud (29:29)
65:11 God (32:32)
65:12 pious (32:32)
65:13 faith (33:33)
65:14 God (33:33)
65:15 control (12:12)
65:16 collectivist (13:13)
65:17 centralization (32:32)
65:18 superstitionists (10:10)
66:1 dissent (20:20)
66:2 suppress (20:20)
67:1 God (10:10)
67:2 fascists (9:9)
67:3 loons (6:6)
68:1 God (11:11)
68:2 God (19:19)
68:3 evil (34:34)
68:4 fool (49:49)
69:1 apocalypse (31:31)
69:2 ALARMIST (52:52)
69:3 apocalyptic (95:95)
69:4 Fear (32:32)
69:5 Scares (35:35)
69:6 force (83:83)
69:7 dissent (88:88)
69:8 SCARED (91:91)
69:9 denialists (29:29)
69:10 heretics (28:28)
69:11 faith (95:95)
69:12 holy (95:95)
70:1 apocalypse (48:48)
70:2 ALARMIST (76:76)
70:3 apocalyptic (143:143)
70:4 Fear (49:49)
70:5 Scares (54:54)
70:6 force (124:124)
70:7 dissent (134:134)
70:8 SCARED (137:137)
70:9 denialists (44:44)
70:10 heretics (42:42)
71:1 Catastrophic (10:10)
71:2 catastrophies (11:11)
71:3 catastrophe (11:11)
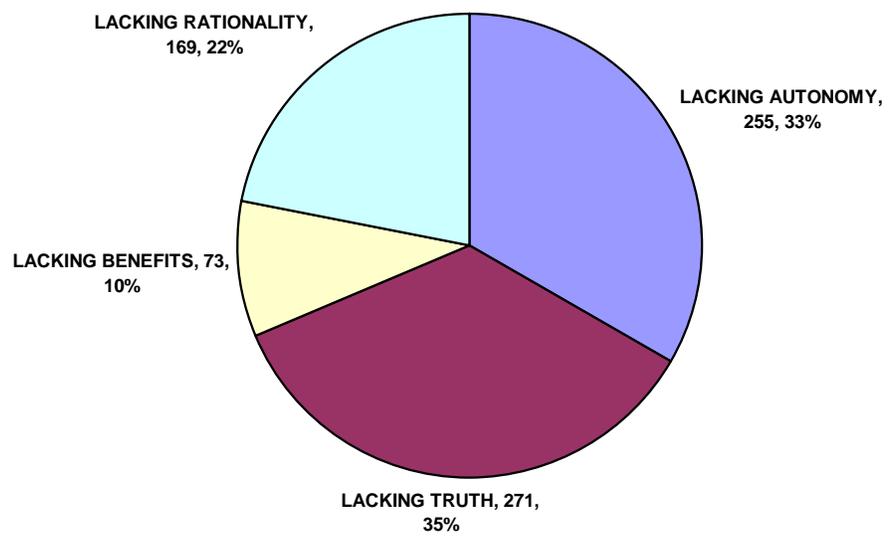71:4 catastrophe (12:12)
71:5 catastrophe (12:12)

Appendix C

Quotation Types as Percentage of Total Text

SUPERSTITIOUS, 3, 0%

RELIGIOUS, 118, 15%

COERCIVE, 156, 20%

IRRATIONAL, 48, 6%

CONTROLLING, 99, 13%

HYPERBOLIC, 91, 12%

HARMFUL, 73, 10%

DECEITFUL, 180, 24%

Appendix D

Quotation Types Merged as Families of Codes

LACKING RATIONALITY, 169, 22%

LACKING AUTONOMY, 255, 33%

LACKING BENEFITS, 73, 10%

LACKING TRUTH, 271, 35%

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