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Environmental Activism And The Internet

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Abstract

Environmentalism is used as a case study to investigate the value of the Internet for activism, protest and social change. The effectiveness of the Internet for helping environmental groups to achieve their goals and the implications of this medium for the future of the environmental movement are explored.

An online (Internet) survey of environmental groups who are currently using the Internet was conducted. Two hundred and forty four requests to take part were emailed to environmental groups, eight of which were returned with invalid email addresses. Over the course of a three month period 79 completed surveys were collected, giving a response rate of 33%. Other methods utilised include face-to-face, telephone and email interviews with environmental group representatives, content analysis of Internet sites and the construction of a database of online environmental groups. Secondary data is also drawn upon extensively.

This thesis examines the Internet's role in helping environmentalists achieve more with limited resources, network across wide geographic distances and create new forms of collective action. The changing role of other media and the ways in which the Internet may be influencing the dynamics between environmental groups and their opponents are also explored.

Difficulties with this mode of communication must also be acknowledged. The concentration of Internet use in already privileged sectors of society may mean that participants in mainstream environmentalism are likely to have access, but it may also mean that the medium holds less promise for emerging ecojustice groups. It is also true that computers and network infrastructures are major causes of environmental harm, so it may appear contradictory to use these to try to protect the environment.

This research suggests that the Internet offers a great deal of opportunity for environmental groups, but it also supports elements of contemporary society that many environmentalists oppose – increased consumerism, unfettered globalisation and direct environmental harm by its very existence.

Activists should approach the Internet with optimism but not complacency. Those who seek to preserve aspects of the medium that promote community and democracy should endeavour to advance an alternative construction of the medium to that which is prevalent in the mainstream media.

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Chapter 1: Introductory Overview

Since the emergence of the early geographically dispersed computer networks which evolved into the Internet, people have contemplated the potential of this new technology for social change and resistance (Rheingold 1994). In some ways, the early ecology of the Internet and other computer networks was well suited to particular types of activism – the sense of an in-group, working underground in a space that normal members of society could not access. Various groups quickly began to utilise computer networks for these purposes (Rittner 1992). Online “communities” of people coming together because of shared interests became a common activity on computer networks long before the flourishing of online advertising or e-commerce (Rheingold 1994a). The relative freedom from the intrusion of advertising, the ability for many-to-many communication, and the unregulated nature of these early networks led a number of commentators to speak enthusiastically about the implications for activism and democracy (for examples see Winner 1986). Today the vision of the Internet as a subversive vehicle for free-speech remains (see Internet World 1999: WWW), but this is giving way to an acceptance of the medium as a new outlet for passive entertainment and consumer gratification (Schiller 1999: 121).

Many now suggest that the environmental movement has not lived up to the hopes and promises of the first Earth Day of 1970 (Dowie 1995, Rowell 1996, Brick 1998). Some believe that it has run out of steam, toppled under its own weight, become trapped under the thumb of those who it should be opposing (Tokar 1997), become harder for people to identify with, and / or failed to provide workable solutions. It is debatable whether each of the specific criticisms leveled against the movement is fair, but on the basis of numerous criteria it can be shown that what has been achieved on a practical level falls far short of the expectations of the 1970's. Many now argue that the movement needs to reinvent itself and find new direction by learning from the mistakes of the past. Various commentators say that the movement needs to understand that the drive for environmental solutions may come from sectors of society that have not traditionally taken part in the movement, that new strategies need to be developed to counter the organised backlash against environmental ideas and actions, and that problems with addressing environmental issues through mainstream media outlets need to be addressed (Dowie 1995, Beder 1997, Rowell 1996, Brick 1998, Stauber & Rampton 1995).

The absorption of both the Internet and the environmental movement into mainstream society has had fundamental and far-reaching effects for each of these phenomena. In recent years the Internet has been transformed from an underground project designed to maintain American communications in the event of nuclear apocalypse, to the domain of a small number of technophiles, to being seen as an integral component of mainstream communication.

Likewise, the idea that we must act to save our environment has ceased to be considered radical by most in Western societies, and has become a recurrent issue in government rhetoric, corporate marketing strategies, education and numerous other facets of the public domain.

The ease and ever decreasing cost at which an individual can obtain access to the Internet would appear to fit well with the hopes of those who believe that this medium could facilitate a more democratic, politically participatory society. Similarly, the ubiquity of references to environmental concerns would seem to bode well for a new environmentally conscious world. However it should not immediately be assumed that people *are* more politically active simply because the Internet *can* be used for political and social change purposes, and that its use is widespread. Neither should it be assumed that just because the environment is being talked about, significant changes are being made or even that a significant discursive shift has occurred in terms of the way people view their position in the physical world. The Internet and environmental ideas have not simply impacted upon existing discourses, structures of power and social hierarchies – both have become part of these things, to some degree reshaping them, and in other ways being reinvented themselves to reinforce existing patterns.

Environmentalists were among the first to utilise the Internet. Those in academic and scientific institutions who had access to the technology relished the opportunity to network with others who held similar views (Rheingold 1994: 262). However during the last five to ten years, the Internet has changed dramatically – or perhaps more accurately, the Internet's role in society has been transformed. The opening up of the Internet to increasingly wide sectors of society has meant that a similarly broad cross-section of environmental groups have begun to adopt the medium. This thesis looks at the ways in which various environmental groups are utilising the Internet, examines how the Internet may have changed the manner in which these groups operate, and seeks to understand the extent to which the Internet may help them to be more effective in achieving their goals.

1.1 Objectives

The study was restricted to one category of protest and activism because of the necessity to confine the scope of the research. Environmental activism was chosen because:

- The environmental movement incorporates a broad variety of groups and organisations, in terms of philosophies and values, organisational structure, size of membership and geographic scope.

- Environmentalism relates to a wide range of other struggles (such as economic justice). This may increase the relevance of the research to groups involved in other forms of electronic activism.
- Some sectors of the environmental movement have traditionally been proficient in the use of technology, and there are a large number of examples of environmental groups who are using the Internet. At the same time, some environmentalists have had very little experience using computers, and the research also sought to find out how these groups fared on the Internet.

The objectives of this study are to:

1. explore competing ideas about the potential of the Internet for democracy, using environmentalism as an example, and
2. produce outputs which will be useful to environmentalists who use or aim to use the Internet.

This means that in addition to examining broad issues relating to the meaning of this technology for society, the research has been designed to benefit the populations that are the focus of the study. It is hoped that the findings of this research will have the potential to help organisations, collectives and individuals develop Internet strategies which take into account the issues examined herein, in order to best utilise this medium for their purposes.

1.2 Research Questions

1.2.1 Primary Research Question

This thesis aims to address the following question:

How effective is the Internet in achieving the outcomes for which environmental groups put it to use?

The analysis and discussion presented here can only give partial answers based on the reported experiences of a relatively small number of groups. Also, “effectiveness” is not something which can simplistically be assessed. It can be measured on a range of different levels and on the basis of numerous criteria which vary widely between individual groups. For these reasons this research does not seek to provide definitive answers to this question, but rather to approach it from a number of angles, and to examine various trends and influences which may build part of a wider picture.

1.2.2 Secondary Research Questions

The secondary research questions are all designed to contribute to the main question by addressing certain aspects:

- For what reasons do environmentalists choose to use the Internet?
- Why do environmental groups choose to use certain forms of Internet communication?
- What types of results do they expect to get from each type of Internet communication (such as their own web pages, newsgroups, email, the Internet as a source of information?)
- Do environmental groups consider the effectiveness of their Internet use, and do they have a means for measuring this?
- From their own experience, does the Internet measure up to the expectations environmental groups had when they began using the Internet? Does it measure up to portrayals in the media?
- Do environmental groups consider the wider implications of using the Internet, or mainly immediate pragmatic purposes?
- In what ways might the Internet be more or less effective for environmental groups than they perceive it to be?
- Aside from the effectiveness of Internet use for particular purposes, are there other issues that might relate to the wider goals of these groups that need to be considered?

1.3 Definitions

The Internet (The Net)

When two or more computers are connected so that information can be exchanged between them, a network is formed. The term “internet” refers to a network of networks interconnected with routers (a device which forwards traffic between networks). *The Internet* (capital “I”) is the largest internet in the world. It is a three level hierarchy composed of backbone networks, mid-level networks and stub networks (local networks that do not carry external information)¹.

¹ Ohio State University <http://www.cis.ohio-state.edu/htbin/rfc/rfc1983.html>.

The Internet can be defined in terms of the global address systems and information transfer protocols which allow computers to find each other and exchange information through this huge worldwide network. It also includes communication services which employ extensions or additions to these protocols, but which rely upon the basic network.

A number of forms of electronic communication exist on the Internet, including the World Wide Web, email, gophers, ftp (file transfer protocol) archives, newsgroups, and real time chat. Some of these are defined in Appendix 1.

“The Internet” is also often shortened to “the Net”; this convention is adopted at times in this report.

Environmental Groups And Environmental Activism

Within the context of this thesis an environmental group will be defined as:

any non-governmental, non-commercial collective whose primary goal is the protection of the environment.

It should be noted that this does limit the boundaries of the study to *organisations* per se. The connotations behind the term “organisation” do not fit the structure or philosophy of some of the groups or collective actions examined, and some state explicitly that they are *not* an organisation. This is perhaps of particular importance given the focus on the Internet, a medium which some claim greatly facilitates the collective action of people with common beliefs and goals without the need to construct bureaucratic mechanisms of administration and control.

Some environmentalists are not comfortable even with the term *group* to describe their collective activities. This term will be used throughout this thesis for want of a better word to represent the diversity of collective environmental activities, but readers should bear in mind that some of the connotations the word carries are not always applicable.

Furthermore, what constitutes *the protection of the environment* is by no means uncontested. This will necessarily have to be left fairly open to ensure that the study is inclusive of the diversity of environmental philosophies which exist (although this does exclude organisations who cynically use the rhetoric of environmental protection while actually pursuing an agenda which contradicts such claims).

This study is restricted to groups that are already using the Internet. This means that there is little scope for a comparative analysis between offline and online groups. However it was decided that, given limitations in time and resources, a more robust approach would be to focus only on the population utilising the Internet. Due to the fact that many environmental groups have started using the Internet very recently, some comparison can be made based on perceptions of the changes that have occurred since going online.

Environmental Movement

At some points in this thesis the *environmental movement* will be referred to. This implicates the combined actions and philosophies of all environmentalists and environmental groups. The value of such a concept is limited because the diversity of ideas and efforts encompassed by this overarching term would suggest that there is no singular movement, but many micro-movements. However, it is useful to describe generalised trends in environmentalism, and to move the analysis to a level where explanations of the wax and wane of particular types of environmentalism over certain periods and in certain places can be attempted. An approach that considered every micro-instance of the environmental movement as an isolated specimen, uninfluenced by the whole, would be as disingenuous as an approach which assumes the environmental movement to be a monolithic, mono-directional phenomenon. For this reason this study will move in between these types of approaches, at times seeking to identify the overarching forces which shape “the movement”, but also recognising that the actions of individual groups are not entirely determined by these forces. Certain instances of the environmental movement will also be referred to, for example the *American environmental movement* in the 1970s.

1.4 Key Themes

This study examines whether the Internet is influencing the effectiveness of environmental groups from a range of perspectives. In doing so it explores a number of issues relating to the role of computer mediated communication in contemporary society. Some of these issues are briefly outlined below.

1.4.1 Networking And Publicity

This thesis examines the Internet’s role in two broad areas where information strategies are a concern for environmentalists – networking and publicity. Networking involves the exchange of information between people who are already affiliated in some way with the group or movement (for example within the organisation, between members or participants, or between various environmental groups).

Publicity orientated information is aimed at communicating the message of the group or movement to a wider audience. This type of communication is hugely important for environmentalists, and many groups' activities are aimed largely at gaining exposure in the mainstream media. This media exposure usually seeks to either change the actions of individuals, or mobilise individuals to put pressure on political representatives and others in positions of power. However it can be interpreted more generally as part of a discursive struggle over the definition of "the environment" and surrounding issues.

The potential of the Internet to improve the networking capacity of environmental groups is important because the interconnectedness within and between groups may be essential to the success of the movement. On an immediate and practical level it means that groups can get more done with the available resources. On a wider level this interconnectedness is what differentiates a large number of dispersed individuals who hold similar views, and a worldwide movement capable of inducing significant change.

1.4.2 Conflict And Power

People seeking to protect some aspect of the environment are often in conflict with another sector, or sectors, of society. There are three primary reasons why it is those in positions of power who tend to oppose the changes argued for by environmentalists. The first is that environmental protection often involves restrictions upon the mechanisms of production and consumption of resources, meaning that profits are threatened. Secondly, the measures environmentalists would like to have put in place sometimes challenge the social status quo, and threaten the hierarchies of which current power-holders are at the apex. Finally, those in positions of power have the most resources available to oppose environmental reform, so their interests are more likely to be protected than those of small unempowered communities.

At times environmental groups have been opposed by those at the opposite end of the power / wealth scale. For example, environmental reforms may threaten the livelihood of people in poor communities, and environmentalists have not always been sensitive to these human consequences. However there is increasing recognition within both environmental and social justice movements that the same social, economic and political structures which are leading to the destruction of the environment are also permitting the exploitation of the poor and oppressed (Dowie 1995: 141, Kaimowitz 1996: 31).

This study recognises that environmental gains achieved through the Internet are also likely to be met with opposition on the Internet. If the Internet is likely to significantly alter the marginalised status of environmentalists and environmental rhetoric, it will have to do more than merely provide a set of useful tools for campaigners – it will need to alter the *balance of power* between environmental groups and their opposition.

The potential of the *Internet* to do this is explored in Chapter 6.

1.4.3 Other Media And The Internet

The potential of the Internet to help environmental groups publicise their cause is important because achieving change usually requires widespread public support. For a variety of reasons other media forms rarely provide an ideal forum for environmental debates.

The limitations of established media are discussed in Chapter 4, and questions relating to whether Internet communication is likely to help overcome these limitations are asked. Structures of power which exist on the Internet are examined, and consideration is given to how this is likely to effect the plight of environmental groups using the net. For example, many of the “areas” of the Internet which attract mass audiences comparable to the audience needed to sustain a mainstream media outlet are often owned by the same companies who already have stakes in other media entities. Such factors need to be weighed against other characteristics of the Internet, such as the ability of anyone to make information available to a *potentially* huge audience.

1.4.4 The Internet As A Discursive Construct

Within the decade or so over which the Internet has evolved into an integral part of mainstream western societies (see Guardian Weekly 1999: 14), a number of narratives have emerged through which the “reality” of this elusive phenomenon can be imagined. These stories play an important part in the way in which we perceive the Internet fits into our lives. The contrasting constructions presented by those of different backgrounds and world views, who have gone onto the Net for different reasons and had varying experiences online (or who have never used the Internet, but whose impressions are shaped by the media and accounts of others) represent competing truths as to the fundamental nature of the Internet.

One point that is argued in this thesis is that peoples’ understanding of what the Internet is, and the role it plays in their lives and society, has important implications for its effectiveness as a medium for activism. If people perceive the Internet as a tool for political participation, a means for challenging structures of power, and for overcoming inequalities built into other auspices of society, then the technology may have potential for progressive social transformation. On the other hand, if people accept the Internet as a passive entertainment medium, a form of hyper-television, and an easy access global shopping mall, then its use is likely to reflect this perception, and the Internet may merely retrench existing ways of life. In actuality, both of these portrayals, and many others, are prevalent. At times they interact in ways that are ironic or contradictory – for example people may be attracted to the Net because they view it as radical and subversive, but adopt a very passive pattern of use.

1.5 Elusive Objectivity And Positioning Of The Researcher

No research can ever be completely objective or free from political bias. To make a claim of objectivity is merely to disguise the implicit bias, and to give up all chances of an investigation which is reflexive on that bias. It is also likely to advantage dominant modes of thought, as supposedly objective accounts often draw on taken for granted, 'common sense' belief systems without questioning the precepts behind such assumptions.

However the acceptance that we can not achieve perfect objectivity does not necessitate descending into an uninformed political rant. As Terry Eagleton points out:

It is ... a simple sleight-of-hand, or sheer intellectual disingenuousness, to imagine that all language is rhetorical to the same degree. (1991: 201)

Particular political perspectives underlie this work. By recognising and referring to personal beliefs and leanings the author hopes to demonstrate that he is aware that different perspectives exist, and to remain able to give due attention to these. This awareness has guided the research process, in that care has been taken not to base research instruments on unwarranted assumptions.

1.5.1 The Researcher's Views On Environmental Activism

This work is written from a position that views the environmental movement as being a vital component of both global and local politics, and one of the most crucial struggles of our times. There are several rationale which underlie this researcher-bias:

1. A belief that the degradation of the environment has a direct and enormous impact upon people's health, quality of life and survival, and that those for whom that impact is most acute are likely to be populations who suffer the most from other forms of oppression.
2. Sympathy for an ecological view of the world which sees humans as being located within, rather than standing above, systems of life.
3. An aversion towards the right-wing ideologies and structures of domination that many components of the environmental movement oppose.

Therefore this work is written from a particular position, and one which, it is conceded, may not be defensible in absolute terms. A rigorous discussion of the value of environmentalism is not undertaken here as this is tangential to the topic and therefore beyond the scope of this thesis.

Throughout the report all efforts are made to remain critical of this and other perspectives.

1.6 Thesis Structure

This introductory section has outlined the objectives of the research, presented some key issues, and defined central terms. Chapter 2 further contextualises the research in relation to current debates about discourse, relativism and the possibility of “truth.” This has important implications for discussions concerning environmental issues, since environmental claims invariably seek some form of empirical grounding.

Chapter 3 outlines the methods used to collect the empirical information used throughout this thesis. Chapter 4 provides a contextual overview of the environmental movement and some of the challenges it faces. An analysis of the general effectiveness of the Internet for environmentalists is undertaken in Chapter 5. Drawing on theories relating to the ownership and control of the media posited by commentators such as Chomsky, Chapter 6 explores the changing role of other media as new opportunities emerge through the Internet. Chapter 7 explores the possibility of the Internet effecting the dynamics between environmentalists and anti-environmental ideologies. Here writers such as Beder (1997), Stauber and Rampton (1995), and Rowel (1996) are drawn upon. The thesis concludes with a discussion of the implications of findings for the environmental movement.

Chapter 2: Theoretical Discourses

The aim of this thesis is to assess the effectiveness of the Internet for environmental groups, and more broadly, to gain some insight into whether this new communication medium is likely to help re-establish the environmental movement as a phenomena capable of initiating significant change at a structural level. In doing this, a number of areas are investigated, including the ways in which the Internet is helping to shape struggles between environmental groups and their opponents, how the Internet compares with other media in providing environmentalists with an opportunity to influence popular opinion, and the general organisational opportunities the Internet offers to environmentalists.

The role of this chapter is to provide a brief overview of previous theoretical work that relates to the topic of environmental activism and the Internet. The purpose of this is to consider the views and theoretical positions of others who have given thought to this topic, to look for previous work which can be built on through this study, and to show that the approach taken here is unique rather than repeating work that has already been done.

This thesis does not contain a literature review section. Literature from a wide range of disciplines and sources is utilised heavily in the analysis, but it is incorporated throughout the various chapters as arguments are developed (as opposed to being presented in one block prior to the development of these themes). A diverse range of topics are touched upon in this thesis, so an examination of the literature from each field, prior to entering into the discussion at hand, would appear somewhat incoherent and not begin to make sense as an entirety until brought together in the discussion to follow.

2.1 Thesis Approach

Between the 16th and 20th centuries an overarching mode of thought has developed whose underlying principles are a belief in the existence of absolute truths upon which all aspects of physical and social reality are assumed to be based, and a faith in the processes of western science to uncover and map these truths. Secondary to these beliefs was the conviction that a perfect society could be created through the pursuit of these fundamental facts of existence. The dawn of this realisation is often referred to as the “enlightenment” since this way of knowing was said to contrast with the “darkness” of religion and superstition within which humankind had previously been immersed.¹ This is also thought of by many as the *modernist* ethos, as it provided the fundamental principles which have underscored the development of all contemporary industrial societies (Pfohl 1994, Schwarzmantel 1998).

¹ See Saul 1992, Chapter 3, for a critical history of what he dubs the “Age of Reason.”

However some commentators argue that the foundations of this doctrine are questionable (see Foucault 1980, Lyotard 1984). The latter half of the twentieth century has seen a decline in the acceptance of enlightenment values and methods of inquiry, both within academic debates and popular culture. Many have begun to appreciate that the precepts of the enlightenment are not universal, but specific to the position of those who defined them - namely, white middle-class males in Western countries (see Pfohl 1994: 447-457).

Perhaps many always knew this, but were deprived of a position from which to speak rationally by the totality of this meta-discourse. It is certain that groups from outside the privileged positions created and sustained by such a doctrine have played a vital role in discrediting it; women, ethnic minorities and other groups subordinated by this doctrine have argued that the modernist discourse is fundamental to, and unhelpful for combating, their oppression (see, for example, Harding 1998, Harris 1991). As will be discussed later in this chapter, some proponents of the environmental movement have also grappled with these discourses and the possibility of simultaneously challenging them and retaining a position from which specific claims about the nature of the world can be made.

Many theorists now argue that the foundations of modern thought are not absolute but merely define one epistemology, of which there are many. It is increasingly common for theorists from a wide range of disciplines to speak of competing and equally valid epistemologies, a possibility which is incomprehensible from a position which relies upon the existences of absolute, universal truths (Barrett 1991).

This thesis aims to explore the ways in which the Internet affects the ability of environmental groups to challenge the truths of dominant interests, and, when this is desired, to gain acceptance for their own assertions. This will necessitate an investigation of the ways in which ideas relating to environmental issues are legitimated, the context in which this legitimisation takes place, and the structures of power which shape that context.

The approach taken will reject the subject / object dialectic upheld by positivist methods of inquiry. Instead a formulation of Pierre Bourdieu's reflexive sociology is to be adopted:

Bourdieu favours a problematic which is more reflexively aware of its origins, claiming that one cannot simply conceive of a theory as a process of uncovering the truth, an opus operatum, but must rather see that theoretical practice (including that of moral philosophers) is itself a particular form of life – a modus operandi. (Smith 1995: 55, original emphasis)

The recognition that the researcher's interpretation of the world is mediated by culturally specific frameworks of knowing does not allow an emancipation from these frameworks. Rather, it provides an opportunity to look back upon the ways in which they have lead me to observe what I have observed, and the way they have helped structure the conclusions I have made from those observations. As Hayles explains,

Reflexivity, understood as recognizing that one has a position and that every position enables as well as limits, can make the double move of turning outward to know more about the world because it also turns inward to look at how one's own assumptions are constructed. (Hayles 1995: 61)

In implementing such a reflexive approach, the researcher seeks to remain aware of their own leanings and likely prejudices, but does not attempt to put forward and defend in absolute terms any particular position concerning, for example, the value of particular approaches to environmentalism (or the value of environmentalism itself).

Arguments are be made, but it is be explicitly recognised that these are based on assumptions which are necessarily partial. These arguments do not seek legitimisation through references to absolutes and universals, but instead aim to evaluate the interaction of consistencies and inconsistencies within and between a variety of approaches.

2.1 Capitalist Discourse And The Environment

Modernist liberal positions often extend the realm of the market to a definition of the worth of all things, including the environment. An archetypal model of the modernist free market position with regard to the environment could be described as follows (see Beder 1997: 49, Welford 1997, or for examples of this position see Anderson & Leal 1991, Jefferys 1993):

- All the natural resources of the world are there for the use of human kind, who are equipped with the rational capacity to make decisions as to what constitutes the best use of those resources.
- The free market mechanism will protect the environment. Having more land in private ownership is better for the environment, because people's individual interests will be vested in the land.
- Any Government attempts to impose limits upon what an individual can do with his or her land is a fundamental violation of that person's rights. No distinction is usually made between the rights of individuals and those of corporations, so this extends to the rights of industry to strip mine, fell ancient forests, or drain wetlands.

- All forms of environmental harm can be quantified and translated to a common scale (usually dollars) which can be weighed against likely benefits (converted to the same scale).

The belief that free trade needs to be defended at all cost for a fair and just world often creates suspicion towards attempts to create restrictions on the basis of environmental reasons. This works at all levels, from the imposition of anti-pollution measures on local industries to multinational trade arrangements. For example, in the late 1980's the European Economic Community was ready to prosecute Holland on the basis that moves to place immediate restrictions on leaded petrol constituted unfair trade barriers (Saul 1992: 290). John Ralston Saul believes that "the very idea that environmentally sound regulations could constitute unfair trade barriers to environmentally unsound products" typifies the prominent way of thinking of those in economically powerful positions in the global scene (ibid: 291).

The idea that the employment of "proper" market practices can save the environment has become ubiquitous to the degree that, in the view of some commentators, it has come to frame debates concerning environmental issues (Hutton 1992:16). This is not to say that the idea is always accepted, but debates often hinge around arguments assessing the validity of this idea:

While the eighties was the decade of wilderness protection, the nineties will be the decade of global sustainable development ... The main argument during this period will not be about whether there is an environmental crisis, but whether the crisis can be adequately addressed purely by the application of market forces. (Hutton 1992:16)

Rhetoric of free market environmentalism is prevalent in New Zealand political and commercial realms. In a commentary published in the journal *Environment And Planning*, Gleeson discusses the effects of the neoliberal Structural Adjustment Program which has dramatically reshaped New Zealand since 1984 on environmental policy and practice. He argues that the Resource Management Act of 1991 (RMA), originally welcomed by business interests and some environmentalists, has "liberalised control over resource development, emphasising the 'management of effects' over the control of activities" (Gleeson 1996: 912).

Gleeson argues that the RMA and other changes have had the effect of making it possible for "big business" to effectively buy resource consent while at the same time instigating a user pays system which makes it more costly for groups and individuals to access information relating to environmental issues. Groups who want to oppose a project face the threat of paying the other side's court costs as well as the expense of presenting their own case. Environmental monitoring and protection have become increasingly difficult as governments have adopted a 'hands off' approach to the economy and resource development. This has led to the severe cutting of funds for bodies whose role includes responsibility for environmental issues (Gleeson 1996: 915).

Changes which decentralise environmental planning, such as the RMA, are attractive to some environmentalists because they take decision making from large bureaucratic structures and potentially place it in the hands of local communities. However the context within which this is being done, and the motivations which underlie these actions, need to be understood if the outcome is to be predicted or explained. Such rolling back of environmental control occurs in a wider economic and political setting where efforts to curb Government intervention are generally less in the interests of restoring power to small communities, and more geared towards providing favourable conditions for industry.

In later chapters the implications of the Internet for struggles between the interests of industry and environmental groups will be explored. This will include examinations of the influences of the Internet on mainstream discourses, as well as practical considerations which may be effecting the amount of weight given to environmentalist claims in such debates.

2.2 Environmentalist Discourses

In arguing their cause, environmentalists also undertake strategies that draw on and construct fundamental truths. Some of these are located well within the scientific discourses of modernity, others involve the creation of new dogma:

For some greens, ecology has become a new absolute. For those at the fundamentalist end of the green spectrum, 'ecology' has taken the guise of a single truth by which all actions might be judged. To this extent, it is analogous to the absolutism of a vulgar Marxism, although religious fundamentalism may be a more relevant parallel in the contemporary world. (Rainbow 1993: 81)

A prominent figure in the environmental movement who espouses such a position is Rudolf Bahro. In the introduction to one of Bahro's books, John Stanford maintains that religious analogies in Bahro's work are not accidental: "Bahro's essays and speeches abound with millenarian sentiments and calls for a new spiritual awakening." (Stanford, in Bahro 1986: 9) Bahro himself argues that:

A fundamental reorientation of the economy such as we are striving for can only succeed hand in hand with the spread of a new ("post modern, post industrial") way of life. Only a different society will found a different technology and organisation out of the arsenal of sciences and skills that have been handed down. (Bahro 1986: 14)

However, aspects of Bahro's conception of a "postmodern" way of life are incongruous with ideas about "the postmodern" that have become ubiquitous in the contemporary social sciences. Contrary to a condition in which the partiality of knowledge is recognised and the search for universals abandoned, Bahro foresees a society within which both the physical means of existence and our way of knowing the world are determined by a new belief system. Moreover, he views this belief system as intrinsically more correct than the current system. He talks about the subordination of the industrial sector to support levels for "a network of interlinked base communities," which would be largely self-sufficient. He believes that the new society needs to be arrived at through a "fundamental ecological attitude" (Bahro 1986: 16).

A similar position has been adopted by groups such as Earth First!, who believe that a "deep ecology" approach needs to be applied to the philosophical foundations upon which society is built, and that the current systems of production, politics, bureaucracy and thought have subverted our true relationship with nature and ourselves. They reject the top down, bureaucratic approach to organisation, claiming that this simply reinforces the systems that they are opposing (Predelli 1995). However the group holds a very particular mindset to which proponents are expected to remain committed. It is perhaps similar to modernist projects in that it holds a certain set of truths as fundamental, and there is an expectation that adherents will interpret the world through the framework created by these truths. It is different from modernist project in that these truths are only partially justified by scientific reason; spirituality is also an important legitimising agent.

In contrast, Steven Rainbow believes that environmental groups need to abandon the quest for absolutes and universals if they are to succeed in the contemporary context, and that the idea of a "green society" is redundant in the emerging postmodern society (Rainbow 1996: 92).

Rainbow's assumption of a 'postmodern' society is perhaps a little hasty. Perhaps we are experiencing increasing suspicion of the value of reason and the possibility of knowable truth. However if the limbo that this creates is disconcerting for theorists, it is even more so for people in general, when their world view is a necessary tool for negotiating every instance of action and thought. Some argue that in western countries we are currently witnessing a frantic search for new fundamentals, or a return to the old, as evidenced by patterns such as the resurgence of nationalism in some territories (see Schwarzmantel 1998:144-148) and the redefinition of family and gender roles (see Stacey 1996).

2.3 Truth, Relativism, and Grounded Environmentalism

Strongly “postmodern” approaches create an array of new problems for those who are seeking to understand or explain the social, and these are particularly pertinent for environmentalists. The problem with abandoning the positioning of ourselves in relation to absolutes (as a prerequisite to being rational) is that we no longer have a basis for valuing one argument or account over another. This poses definite problems for groups who have become strongly associated with ‘postmodern’ positions in recent decades – writers and activists dealing with feminist, gay and lesbian rights and racial equality issues are some key examples. However for these groups the iconoclastic potential of a relativist position is sometimes productive to the degree that it can weaken the discursive foundations of their oppression.

For environmental groups, the problems posed by a relativist position are perhaps greater. This is because environmentalists deal with things which are generally assumed to exist beyond the discursive. A tree may be experienced as a different thing depending upon the framework through which we interpret and understand, but there is little defense for the existence of an environmental ethos if the tree, and its potential destruction, is not assumed to be somehow real beyond that framework.

Hayles uses the experience of a colleague giving a presentation to a group of environmentalists to illustrate the difficulty that exists in reconciling constructivism (the reduction of reality to the realm of the discursive) with environmentalism:

My friend espouses radical constructivism. He believes that everything we know ... is a construction emerging from historically specific discursive, social and cultural conditions. The environmentalists were upset at this claim. The meeting took place in Puget Sound, and they were incredulous that anyone could be amidst such breathtaking natural surroundings and still believe unmediated nature was not within our ken. Moreover, they worried about the effect the claim would have on environmental movements. If nature is only a social and discursive construction, why fight so hard to preserve it? (Hayles 1995: 47)

In other words, for these environmentalists this suggestion both defied their direct experiences which they regarded as unquestionably “real”, and presented a discursive position from which it would be difficult to formulate effective rhetorical strategies.

Although most people probably do not consciously negotiate their relationship with dominant discourses to formulate discursive strategies that will serve their purposes, a consideration of such strategies is nevertheless useful for understanding why certain positions are adopted, and why particular positions may be more successful than others in certain contexts.

For example, in a review of a book challenging the science of anti-environmentalist groups (Paul and Anne Ehrlich's *Betrayal of Science and Reason*), Sharon Beder points out that the position of the authors is basically a positivist one, and that the style of their argument is in fact very similar to that of those who they are opposing (Beder, 1998:WWW). However Beder defends their approach, asserting that:

it is hard to imagine how the Ehrlichs could have mounted what is basically an effective refutation of brownlash claims (with chapter titles such as "Fables about Population and Food") using a wholly relativist argument. Relativism may work well when you are challenging the scientific consensus and seeking to undermine those arguments by deconstructing them but it is not always the best tool for supporting mainstream science. (Beder, 1998:WWW)

So if environmentalist claims, in the first instance, rest upon the assumptions of a positivist approach, it is perhaps a better strategy to challenge *the use* of that science by those who oppose the claims than it is to challenge *the validity* of the mode of inquiry all together. The latter strategy would take away the foundations of the arguments of both sides. This shows that even if environmentalists recognise the problems with the modernist epistemology, in some instances the most effective rhetorical strategy may be to remain within this epistemology. (Of course, the positioning of environmental arguments within a modernist discourses isn't always, or even necessarily usually, purely a rhetorical strategy. For many environmentalists the evidence provided by a positivist view of the world underlies their motivation for action.)

The problem with a strong postmodern approach, when arguing for environmental protection, is that it necessarily engenders a degree of uncertainty. It is difficult to claim that the environment has intrinsic value from a position that views all truths as, at best, "partial." Such a position would appear to support the interests of those who oppose the environmental movement more than it does the movement itself. Commentators on the commercial backlash against the green movement argue that anti-environmental entities do not usually have to prove that something is safe, but just create an impression that the claims of environmental groups are perhaps questionable, to stifle the spirit of protest (Beder 1997, Stauber & Rampton 1995). However this general apathy is perhaps in part due to a prevailing faith in the market mechanism to sort things out, and the costs of interfering with this system (both in terms of time and resources put into activism, and the supposed loss of jobs and increased cost of living environmental protection brings). The legitimisation of a more deconstructivist position may benefit environmentalists (and the environment) by weakening overarching assumptions that the market mechanism is inevitable, and that to interfere in market practices is necessarily "bad".

The effect of the Internet on the dominance of modernist meta-discourses is by no means certain. The Internet may have the potential to promote a more deconstructivist position simply bringing a wider range of competing epistemologies into contact with one another, thereby bringing into question the absoluteness of each. On the other hand, it may simply serve to perpetuate the “truth” of the inevitability of the market, but with more uniformity on a global scale.

2.4 The Internet, Democracy And Social Change

In examining the effectiveness of the Internet for environmental groups this thesis aims to make observations which are relevant for activism and protest in general. Given that the existence of discursive space for activism and protest is considered by many to be a vital element in any healthy democracy (Rheingold 1994a: 261, Frederick 1993) this has implications for the Internet’s role in promoting or obstructing the development of more democratic societies.

In recognition that “democracy” itself is a fiercely contested construct, no attempt will be made here to impose a benchmark of what should be considered “true democracy.” For the current analysis it is suffice to posit some of the dimensions that are commonly referred to as contributors or necessary conditions for a democratic society. Therefore, questions worth asking may include:

- Does the Internet facilitate freedom of expression?
- Does it increase participation in decision making, especially for those who previously tended to be excluded and marginalised?
- Does it increase equality of access to information and knowledge, especially information which is necessary for informed participation in political debates and decision making?
- Does it help afford people the ability to challenge the decisions made by those in positions of power?
- Does it afford people protection from potentially coercive and intrusive aspects of power structures?
- Does it have the potential to produce significant changes in the status quo?

The Internet is clearly transformative, at least for the middle class in western societies. Popular media frequently make observations to the effect that the Internet “has already become the main source of instant knowledge on any subject,” and has “proved that it will completely revolutionise leisure, education, work, shopping and health” (The Guardian Weekly 1999: 14). However whether the Internet is likely to transform societal *structures* and *systems* is debatable. It has often been pointed out that utopian claims made about computer communication bear close similarities to those made when other media forms have emerged (for examples see Rheingold 1994a: 15, Winner 1986, Fox 1999: 174). For example, intellectuals and journalists of the 1950’s proclaimed television to be the greatest educational medium in history (Rheingold 1994a: 15). Therefore it is important to consider not only what social conditions the technology has the potential to produce, but also the existing social conditions out of which it is emerging.

A key prerequisite to democracy is participation. In the case of the Internet, participation is restricted by access. This is likely to remain a limiting factor in the Internet’s potential for society-wide democracy, and may even serve to increase inequalities by widening the gap between the information rich and information poor. Disparities in Internet access are discussed in Section 5.3.2.

From the time people started writing about the social effects of computer communications, predications have ranged from the strongly utopian to strongly dystopian. Proponents of utopian positions include US vice president Gore (1995), Etzioni, Laudon, & Lipson (1975), Naisbitt (1982), Stonier (1983) and Toffler (1970). Examples of dystopian positions include Burnham (1983), Postman (1992) and Wicklein (1981). Both extremes remain widespread in contemporary literature, but most of the more recent work demonstrates at least a cursory recognition of the limits of technological determinism.

A large number of works have been written about the use of computers for conducting elections and referendums, and facilitating the electoral process in other ways (see Baldwin 1992, Betts 1992, Elgin 1993). Proponents of this type of system argue that this gives citizens the power to decide matters for themselves rather than surrendering their decision-making power to representatives (Naisbitt 1982). Others believe that frequent electronic referendums would replace more detailed deliberation, and that it would actually increase the power of rulers who would be able to achieve desired outcomes through the types of questions posited in these referendums (Malbin 1982, Schudson 1992). However, regardless of whether this type of computer use is likely to be a “good” or a “bad” thing, it is at best a more effective means of administering a centralised, institutional type of democracy. This perhaps represents less of a shift from current social practices than some other, potentially more “radical,” types of Internet use.

Skeptics of the Internet's democratic potential frequently refer to aspects of computer communication that threaten to invade privacy and amplify systems of surveillance already prevalent in contemporary society (Brown 1996, Wicklein 1981, Brin 1998: 54 - 84). Most Internet communication can easily be monitored, and this information can be used in a wide range of ways by corporations and governments to exercise increased social control. Governments have used the threat of criminal and terrorist use to justify banning encryption technologies such as the clipper chip, but some commentators believe that we have much more to fear from government abuse and coercion than terrorist attacks (Poster 1995: WWW, Brown 1996).

Tendencies for the computer communication to promote a society based on corporate values and consumerism are also sometimes viewed as a hindrance to democratic use of the medium (Wicklein 1981). This is in contrast to the views of some authors, who believe (or at least believed) that computer communication will bring an emancipation from physical concerns, and a society-wide pursuit of philosophical and intellectual endeavors (Stonier, 1983:214). It certainly appears that commercial aspects of the Internet are likely to retain their dominant profile (Schiller 1999: 109-118, Hoffman & Chihara, 1998:WWW). This is not necessarily at the exclusion of "democratic" uses of the medium, as there is no limit to the amount of space available on the Net, but it does have implications relating to the prevalence of dominant meta-discourses in this medium.

Some writers suggest that the Internet can be thought of as a new form of "public sphere" (Rheingold 1994s, Poster 1995, Agre 1997). The public sphere is a concept most commonly associated with philosopher Jurgen Habermas. Habermas says that this is any part of society where citizens can discuss and debate important issues of general interest, particularly of a political nature. Access to the public sphere is open to all citizens, and a portion is created in every instance where private persons come together in conversation, outside the scope of business or legal exchanges, and without being subject to coercion (Calhoun 1992). For Habermas, the public sphere largely collapsed with the advent of contemporary media, and especially with the proliferation of advertising as a key determinant of content. He argues that electronic spectacle has replaced the development of ideas between citizens, and the manufacture of public opinion damages the foundations of democracy (Rheingold 1994a).

The Internet can act as a public sphere through the discourse that takes place in chat rooms, mailing lists and discussion groups, which offer requisites such as open access, voluntary participation and the freedom to criticise the way power is organised. The barrier of geographical distance is overcome, and the discussion and development of specific issues is facilitated by the existence of online groups relating to almost every possible subject.

However the pervasiveness of advertising continues, and centralised news services remain as some of the main sources of information on the Internet. The Internet provides loci for the public sphere to flourish, but it is not the actual place for discussion that Habermas says we have lost. The Internet's functioning as a public sphere will rely on people choosing to spend their time online using this space for conversations, and perhaps an active aversion to the influence of ideas from centralised media forms, whether these originate on or off the Internet.

Other theorists have also contributed models of the media as a site of struggle. For example, Gramsci argues that the cultural symbols of marginalised groups tend to be appropriated and redefined by power holders (Gramsci 1971). Such approaches have continuing relevance for inquiries about the Internet and power, and are drawn on at times in this thesis.

A range of commentators have argued that the Internet and other communication technologies are "postmodern," but what is meant by this, and the implications for society, contrasts quite sharply between different accounts. Some of those who view contemporary communication technologies as postmodern believe that this means they are liberating and subversive of dominant discourses (Kitchin 1999: 64), while others argue that it creates a layer of hyper-reality which simply serves to shroud structures of oppression (Baudrillard c1994).

Postmodern theory breaks from limitations of the left / right spectrum, and focuses on the construction of identity, systems of signs and production of "reality." The Net is sometimes construed as postmodern because it creates a kind of virtual reality or cyber-space, which is experienced purely as a transient system of signs, constructed both physically and interpretably by the user. It is largely decentralised and culture is (potentially) produced by the consumer (Poster 1995: WWW). Identity can be wrested from the confines of the physical form, meaning for the individual that gender, age, ethnicity or any other form of social category can be instantaneously shifted, consciously or unconsciously. Whether or not this experience is in fact liberating is a subject of ongoing debate for postmodern Internet analysts (Poster 1995: WWW).

Whatever the conclusion, the societal implications for this individualised emancipation are questionable. It is possible that the dislocation of self takes place within and fosters a more deconstructivist position from which dominant discourses are no longer accepted as absolute. However, if this is the case, it presents new challenges with regard to constructing a basis and direction for collective action, formulating positions about what is wrong with social relations and considering what type of changes can be labeled progressive.

A number of authors argue that the networking capacities afforded by the Internet to non-governmental organisations is an area of significant democratic potential (Frederick 1993, Rheingold 1994a: 241-275). Aspects such as the ability to form alliances and share information across wide geographic distances are explored in detail throughout this report.

2.5 Previous Work On The Internet And Environmentalism

A number of other authors have sought to address the potential of the Internet for empowering environmental groups. Most of these are based on the experience of someone who has been using the Internet for environmental purposes, or discuss the ways in which the Internet offers new solutions which activist groups have not previously had access to.

Only one study based on actual research designed to measure the ways in which the Internet may be changing things for environmental groups has been located in the extensive literature searches carried out for this project. This study, *The Politicization Of The Internet For Environmental Groups*, is based on a survey of environmental groups conducted by Joseph Zelwietro (1998). The survey included both “online” and “offline” groups (groups who are and are not using some aspect of the Internet). The aim of Zelwietro’s study was to find out whether there were differences between the online and offline groups, and the overarching conclusion was that online groups are more “politicized”. The study examines the type of information disseminated by environmental groups on the Internet, the importance of the Internet in relation to other media forms, changes in the number of campaigns organisations run after adopting the Internet, and the reasons why some groups are not using the Internet.

Zelwietro’s survey was administered using two methods of delivery – 290 questionnaires were sent out by standard post, while 110 were sent out via email. From a total sample of 371 organisations with valid addresses, he received 135 responses.

The methodology utilised in this study differs from Zelwietro’s. The survey for this thesis was sent out entirely using email, a larger sample of email survey recipients (but a significantly smaller overall sample) was gained, and a range of other approaches were incorporated alongside the quantitative survey.² These differences are largely due to the fact that this research focuses primarily on groups that are currently using the Internet.

² See Chapter 3 for an outline of the methods utilised.

This research also seeks to answer a different range of questions to those discussed by Zelwietro. For example, it asks about the ways in which the Internet might be altering the dynamics between environmental groups and their opposition. There is also a focus on more specific questions about the how the Internet is effecting the relationship between environmental groups and the mainstream media.

Zelwietro's study is utilised at several points in this thesis to provide comparison between online and offline groups and as a source of data on other areas that were not covered by the survey for this thesis.

Other work which looks at the implications of the Internet for environmental groups consists of a handful of journal and magazine articles, and a few articles published on the Internet itself. None of these are based on "research projects" per se, but are nevertheless useful sources of secondary data since they highlight significant examples and introduce anecdotal evidence from environmentalists themselves. Most of these articles do not draw extensively and explicitly on social theory, but in some cases positions are developed in terms of the relations of power on the Internet, and the influences of consumerism (which environmentalists usually oppose).

A major writer on the potential of computer aided communication for activism and social justice purposes is Howard Rheingold. At times Rheingold looks specifically at the use of the Internet by environmental groups, and his work is particularly useful for its historical perspective. Rheingold was writing about computer aided communication before the Internet became a popular medium. Therefore his work contains first-hand descriptions of the early use of networks by environmental groups and others seeking social change (examples include Rheingold 1994a & 1994b).

John E. Young (1994) claims that computer networks are making activists "better informed, better organized, and better able to react quickly to developments around the world" (Young 1994: 20). However he also argues that there are other sides to the Internet, and takes a similar approach to Rheingold in arguing that environmental and other public interest groups need to engage in the debates surrounding control of the Net, or risk losing the advantages of this medium.

Steven Kneeshaw (1996) looks at the use of the Internet for educating American college students on environmental issues. He maintains that the Internet empowers students, and allows them to become more actively involved in their education. Kneeshaw concludes by saying that through the Internet students "might begin to believe, too, that they can make a difference for their world" (Kneeshaw 1996: 11).

Barbara Ruben (1995) gives examples of the way access to information and the ability to find others with similar problems empowers people in communities faced with industrial environmental threats. Ruben also gives a lot of attention to potential problems for environmentalism on the Internet, such as the possibility of the Net being overwhelmed by increasing commercialism, problems of access to resources and skills for many groups, and the possibility that some groups will put less attention into providing information to populations that do not have Internet access. She stresses that the Internet will only have an impact if the people using it are willing to engage in the issues, and that the technology itself can not invoke change if used by an apathetic populace.

Jim Motavalli (1996) discusses the efficiency of the Internet. He argues that although some green groups may be distrustful of technology it offers new opportunities which should not be missed. He also points out that both the friends and foes of the environmental movement are rapidly taking up this technology, and that if environmental groups fail to do so they risk falling into a marginalised position.

A number of articles about the benefits of the Internet have also been written by people in, or working with, environmental groups themselves. For example, an article entitled *Wired For Action* looks at the way Greenpeace has used the Internet to disperse information and conduct online campaigns (Greenpeace 1997). Don Rittner (1995), writing in *Environmental Action Magazine*, and Weldon Dodson (1995), writing in *Sierra* (the magazine of Sierra Club, one of the largest American environmental organisations) provide an overview of the ways environmentalists can use the Internet, and point to some online resources.

Several guides to Internet based environmental resources have also been published. Examples include Don Rittner's *EcoLinking - Everyone's Guide to Online Environmental Information* (1992), Briggs-Erickson & Murphy's *Environmental Guide To The Internet* (1997), and Katz & Thornton's (1997) *Environmental Management Tools On The Internet: Accessing A World Of Environmental Information*. These publications can be taken as indicators of the growing importance of the Internet in the environmental arena.

Another area of commentary that discusses the Internet and environmental issues involves work examining the direct impact of the Internet on the environment. The environmental harm associated with computer production and power consumption is well documented (Glosserman 1996, Krause 1997, Maclachlan 1998, Schmit & Smith 1998, Schultz 1998), and is therefore a factor which needs to be considered when assessing the value of the Internet for environment groups. Literature associated with this topic is touched on in section 4.4.1.

This thesis has been formulated in such a way as to build upon, rather than replicate, existing work. Literature searches have revealed that a limited amount of work on the use of the Internet by environmental groups has previously been conducted. However this study is unique for the following reasons:

- Only one previous study (Zelwietro 1998) has undertaken primary research on the use of the Internet by environmental groups
- This thesis differs from Zelwietro's research methodologically, and in terms of focus. A wider range of research methods are used here, and there are both overlaps and divergences in the types of information collected in the surveys for each study. Also, this thesis positions the struggles of environmental groups within structures of power and control, and explores ways the Internet may impact upon the relationship between environmental groups and these structures.
- Previous works have not included detailed explorations of the ways in which the Internet may be changing how environmental groups use or are portrayed in other media, or the balance of power between environmental groups and their adversaries.

In this chapter the theoretical positioning of the thesis has been outlined and discursive strategies of environmental groups have been situated within dominant discourses. Competing theories relating to the potential of the Internet for democracy and social change have been considered. Previous work about environmental groups and the Internet has been briefly reviewed and compared with the objectives and focus of this study.

The following chapter provides a brief history of the environmental movement and considers some of the challenges faced by contemporary environmental groups. The purpose of this is to provide a background against which the question "what can the Internet do for environmental groups" can be posited.

Chapter 3: Methodology

The empirical research for this study took a multi-faceted approach. The results from a range of research methods were triangulated to create a more solid and comprehensive representation than could be expected from the utilisation of just one method. Among these methods were unstructured interviews, web site content analysis, a database of environmental groups on the internet, and an online survey.

The practical components of this study focused upon environmental groups who are already using the Internet. The inclusion of environmental groups who have not used the Internet would add a valuable dimension to the project. For instance, this would have allowed an examination of the reasons why some groups are not using the Net, and comparisons between the types of groups who are and are not on the Internet. However, in order to keep the project to a manageable size, it was decided to restrict the scope in this way. Fortunately, the previous work of Zelwietro (1998) allows some secondary data about these things to be brought into the analysis.

3.1 Unstructured Interviews

A range of informal communication methods were used to collect qualitative information for this study. Informal face-to-face interviews were conducted with several people involved in the organisation or promotion of environmental groups. The purpose of these interviews was to gain insight into the experiences of people involved in trying to achieve environmental goals through the Internet in a format which would allow more comprehensive answers than is possible through a survey, and which allowed answers to be followed up. A total of ten face-to-face interviews were conducted. Five of these were conducted in Sydney, Australia.

Several informal email interviews were also conducted, with the same purpose as the face-to-face interviews, but using the electronic medium to overcome geographic distance. These varied considerably in length and in format. Some consisted of interviews in which email responses would be followed up by further questions, involving up to four emails with questions sent by the researcher. Others simply involved one or two questions emailed to an individual or organisation (including environmental groups, organisations that support environmental groups, and online environmental journals), or information and views that people emailed after coming across the project web site. In total around 28 instances of this type of email contact, where the information or views contributed to the study in some way, took place.

3.2 Content Analysis Of Web Sites

The web sites of environmental groups and other organisations were used both to establish the ways in which environmental groups use the Internet, and to gain some insight into group's perceptions of the importance of the Internet for their activities. For example, some environmental web sites explicitly state the ways in which they believe the Internet is helping them, and environmental groups in general. Often environmental groups' web sites also include information about their other uses of the Internet, such as discussion groups, or email addresses for various staff members.

3.3 Database Of Environmental Groups On The Internet

A database of environmental groups who have a web site has been created. This is not exhaustive, as it includes only groups that could be located during the course of this study. The primary use of the database has been for the management of the online environmental group survey, described below. Originally it was intended that the database would also be used to quantitatively compare the range of environmental groups who are using the Internet with the range of groups who are not. However a number of practical problems meant that this component did not progress. For example, reasonably complete (or at least representative) lists of environmental groups in general, and environmental groups who use the Internet, would need to have been obtained. No such list was available for this study, and it was not realistic to put this together given time and resource constraints.

3.4 Online Environmental Group Survey

3.4.1 Rationale

The purpose of this survey was to collect information on the ways environmental groups use the Internet and the successes or challenges they may experience. The survey was designed to examine whether the Internet is changing the relationship between environmental groups and the established media, whether the Internet has altered the balance of power between environmental groups and their opposition, and the types of Internet use which environmental groups are finding most effective.

The survey was designed to produce both quantitative and qualitative data. The quantitative component sought to provide an overview which could be contextualised and interpreted using the results of other methods. However there was some uncertainty about whether the response rate would be high enough to produce generalisable and meaningfully quantifiable results, so the questionnaire was also designed to produce useful qualitative information. This information relates more specifically to the individual experience of particular groups, and is used to provide examples which illustrate the various aspects discussed herein.

3.4.2 Sampling

The survey was restricted to environmental groups who have both an email address and a web site. The main method for locating groups involved searching the Internet for environmental groups or organisations and sending email messages inviting participation to all that were found.

The methods used in searching for environmental groups followed a standard pattern of Internet browsing. A range of search engines (including Lycos, Yahoo, Alta-Vista, Excite, Search NZ) were utilised, and links that appeared to lead to organisations that matched the study criteria were followed. Various search terms were employed (such as “environmental activism”, “ecological activism”, “environmental groups”). A large proportion of the organisations included were not found directly through search engines, but through links in other pages. In other words, a form of snowball sampling was utilised.

This sampling method is non-random, and organisations whose web sites have higher rankings in search engine listings, or who are more frequently listed on web pages, were more likely to be included. This tendency was illustrated by the fact that some organisation’s web pages appeared near the top of the search listings on a number of different search engines, and when different search terms were utilised, while others were found only after extensive web searching. This could mean that there was a slight bias towards those who are more proficient or proactive in their Internet use, larger organisations, or those who have been on the Internet longer. This is because rankings in search engine listings can be improved using a variety of tactics, and larger organisations and those who have been on the Internet for longer are more likely to be listed in the links pages of others.

The approach described above was used to find most of the environmental groups included in the sample. However a small proportion of groups were found using other means:

- A printed directory of environmental organisations and resources on the Internet, *Environmental Guide To The Internet* (Briggs-Erickson & Murphy, 1997), included some groups that fitted the research criteria. Six of these were included in the sample.
- Requests to take part were posted on three environmental Usenet newsgroups. Potential respondents were asked to email the researcher to receive instructions for taking part; this was to ensure that only those who fitted into the scope of the research completed the survey. This sampling method introduces the problem of self-selection, but this is not seen as a critical problem because only a small proportion of respondents were located with this method. Three respondents became involved in the survey as a result of newsgroup postings.
- A number of people involved in environmental groups who had contacted the researcher through the project Internet site were asked to participate.

3.4.3 Questionnaire Design

The questionnaire was kept short, in an attempt to ensure minimum inconvenience for participants. The Internet (www) version of the questionnaire was designed first, and the email version was adapted from this.

The www version permitted a greater number of selections for closed answer questions than would be feasible in a paper questionnaire, as some selections were made from drop-boxes, which hide unselected options. For example 80 options were given for the country the organisation is based in, but the question occupied very little room on the questionnaire. The email version had some limitations compared to both the www version and a conventional paper questionnaire, as the text-only quality meant that formatting capabilities were very limited (for example, it was not possible to construct likert scales with options boxes across the page).

A copy of the www version of the survey is included in Appendix 2. For each closed-answer question where a drop-box is used to provide options, the numbers in brackets refer to the key included with the survey (which lists the selections available for each of these answers).

3.4.4 Questionnaire Administration

The questionnaire administration took place between 9 December 1998 and 16 February 1999. The final completed questionnaire was received in March 1999.

The questionnaire was administered entirely in electronic format. Participants could choose whether to respond via email or via an online www form. Requests to take part were emailed to participants. This request included brief instructions for completing the survey through both the www form and email. It also included options to receive participant information sheets either via email or a page on the project web site, and the URL for the project web site.

To respond to the survey via the www form, participants used the URL supplied in the request email (<http://arachna.co.nz/survey01.html>) to direct their browsers to the questionnaire web page. They then filled out the survey, and pressed the "submit" button at the bottom of the page, which instantly sent the results to the researcher's email box. The results were also instantly entered into a text database, eliminating the need for data entry.

To respond via email, participants sent a blank email message to getsurvey@arachna.co.nz. This address had been set up to automatically return an email version of the survey to the sender's address. The participant would then complete the email survey form and send it to a specified email address. An email reminder was sent out to participants approximately one week after they were sent the questionnaire.

3.4.5 Survey Analysis

Survey data was imported (in the case of WWW responses) and entered (in the case of email responses) into a computer database for analysis. The survey was analysed using both qualitative and quantitative methods. The qualitative results have been used to provide examples and give explanations for trends apparent in the quantitative data, and have also drawn attention to important aspects of this topic which may not have otherwise been considered.

The statistical analysis of the quantitative results was very simple, in most cases examining only the percentages of each answer given. The number of responses was not high enough to create meaningful crosstabulations, or to utilise other more advanced analysis approaches.

3.4.6 Survey Response Rate

244 survey requests were emailed to environmental groups and organisations. Eight of these were returned with invalid email addresses, leaving 238 survey requests that were likely to have got through to the intended recipient.

A total of 79 survey responses were received, meaning that the overall response rate for this survey was 33% (79/238). This response rate is approximately that which was anticipated in the design process, and is a fairly standard response rate in comparison with mail-out surveys with one follow up (de Vaus 1999: Chapter 7). It is also comparable to the response rate to the email component of Zelwietro's survey of environmental groups, which was slightly higher at 38 responses out of 100 valid deliveries, or 38% (Zelwietro 1998: 48).

The modest size of the survey sample means that there are limits to the generalisability of the results. Although it is worthwhile to examine the trends emanating from this sample, it can not be assumed that these patterns are representative of a cross section of all environmental groups which use the Internet. Other factors, such as the possibility that groups with certain characteristics may have been more likely to respond than others, also effect the generalisability of the results¹.

¹ If random sampling was utilised the sampling error for this sized response would be +/-12% (de Vaus 1991: 120). However the method for selecting organisations to send the survey to was non-random, so this does not hold.

3.4.7 Overview of Survey Respondents

The survey did not collect a large amount of information about the demographics of respondents (such as type of environmental group, membership size, number of paid staff and so on). This is because the questionnaire was designed to be as short as possible. Also the analysis of respondents' web sites was intended to collect this information – this is a component of the study which could take place at a later stage.

There is a limited amount of non-response information for this survey. That is to say, there is not a lot of quantifiable data which can be compared to information about the broader sample in order to establish whether certain types of groups were more willing to answer the survey.

One criterion for which this information is available is the country or region in which the group is based. Table 3.1 shows the total sample broken into regions. The country spread of survey responses is fairly similar to the spread in the sample.

Table 3.1: Survey Response By Region

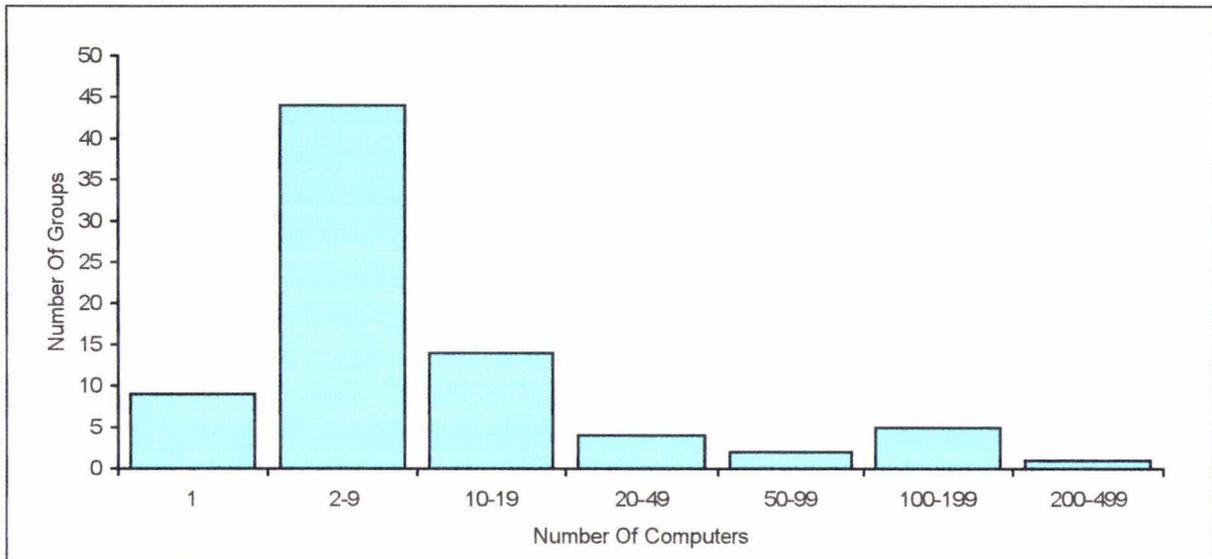
Country / Region	No. In Sample	% In Sample	No. In Survey	% In Survey
United States	139	57%	42	53%
New Zealand	23	9%	8	8%
Australia	16	7%	6	8%
United Kingdom	13	5%	6	8%
Canada	13	5%	9	12%
International	27	11%	4	5%
Other	12	5%	8	6%

Notes: There were a total of 77 responses to this survey question. Survey responses listed as "Other" include those from the Netherlands (3), Argentina (1), South Africa (1) and Uruguay (1).

Another survey question asked respondents to indicate the number of computers used by their organisation (see Figure 3.1). Because not all of the groups included in the survey were formal organisations, respondents were asked to include computers used in the activities of the group, whether or not they were owned by the group itself. Therefore in the interpretation of these results it should be taken into account that the numbers may mean quite different things for different respondents.

Many of the groups who took part in the survey have been using the Internet for a relatively short time, and are therefore still developing their strategies with regard to this medium. For example, 49% (34) of groups who could indicate the year they began publishing information on the Internet said that they did not start doing this until 1997 or later.

Figure 3.1: Number Of Computers Used By Environmental Groups



Note: There were a total of 77 valid responses to this question.

Several groups indicated that they expected the answers to some of the survey questions to change over time as their Internet strategies become more important. For example, one respondent who had not indicated that their group used the Internet in any of the ways listed in the survey commented:

As time passes and we learn more about what we can do with this communication method, we should be able to use it in many of the areas mentioned in this survey.

Therefore this study should be taken as a snapshot, produced at a time when the Internet and related technologies are rapidly being adopted by environmental groups and western societies in general, and when the medium's overarching influence on existing structures of power is far from certain.

Rather than being presented separately, findings from the survey are incorporated throughout the rest of this thesis. Chapter 4 presents a brief history of the environmental movement and discusses some of the challenges facing contemporary environmental groups. The purpose of this is to contextualise the work and to better understand the ways in which the Internet may be beneficial or detrimental to environmental groups.

Chapter 4: The Environmental Movement - Where It's Been And Where It's At

The environmental movement is in crisis, ... but it is very much alive. And far from its nucleus, on the outer edges of its vast penumbra, there are signs of rejuvenation. (Dowie 1995: 259)

In recent years some writers have suggested that the environmental movement which swept the western world in the early 1970's has lost its momentum (Brick 1998, Dowie 1995, Rowell 1996, Stauber & Rampton 1995). Various explanations for this regress have been forwarded, both by writers who are sympathetic to environmental groups and those who are not. Such theories usually implicate complex social, political and economic changes, and the ways in which environmental groups have adapted to these changes. An understanding of the current state of environmentalism is important for this research because it provides a basis for discussing what is needed for the movement to continue as a politically powerful force. More specifically, it provides a basis for considering what environmentalists may want to gain from the Internet, if this new medium is to play an important role in helping to achieve these goals.

The decline of the mainstream environmental movement is observable throughout the western world (see Brick 1998, Dowie 1995, Lemonick 1994). Indicators include dramatic drops in donations to and memberships of major environmental organisations (Brick 1998, Dowie 1995:175, Lemonick 1994:41), the collapse of green political parties (Minnerup, date unknown) decreases in the number of environmentally-friendly laws passed (Dowie 1995:176), and a decrease in sympathetic media coverage (Pope 1996: 13).

4.1 A Brief History Of Environmental Action

As is the case with any social phenomenon, it is impossible to locate the point in time where environmentalism began. Events or changes can be taken as important and useful markers, but if we are to label these markers *the beginning* of something we must also bear in mind that this is a construction, and that a history (or, more accurately, innumerable histories) lie beyond that point (see Foucault 1972). However, as is the case with most social phenomena, many have sought to locate the origins of environmentalism (for example Clapp 1994, Grove 1992), and such accounts are useful in that the circumstances and turns they point to illustrate competing concepts of what defines the environmental movement.

According to Grove (1992), the roots of Western conservationism began in the early 17th and 18th centuries as people began to realise that European colonialism could be destroying parts of the natural world. Grove suggests that in this period the empirical science of the Enlightenment, alongside Romantic ideals of the unspoiled landscape, began to clash with the goals of colonial domination.

Clapp suggests that Malthus, the “founder of democracy”, was perhaps the first “conscious and celebrated conservationist” since his work indicates an awareness of the dangers of growth (Clapp 1994: 1-2). According to Clapp, scientific concerns regarding environmental degradation began to emerge in the 1860’s, but did not stimulate any kind of widespread public concern (ibid: 8). Although concepts of sustainability and environmental degradation began to emerge during this era, nothing resembling the environmental movement as we know it today had developed (Grove 1992: 22-27).¹

It should also be noted that many of the ideas and philosophies central to some forms of modern environmentalism are not specific to “western” ways of thinking, and have existed in non-western cultures long before the periods described by authors such as Grove and Clapp. Concepts from non-western societies (or, at least, western interpretations of such concepts) have been explicitly drawn upon by some in the environmental movement (Booth & Jacobs 1990). Portrayals of indigenous peoples as living in perfect and harmonious symbiosis with “nature” have at times been exaggerated (Dore 1996: 48), and can even be rather patronising in that they impose western ideals of environmentalism on other cultures. However there is evidence that in non-western cultures concepts akin to sustainable resource use, respect for the land and sea as providers, and consumption on an as-needed basis did, and do, exist (for examples see Booth & Jacobs 1990, Harris 1995).

From a western perspective, several authors who document the growth of the American environmental movement trace the origins to the late nineteenth or early twentieth centuries (see Dowie 1995: Chapter 1, Sale 1993, Chapter 2). The Sierra Club, one of the largest environmental organisations in the United States, was established in 1892, and several other organisations formed in the early part of the 20th Century (see Sale 1993 for a timeline of environmental organisations, actions and events). However these early American organisations tended to focus on preserving wilderness and wildlife for the enjoyment of the social elite. In many cases non-whites were excluded, and even condemned as destructive to the “natural wilderness.” As Dowie puts it, with these attitudes “it is small wonder that early American conservationists had difficulty creating a true social movement” (Dowie 1995: 2).

¹ These are only two examples of early environmental thinking. See also Wall (1994) for a broader set of examples from a wider variety of perspectives, going back as far as ancient Plato and Lucretius.

Despite this more extended history of environmental ideas, organisations and activities, the popular conception of the environmental movement as we know it today is restricted to the period from the late 1960's or early 1970's onwards. Authors who write about the history of the movement usually support this and show that changes occurred in this period which suggest that as a milestone for the beginning of the environmental movement it is more than arbitrary (but less than absolute).

Sale argues that although by 1960 membership in major US conservation organisations came to more than 300,000, "there was really no such thing as an environmental *movement* – concerted, populous, vocal, influential, active" – at this stage (1993: 4). By some accounts, it would appear that concerns regarding environmental issues were beginning to find their way into the public consciousness in a significant way during the 1960's, and it was during the 1970's that this concern consolidated itself into a "movement" (Clapp 1994: 8-9). Some consider the milestone which marks the beginning of the environmental movement to be the first Earth Day of 1970 (see for example Brick 1998: 195). Others argue that the release of Rachel Carlson's *Silent Spring* in 1962 was the catalyst that sparked the movement (Sale 1993: 3, Stauber and Rampton 1995: 123).

In some respects the environmental movement spans the western world and beyond, in the sense that events and organisations in one part of the world are often reflected in other countries. However the movement takes very different forms in different locations, and has different histories. For example, Duijvelaar outlines the importance of communist governments in the formation of environmental groups in Central Europe, and draws the distinction between those created "from above" and those created "from below". The first category already existed under the supervision of the communist governments, while the second existed in opposition to the governments - either finding ways to work through officially established and legal groups, or as underground organisations. In the 1980's many of these organisations started to become established, and by around 1989-1990 held considerable influence and a generally optimistic outlook. However from 1993 onwards support for these groups started to decline, largely due to economic difficulties (Duijvelaar 1996).

4.2 Problems Faced By The Environmental Movement

The contemporary environmental movement has experienced a deterioration in its active support base and a diminution in its impact upon actual world events (Brick 1998, Dowie 1995, Lemonick 1994). Some of the possible reasons for this decline are explored below.

4.2.1 Compliance – Environmentalism By Negotiation

Some commentators argue that important sectors of the environmental movement have become compliant with the corporations and government agencies they should be fighting, absorbed into commercial structures, and effectively neutralised (Beder 1997: 130-133, Dowie 1995: 53-59, Stauber & Rampton 1995: 125-140).

Commercial interests have learnt that an openly confrontational approach to environmental issues is unlikely to work because public sentiment is too strong. Confrontational approaches only alienate people further and reinforce the public's negative perceptions of industry (Rowell 1996: 72).

A strategy that has proved infinitely more successful has been the redefinition of environmental ideas themselves. By employing aspects of the language used by the environmental movement, by reinforcing rather than challenging the "environmental = good" assumption, and by placing their names and logos next to those of environmental groups, industries have been able to create the impression that they are saying the same thing as the environmental movement (Tokar 1997: WWW). Not only has this quelled the growing tide of resentment towards industrial disregard for ecosystems and human health, but it has allowed industries to capitalise upon the goodwill that people had begun to feel towards environmental groups.

This high profile environmental self-congratulation has been given credibility by endorsements from large environmental organisations seeking sponsorship, publicity for themselves, and environmental concessions. Although the environmental concessions gained from such alliances typically achieve some minor reduction in pollution, degradation or resource use, this is often negligible in comparison to the companies' actual environmental impact. For example, the Environmental Defense Fund (EDF), a major US organisation, has played a key role in turning around the environmental image of the McDonalds hamburger chain. Stauber & Rampton (1995) argue that by taking credit for the changeover from foam to cardboard containers (despite the fact that most of the pressure to do this came from other groups' grassroots campaigns) EDF "assists McDonalds in fooling the public into believing that something significant has occurred" (1995: 129).

The corporate usurping of environmentalism became especially obvious through the 1995 Earth Day, an event designed to mark the anniversary of the original 1970 Earth Day. This became a major public relations event sponsored by and used in the advertising campaigns of some of the most notorious polluters, such as Monsanto, Peabody Coal, and Georgia Power (Beder 1997: 129, Stauber & Rampton 133-137, Tokar 1997: WWW).

Almost no attention was given to the institutions, economic systems or societal structures responsible for the current state of the environment, and any challenge to the actions of corporate polluters was markedly absent. Emphasis was placed on the individual rather than the corporation or state - the main messages of the event urged people to recycle, drive less, stop wasting energy, and buy better appliances (Tokar 1997: WWW).

It is for this reason that environmentalism can remain an important, even passionate issue in the popular imagination, yet inspire very little in the way of popular action. Numerous surveys have shown that overwhelming proportions of the population in western countries consider themselves to be “environmentalists,” “concerned about the environment,” or “green” (Dowie 1995: 260, Stauber & Rampton 1995: 126, Wirthlin Report 1997: WWW). However this does not mean that major changes have been made to prevent environmental degradation. Media, government and commercial interests are keen to align themselves with the environmental agenda, but are also quick to say that environmentalists have “gone too far” when actions or claims begin to push for meaningful change (for example see Denson & Long: 1999).

Companies who publicly “work with” environmental groups routinely implement practices that represent striking contradictions to this apparent goodwill and co-operation. For example, the same companies who openly give money to mainstream environmental groups are often simultaneously lobbying government to have environmental regulations removed, funding institutions who say that environmental problems are not real, and manufacturing “grassroots” anti-environmental campaigns (Beder 1997, Stauber & Rampton 1995: Chapter 4). This flip-side of corporate environmental public relations is explored in Chapter 7, which examines the way the Internet may be effecting the relationship between environmentalists and the organised anti-environmental opposition.

4.2.2 Internal Dissent and Lack Of Direction

Another problem which has plagued the environmental movement in the late eighties and through the nineties has been infighting on a number of levels, ranging from personal aggravations within organisations to major dissent between various strands of the movement (Brick 1998, Dale 1996, Dowie 1995: 208-212, Lemonick 1994, Predelli 1994). This dissent is fueled by external antagonism from industry and other interests who want less, rather than more environmental regulation. This means that moderate environmental organisations suffer simultaneous attack from industry representatives who say they are being too tough, and other environmentalists who say they are not being tough enough (Brick 1998: 202).

4.2.3 Alienation

Some commentators argue that the greatest shortfall of contemporary environmental groups is the alienation of large sections of society from the environmentalist cause. Too many environmental groups focus on the environment as a single issue, and fail to take into account the human consequences of the policies they propose.

The mainstream environmental movement has historically been made up largely of people from traditionally dominant sectors of society. According to Sale:

The people in the important mainstream environmental organizations are very largely white and very largely well-off, the more so as you move from membership to board of directors, and they are very largely male as well. ...their concerns have tended to mirror those of the white suburban well-to-do constituencies and that the kinds of people who have been attracted to the staffs have tended to be college graduates, often professionals and the same general milieu as the people they deal with in legislatures and boardrooms. (Sale 1993: 98)

The environmental movement has also been criticised for failing to provide viable alternatives. For example, one publicity consultant for several American national environmental organisations argues that, “the movement has lost support because it has failed to demonstrate convincingly that its goals are compatible with the economic needs of the country” (quoted in Dowie 1995: 23).

Of course, there are two sides to this ‘coin’. The compatibility with a country’s economic *needs* depends upon what those needs are; if the current American lifestyle is to be the benchmark of those needs, then it is quite possible that some goals of the environmental movement are *not* in fact compatible with the country’s “needs”. Many claim that western lifestyles are not sustainable, and that it is imperative that levels of consumption be reduced (for examples see Rosenblatt 1999). Therefore environmental protection may not be compatible with the peoples’ “needs” as defined by the contemporary consumerist ethos, but in order to persuade people that they are some environmental groups may make concessions in terms of where the environmental goalposts are placed.

4.3 Grassroots Environmentalism

Alongside the major national and international environmental organisations there exists a plethora of usually smaller, often more localised, and much less formally structured environmental groups. These grassroots groups are often comprised of people who:

- are concerned about what is happening in their area,
- do not feel that the mainstream organisations are effectively addressing the key issues, or
- want to make their own decisions about how to combat environmental destruction, rather than working within the structures of larger organisations.

Perhaps the best grounds for distinction between mainstream and grassroots environmentalism groups is the presence or absence of a defined management and marketing structure. Grassroots groups are often small, but can also be large (as in the case of Critical Mass, a movement which has flourished in numerous cities around the world). Geographic locality may sometimes be important, but grassroots groups can be globally dispersed, especially now that the Internet and other communication technologies are breaking down communication barriers.

4.3.1 NIMBYs

Not In My Back Yard (NIMBY) is a phrase originally coined by those unsympathetic to localised grassroots activism (Stauber & Rampton 1995: 202). The term supposedly refers to people prone to complaining about any of kind of activity that might threaten their health or local environment, but who are happy to enjoy the benefits of industrial society as long as the less pleasant aspects are far from their doorsteps. The implications of the derisory NIMBY label are that the uglier side of industrial society must exist somewhere, and that if it happens to come to your neighborhood then this should be accepted.

However a number of writers sympathetic to environmental goals have recently begun to identify NIMBYs as the true champions of the environmental movement, fighting with very little in the way of resources to protect their families and communities (see for example, Stauber And Rampton 1995: 89). In the words of Sue Arnold, a prominent environmentalist:

Let there be no mistake about the identity of the front-line fighters in the great environmental battles – they have been and continue to be the locals. Born again greenies if you like; townspeople who just won't cop wanton destruction of their communities; the grass roots of the environmental movement, the real political threat to the major political parties. (Arnold 1989, 55)

A closer look at NIMBY groups shows a great deal of diversity – sometimes people may be happy for the problem to be moved elsewhere, but very often the concern is with the broader effects as well as the local impact.

It often makes sense to deal with things at a local level, where the problems are tangible and accessible, and the combined effects of people standing up for their communities can be far reaching. If NIMBYs exist everywhere, polluters and resource-depleters will have to change their practices rather than simply move them to another location (Stauber & Rampton 1995: 201).

4.3.2 The Ecojustice Movement

Some argue that the type of mainstream environmentalism that has come to define the movement in western countries is a luxury that only the well off can afford (Kaimowitz 1996)². The long term and wide-spanning goals of mainstream environmentalism such as climate change, ozone depletion and biodiversity are unlikely to be a primary concern for those for whom mere survival is a daily struggle. In the developing world, poverty, disease and hunger vastly overshadow seemingly abstract notions of global sustainability. Even in developed countries unemployment and poverty are much more immediate concerns for many (Alexander 1994). The traditional approach to environmentalism seems to have relevance only to those whose basic needs are securely met. This is evidenced by the decline of environmental concern in the face of economic hardship in the former East bloc (Alexander 1994: 40). One Russian environmentalists says:

What happened to Russia's green movement? People now say, give us bread, shelter and clothing – then we can think about ecology. (Borozin, quoted in Alexander 1994: 40)

And in Latin America, where participation in environmental organisations is very much restricted to the wealthy urban minorities:

For the vast majority of Latin Americans, the basic issue is not environmental conservation but day-to-day survival. Getting these popular sectors involved and making the environmental movement something more than a dim reflection of developed country environmental concerns will only happen once the immediate impact of environmental degradation in peoples' daily lives is addressed. (Kaimowitz 1996:31)

The environmental justice (or “ecojustice”) movement reverses this trend. For ecojustice proponents, the goal of environmental protection is wedded to the goal of improving the circumstances of oppressed and exploited people (Wenz 1988: 2).

² Also see McAdams, 1991 for a study on the intersection between race, class, gender and environmental activism.

It is important to understand that, in the majority of instances, the objectives of environmental justice are not a compromise between environmental benefits and a more just situation for exploited and marginalised people. The basic precept of ecojustice is that the same processes that are destroying the environment are systematically exploiting certain societies or populations (Sarokin & Schulkin 1994, Wenz 1988). Examples of this may include toxic waste dumping in a primarily African American community, unsustainable commercial fishing in waters that local people use as a food source, or the exploitation of third world labor in a factory which pumps pollution into the air.

Ecojustice campaigners point to what they see as intrinsic problems in contemporary social structures and economic systems. They say that these structures and systems have thrown the world into a state of disarray, causing disharmony between people and peoples, environmental imbalance at a catastrophic level, and massive economic disparities (Sarokin & Schulkin 1994, Shiva 1997, Wenz 1988). For example, the entire twentieth century trend towards globalisation is viewed by many commentators as simultaneously contributing to increasing economic disparities and environmental damage. Referring to India, Vandana Shiva says:

Globalisation is about liberalised imports and exports, which makes India export our best natural wealth and import the junk and wasted pollution of international production, including of the Western economies. This means India provides an environmental subsidy to global economic growth, precisely by not counting that destruction. (Shiva 1997: WWW)

Mainstream environmental groups normally struggle to convince the media, politicians and the public that they are non-political and do not have other agendas. In contrast, ecojustice groups explicitly fight for social change as a crucial and unavoidable part of environmental protection. According to some authors, such as Shiva, an integrative approach is imperative:

The environmental movement can only survive if it becomes a justice movement. As a pure environmental movement, it will either die, or it will survive as a corporate 'greenwash'. Anyone who's a sincere environmentalist can't stand that role. But it has limitless possibilities, as both an ecological and justice-based movement. ... The antidote to ... globalisation and a national elite that is corrupted is local democratic action, and an assertion on the part of people to defend themselves. (Shiva 1997: WWW)

4.4 Reflections

Within the environmental movement, large national and international organisations have traditionally held the most credibility in the eyes of the media, and exercised the most leverage on governments (Dowie 1995: 136). However an examination of contemporary environmentalism shows that these should not be unquestionably viewed as *the* voice of the environmental movement, since these organisations represent the views and philosophies of only one sector of environmentalism.

This is not to downplay the importance or value of the mainstream environmental organisations. In some instances corporate muscle has to be combated with sizable, coordinated resources (and the resources of even the seemingly huge environmental organisations are dwarfed by those of most industries – see Dale, 1996). Government influence is also something which can not be ignored, and often it takes the resources and skills of the larger organisations to access these sites of power.

However, there is increasing demand for room to be made for, and legitimation given to, the diverse range of grassroots groups which are emerging throughout the world. It is these which are perhaps more likely to constitute a “social movement” with the potential to initiate fundamental changes in the way society works. This is important because there appears to be a limited amount of discursive space for environmental issues, both in terms of the amount of time and attention the media, policy makers and the public are willing to devote, and in terms of discursive closure attempted by differing perspectives. In this vein, some authors argue that by promoting the message that adequate environmental protection can be achieved by working *within* the structures of power, mainstream organisations tend to diffuse the sense of crisis which activist groups are attempting to communicate and de-legitimize perspectives which call for fundamental changes in societal structures (Beder 1991: WWW, Stauber & Rampton 1995: 130).

A number of contemporary commentators believe that the future of environmentalism will increasingly depend on small, innovative grassroots organisations (see, for example, Dowie 1995, Kaimowitz 1996, Rowell 1996, Stauber & Rampton 1995 and Tokar 1995). The ability of these small entities to achieve significant political and social change is likely to rely upon their ability to come together over common goals, and mobilise in a unified way where required.

As we have seen, there is a great deal of diversity within the environmental movement, which includes mainstream organisations, localised NIMBY groups, ecojustice campaigners and a wide range of others. Each has its own scope, organisational structure and philosophical underpinnings. It can be expected that the communication and informational needs, and therefore the use of the Internet, will vary between these different types of group. This is why it is important to draw these distinctions before moving to an examination of Internet usage.

In Chapter 5, general environmental group experiences and patterns of Internet use are examined. In particular, the ways the Internet may effect some of the issues introduced in this chapter are explored. Attention is given to issues such as the ability of small groups to network and coordinate unified action, and the role of the Internet in facilitating more participatory and informal organisational structures. These factors are especially relevant for the emerging tide of grassroots groups which Dowie (1995) and others view as playing an increasingly important role in 21st century environmentalism.

Chapter 5: Environmental Activism and The Internet

There can be no doubt that the Internet is changing the ways in which some environmental groups operate - a significant number of groups owe their entire organisational scope and structure to the medium, and some new groups would never have come into existence were it not for the communication opportunities offered by the Net. Other groups have adapted Internet strategies to mirror their offline structures and activities, enabling them to employ tried and true measures with increased interaction and efficiency.

This chapter illustrates patterns of Internet use by environmentalists, and explores some of the general ways in which the Internet may be influencing the effectiveness of environmental groups. The potential of the Internet to facilitate better communication within groups, and to allow groups to do more with limited resources is examined. The ways in which the Internet may have changed some environmental groups, the possibility of effective environmentalism outside the confines of a group or organisation, and new forms of networking and support are also discussed.

In addition to examining the benefits for environmental groups, this chapter contemplates challenges that exist for online environmentalism. For example, how can the Internet be used to protect the environment when its physical manifestation is very much environmentally *unfriendly*? Inequality of Internet access is also considered, with regard to the demographics that environmental groups are able to access through this new medium, and the types of groups which are likely to gain the most benefit from the Internet.

5.1 Uses Of The Internet

Before exploring the ways in which the Internet may be influencing the effectiveness of environmental groups, it is worthwhile examining the ways in which environmentalists are actually using the Net. One part of the online survey undertaken as part of this research asked participants to indicate which year they began using various aspects of the Internet, and to rate the importance of each aspect. Table 5.1 presents the responses of the 79 environmental groups surveyed.

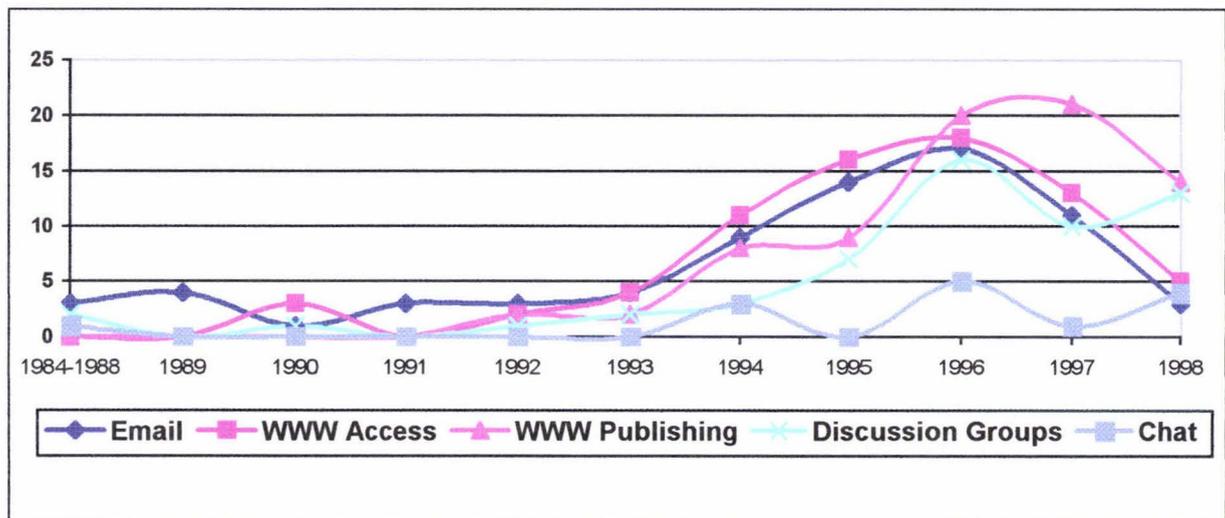
Table 5.1: Use Of Internet Components

	Email	WWW Access	WWW Publish	Discuss. Grps	Chat
Don't Use / No Resp.	1	4	2	21	66
Unsure	6	3	2	4	0
Indicated Year	75	72	76	55	14

Note: "Indicated Year" shows how many people stated the year they began using the technology¹.

Figure 5.1 shows the number of groups which began using different forms of Internet communication each year. No respondents indicated that they had begun using any form of Internet technology prior to 1984.

Figure 5.1: Number Of Groups Who Started Using Technology By Year



These results show that amongst the survey population there has been a slow but steady uptake in Internet technology until 1993, when groups began to adopt the technology at a faster rate. It should be noted that the drop-off in results in the most recent two years does not indicate a decrease in technology utilisation. Instead, this can be explained by the fact that only groups that are using the Internet have been selected, and that it is therefore likely that those who have been using it for a slightly longer time will have had more chance of being included in the sample.

¹ The online questionnaire included a "don't use" option, which has been grouped with non-response. Usually respondents did not make a year selection in cases where they also did not indicate the importance of a particular technology, which suggests that most instances of non-response mean that technology is not used.

Email was the technology most quickly adopted prior to 1993. This is because in the early years of the Internet email was often the only affordable type of computer communication available to environmental groups. From 1993 onwards groups begin to access the World Wide Web (WWW) at a much greater rate, mirroring a sudden increase in use and awareness of this medium in western societies more generally (Chon 1996: 59). The number of groups starting to use email for each year closely follows the number starting to access the WWW, presumably because an email address is usually included with an Internet account providing WWW access.

The number of groups starting to use email in each year in the later period is slightly lower than the number beginning to access the WWW. This is most likely because some groups were already using email before they gained WWW access².

None of the groups surveyed had published on the Net prior to 1992, and three quarters had not used the medium for this purpose prior to 1996. The more recent uptake of Internet publishing, in comparison with WWW access and email use, can be explained by the likelihood that most individuals and organisations would want to become comfortable with the more passive use of the technology before beginning to create their own web sites. Also, publishing on the Internet has become easier in recent years, with the development of software which reduces the amount of technical expertise required to create a web site.

5.2 Importance Of The Internet

No survey respondents indicated that the Internet had failed to increase the success of their group or had been a hindrance to achieving success. 29% of the 76 groups who answered this question said that it had helped them to be a little more successful, and 71% of respondents said that the Internet had helped them to be much more successful.

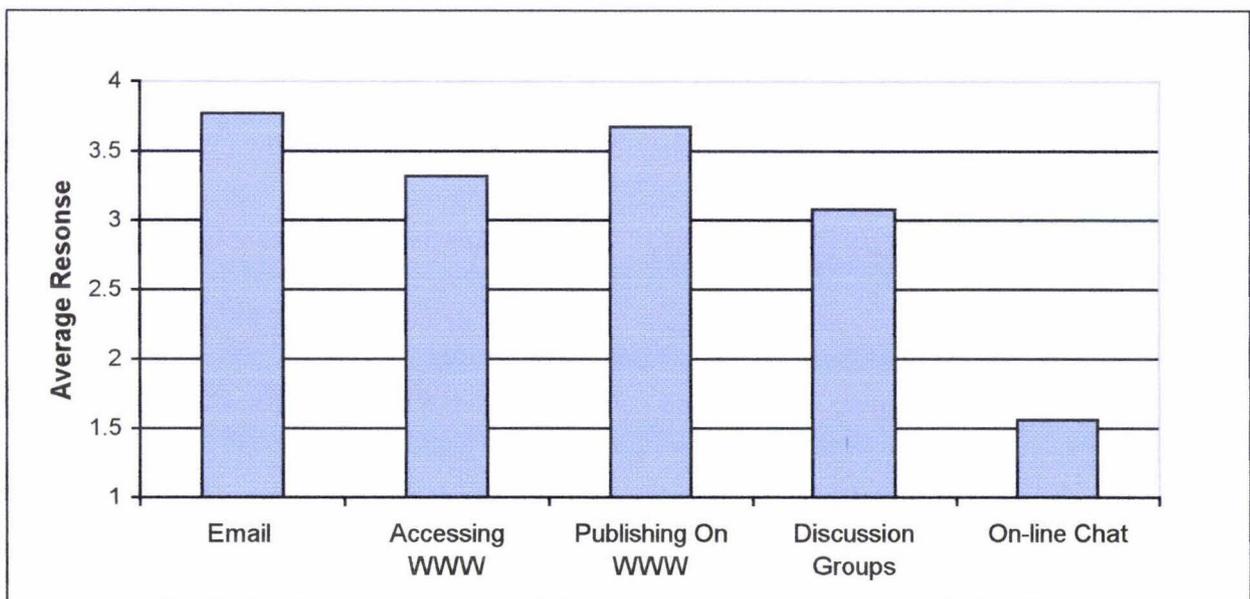
The results to this question alone suggest that the Internet is beginning to play an important role in contemporary environmentalism. Although this tells only us about *perceptions* of the role of the Internet in helping groups to bring about tangible change, the positive attitude indicates that the experiences of groups using the medium are for the most part favourable.

² Of the 64 respondents who use both email and access the WWW and were able to indicate the year they started using both of these, 27 began using email before they began accessing the WWW. The remainder began using email and the WWW in the same year; none started accessing the WWW before they had email.

In addition to indicating the overall impact of the Internet on their success, survey respondents were asked about the importance of each component for their group or organisation. Figure 5.2 shows the perceived importance of email, access to the World Wide Web (WWW), publishing on the World Wide Web, discussion groups, and online chat for the environmental group representatives who took part in this survey³.

The results indicate that email and web publishing are the most important components of Internet communication for the survey population, with 80% (email) and 78% (web publishing) of respondents indicating that these are “very important”. Few groups consider online chat to be an important part of their Internet activities – possibly because this is a format more conducive to social exchange than organising or exchanging detailed information. The importance of online discussion is likely to depend on the structure of the particular environmental group – for example, it is likely to work well for grassroots groups with a non-hierarchical structure, where most members have access to the Internet.

Figure 5.2: Importance Of Internet Components



Note: The number of responses to each of the questions represented in the graph were as follows: Email, 71; Publishing, 68; Access, 66; Discussion, 55; Chat, 25.

³ The survey responses to this closed answered question were coded as follows: very important: 4, moderately important: 3, slightly important: 2, unimportant: 1.

5.2.1 Organisational Potential

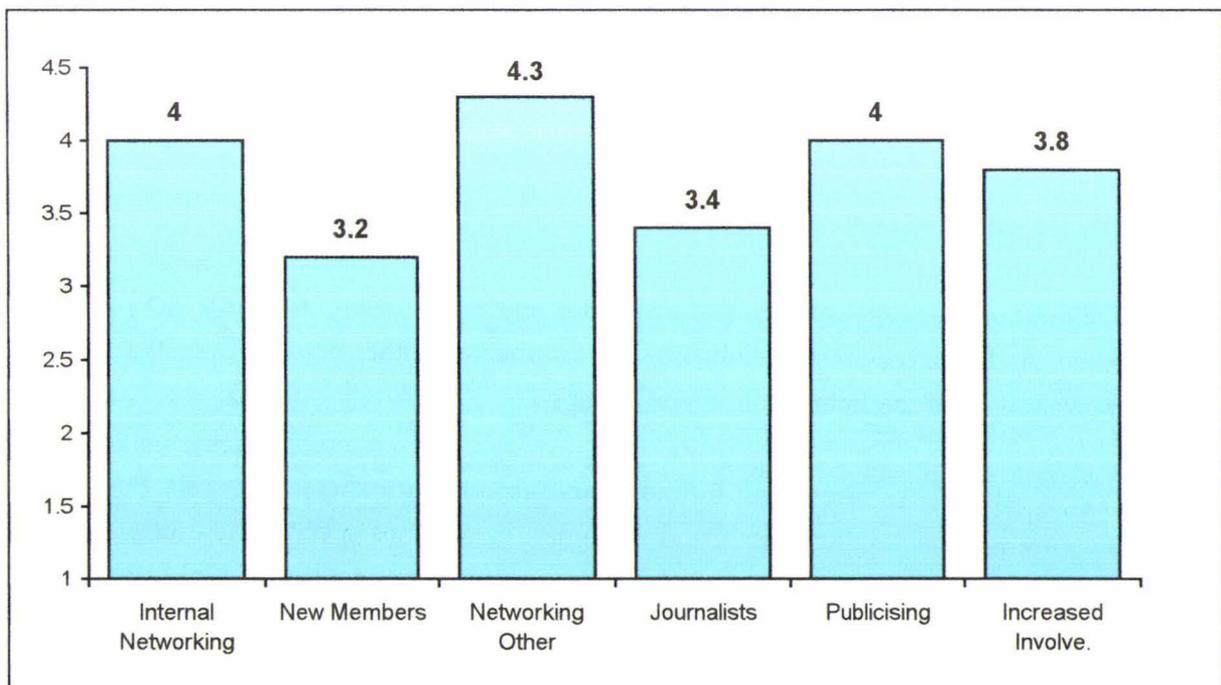
Internal organisational implications have been one of the most consequential effects of the Internet for environmental groups. Despite the speed at which new Internet based technologies are emerging, simple text based email remains the most important component of this medium for many groups (as indicated by the survey results above).

Survey respondents were also asked to indicate the importance of the Internet for a range of purposes. A five point scale was utilised. A rating of 5 indicated that the Internet is “very important” for a particular purpose, 3 indicated it is “moderately important”, and 1, “unimportant.”⁴ The following reasons for Internet use were included (as worded in the survey):

- Networking within the organisation.
- Gaining new members.
- Networking with other organisations.
- Providing information / contacts for journalists.
- Directly publicising issues.
- Encouraging increased involvement in the organisation.

Figure 5.3 shows the average results for each of these categories. Spread graphs and non-response details for each category are included in Appendix 3.

Figure 5.3: Importance Of The Internet By Purpose



⁴ In the WWW version a likert scale was used which did not show the numbers, but the results were returned in this format. The email version used these numbers.

The organisational potential of the Internet is essentially helping environmental groups to become more effective by permitting an increase in the amount of internal and external communication, while utilising a restricted level of time and financial resources. As Figure 5.3 shows, the importance of networking within the organisation averaged between moderately important and very important for the survey population. Some survey respondents said that the Internet has dramatically reduced their phone and postal budgets, and some said that it has greatly improved communication within the group, meaning that decisions can be made faster and activities organised much more efficiently. Some examples of such responses are listed below:

- Rapid communication with board members; faster decision-making with more participation from board; ability to make decisions, edit draft documents, etc. without calling a meeting.
- Internet is the solution for a global (international) network of people like ours. Phone is too expensive (We do not charge). Fax is better. Email is perfect.
- It has cut our postage budget down to almost nothing. We e-mail issue alerts; and set up web sites for sharing information. We set up petitions at a web site. Everything we used to use mail for we now do on the internet.
- We are a provincial network with members all over the province. The Internet facilitates time-efficient; cost-effective and increased communication between members. In effect; geographical barriers are lessened and people are more connected and in touch with ongoing events and activities.
- Fast way to get information out and in. Easy way to communicate with those not physically present in the office. No longer have to send out materials for information requests-direct people to the web site.
- Greatest advantages are those created by the availability of e-mail. Can contact several people at the same time (cutting down on phone calls). Enables one to send messages at times that may be inconvenient for phone calls.

5.2.2 Networking

The ability of small grassroots organisations to communicate with each other, exchange information, and provide support may be one of the key factors in determining the difference between numerous disparate instances of resistance and a movement of significant scope and consequence. As the survey results indicate, networking with other organisations is one of the most important uses of the Internet for many groups.

Internet networking takes place both by individual groups with shared interests finding and communicating with each other online, and through organisations specifically created to bring groups together via the Internet. Internet based networks allow environmental groups to let each other know what they are doing, share information and co-ordinate action. These networks range in their organisational role – some simply provide a place for groups to place information about themselves on the Internet and take part in online discussion forums, while others actually play a major role in co-ordinating action between environmental groups.

For example, the Institute for Global Communications (IGC), is described by Howard Rheingold as “the largest and most effective activist network in the world,” and “a kind of virtual community for NGOs” (Rheingold 1995a: 263-266). Formed in 1987, when EcoNet (formed in 1982) and PeaceNet (formed in 1986) joined together, IGC is one of the first networks of its kind. It now consists of these two networks, as well as Conflict Net, LaborNet, WomensNet and Anti-RacismNet. IGC, in conjunction with the affiliated organisation the Association For Progressive Communications connects existing networks of NGOs from around the world. EcoNet, IGC’s environmental component, was reportedly the world's first computer network dedicated to environmental preservation and sustainability, and continues to be active in facilitating environmental communication, as well as providing up to date environmental news and alerts (IGC web site 1999).⁵

Another example of Internet networking is the EnvironLink network. Originally created in 1991 as a mailing list of 20 student activists, it has become one of the best known and most comprehensive environmental sites on the Internet, bringing together listings of environmental groups and a range of other environmental information. EnviroLink includes resources such as chatrooms, discussion boards, a Sustainable Business Network and an Environmental Education Network. It also provides free web hosting, automated e-mail lists, e-mail accounts, real-time chats and bulletin board systems to any non-profit environmental group.⁶

5.2.3 Increased Effectiveness Through Faster Communication

In some cases the speed of Internet communication has been crucial for the success of environmental campaigns. This is usually in situations where fast action is necessary to halt the conduct of a government or commercial opponent – for example where environmentally harmful activities are about to take place, or laws are about to be passed which will permit such activities.

In many instances the time delay between releasing information about and implementing activities which pose a threat to the environment is kept deliberately short so that concerned citizens do not have a chance to respond (Ruben 1995: 17). The Internet may aid in the rapid communication of information in these instances.

⁵ The IGC web address is www.igc.org, the EcoNet address is www.igc.org/igc/econet/

⁶ The EnviroLink web address is www.envirolink.org

For example, in 1994 the Internet was used to prevent a US Senator from “railroading through” a proposal to transfer land for a low-level nuclear waste dump in California’s Ward Valley (Ruben 1995: 17). US Senator Bennett Johnston was attempting to push through approval for the dumping site in the Mojave Desert without hearings or further studies, despite the fact that environmentalists and Native American activists had been fighting to prevent the facility for several years. It may not have been possible to get enough support in time to challenge the dump if conventional communication methods had been used, but by using the Internet, Nuclear Information And Research Service (NIRS) were able to stop the project. An urgent plea to online activist lists on services such as EcoNet and America Online generated enough letters to compel Johnston to terminate the proposal within a week. According to Michael Marriotte, executive director of NIRS:

We never even used a piece of paper. This was a case when using the postal system would have just been far too slow. Electronic communication works, it definitely works. (quoted in Ruben 1995: 16)

5.2.4 New Types Of Environmentalism

As well as facilitating the organisation of existing groups, and allowing them to achieve more with the resources they have, the Internet has permitted the formation of new modes of environmental action which probably could not have previously existed in their current form.

The Internet has the capacity to bring together people who do not have contact with others with the same problems or views in their local community. The ability to share ideas and information with others is enormously important, as environmental issues are often of a nature that individuals acting alone are fairly powerless – the problems themselves are generally large and complex, and possible solutions frequently require powerful commercial or government entities to take notice and action. The Internet gives people the opportunity to find each other. In cases where environmental issues are localised, individuals who find each other through the Internet can work together to coordinate action. In cases where issues span wide geographical regions information such as technical or scientific data, types of protest action which have been effective elsewhere, and legal knowledge can be exchanged.

An example of a localised issue involves an American family in Ohio who went online to fight a dioxin-producing rubbish incinerator after two of their children developed tumors. Sherri and Stan Losko had initially been effectively ignored by both plant officials and the US Environmental Protection Agency. However on Internet environmental bulletin boards they found huge amounts of information and support, which enabled the family to proceed with a battle which would have otherwise seemed impossible to win. The plant was shut down, reportedly “due to a combination of citizen pressure and the high costs of operating the plant” (Ruben 1995: 16). In the words of the Loskos:

Without making that connection over the computer, I'm not sure where we'd be today. We were on the computer around the clock. It's a really serious resource for people who need help. (Sherri Loscko, quoted in Ruben 1995: 16)

Online networking gave us the information to be brave enough to stand up to local politicians. [...] Otherwise we would have been ruled out as too emotional. It empowered me as a mad dad who didn't want to see his boy get sicker to confront what was going on. (Stan Loscko, quoted in Ruben 1995: 16)

The Losckos had not previously been active in environmental issues, but this success has inspired them to continue to network with activists around the world (Ruben 1995: 17). In this way, the ability of individuals to find each other through the Internet not only empowers the people concerned, but also has implications for the growth of the environmental movement in general.

The Internet can also facilitate grassroots environmental action across wider geographic spans than previously possible. The advantages of the Internet for intra-organisational networking and communication have already been discussed. However, as well as making organisations more efficient and inclusive, the Net can also enable the existence of groups with a greater scope than previously feasible. An early example of such a group is EarthTrust: “an extremely low overhead transnational organisation that exists almost entirely as a network of volunteers scattered throughout the globe,” aimed at addressing issues that are beyond the scope of local groups (Rheingold 1995: 262). EarthTrust provides its offices around the world with cheap computers, email accounts, modems and printers. The organisation has volunteers in cities, where governments can be lobbied, and remote locations, where the actions and impacts of industrial activities can be monitored. According to Earthtrust's director, Don White, “Our organization has accomplished goals over the last two years that rival the achievements of organizations with twenty times Earthtrust's annual budget” (Rheingold 1994: WWW).

Of course, transnational environmental organisations existed prior to the Internet. The difference is that the Net enables the formation of international movements without the need for a hefty bureaucratic administration or fundraising component, meaning that something closer to the grassroots ideal can be achieved at this level.

5.2.5 The Internet As An Information Source

Environmentalists often need to have access to a wide variety of complex and obscure information. Before any environmental group can make a convincing public statement about an issue, lobby government for change, or initiate legal action, it is necessary to demonstrate in very specific terms that a problem exists, the scope of the problem, and the causes of the problem.

This may mean finding out how much waste a particular factory is producing, researching the effects of certain pollutants on ecosystems or human health, demonstrating the long-term effects of the fishing industry on the survival of some species, or producing indicators to show the major causes of greenhouse gases. Environmentalists may also need information about how the law can be used to prevent environmentally harmful practices.

As most environmental groups do not possess the resources to carry out a lot of primary research or to spend large amounts of time and money locating data an increase in the ability to quickly access accurate information is likely to be very valuable. Vast amounts of information, on virtually every conceivable type of environmental issue, is accessible through the Internet. This includes data on global issues, information which may be applicable in numerous contexts (for example, information on the effects of particular chemicals), and regionally specific information.⁷

27% (20/74) of the survey respondents who answered one or both of the relevant questions listed access to information as one of the main advantages of the Internet, or one of the reasons why it was helping them to become more successful.⁸ Jim Motavelli, writing in *E / The Environmental Magazine*, believes that "probably the best use of the Internet for environmentalists is as an information source" (Motavalli 1996: WWW).

An example of this is the University Of Iowa Center For Global And Environmental Research site.⁹ This lists links to 30 environmental directories, 14 research programmes, 35 environmental computer models, 76 environmental education resources, 51 environmental newsletters, journals and magazines, 32 environmental law resources, 51 air pollution / air quality data sources, 41 ozone depletion / global warming resources, 50 biodiversity resources, 8 paleoclimate resources and 43 "special topics." Over 600 links to sources of digital geographic and environmental data are also included in a separate list, grouped under topic headings.

The introduction to the University Of Iowa lists accurately describe these as "just a sample" of the environmental information available on the Internet. A book published in 1997 lists other environmental resources available on the Internet, including topics on regulatory information, water, land and soil, air and chemical-specific information (Katz & Thornton 1997).

⁷ Examples of literature which discusses the availability of environmental resources on the Internet include Reichhardt (1996), Notess (1994), Feidt & Roos (1995) and Briggs-Erickson & Murphy (1997).

⁸ This was an open ended question.

⁹ The Center For Global And Environmental Research listing can be found at http://www.cgrer.uiowa.edu/servers/servers_environment.html.

Environmentally-aware individuals are another major source of information on the internet. As Howard Rheingold describes:

A person concerned about ecology can go to an ecology discussion area and browse the list of discussions, selecting from topics devoted to local water resources or national air quality. By organizing information this way, networks of people can serve as informal support systems for one another; a conferencing system that includes a broad base of members with a wide variety of expertise is a "living database" in which everyone can serve as a librarian and consultant for everyone else. (Rheingold 194: 262)

This means that people do not necessarily need the knowledge of where a specific type of information can be found, because by placing a request which can be read by other environmentalists, possibly including experts in the relevant field, it is likely that someone will respond with a solution. It also means that individual pieces of information may sometimes have greater use value for the environmental movement as a whole – rather than just being used by the group who obtained it, material can be used many times over in a variety of contexts.

Information Provided By Governments

It is fairly widely accepted that governments are not always sympathetic to the actions or claims of environmentalists, largely because of the influence of industry pressure (Kaimowitz 1996: 21, Shiva 1997: WWW). In support of this assertion, 16 survey respondents cited local or state government or a government agency as one of their major opponents.

However in order to maintain legitimacy, governments need to portray themselves as being concerned about environmental issues, and as supportive of others who are trying to protect the environment. Therefore national and local governments sometimes find themselves in a position whereby they are under considerable industry pressure to limit environmental regulations, but in which they may lose public support if they are not seen to be taking environmental issues seriously. This means that environmental policy may sometimes be carefully crafted to appear to be limiting the impacts of industry, but in practice allow to companies to proceed relatively unhindered. This is not to say that environmental policy is never developed with sincere intentions, or that in the majority of cases auspices of government oppose environmental groups. However, there are numerous examples of cases where the effects of environmental policy are not entirely transparent, or where connections to commercial interests have been demonstrated (see Shiva 1997: WWW (India), Rowell 1996: 336 (UK) Beder 1997: 235-239). In this type of situation it is often the task of grassroots activist groups to intervene.

Government agencies frequently hold huge stores of information that is likely to be of interest to environmental groups. This information can create a dilemma in instances when the holders of this information perceive environmental groups as a threat to their interests. If they provide the data, they will be helping their antagonists, but if they hold onto it they will be testing the limits of legitimate governance by refusing to release public information. One solution is to claim that environmental information is available to any member of the public who asks for it, but to in practice employ retrieval and reproduction charges that hinder access by individuals and cash-strapped environmental groups.¹⁰

One way that the Internet may be helping to change this situation is by removing the possibility of using the excuse that environmental information can not be provided because this is too costly. As one survey respondent noted:

The internet has made it much easier to publish environmental information which up till now the government has found it easy to restrict access to through incomprehensible formats and high price.

If an environmental group manages to obtain a scarce information resource they can easily make it available for the use of others by placing on the Net. Furthermore, the availability of Internet publishing means that the onus can be placed upon government bodies to explain why they are *not* making material available online.

Further research could ascertain the actual extent to which governments are providing previously inaccessible environmental information on the Internet (or perhaps limiting what is put on the Internet), and the importance of this for the activities of environmental groups in general. However it is almost certain that the huge availability of government provided information on the Internet is helping some groups work more effectively, and to better demonstrate the scope of environmental problems.

5.2.6 Increased Involvement

A major difficulty for many environmental groups is the hiatus between concern and action. People may feel strongly about environmental issues and want to do something, but the perceived effort that it would take to become involved can outweigh this. This is evidenced by a number of studies which indicate that a majority of people consider themselves to be environmentally sympathetic, but only a small proportion ever become actively involved in any type of environmental action or protection (Herrera 1992, Hoad 1997).

¹⁰ For example, B. J. Gleeson (1996: 1914), writing on the New Zealand Resource Management Act (1991), argues that the costs of acquiring information from government and councils is often beyond the reach of individuals and community groups making "a mockery of the concept of public consultation."

If the gap between the amount of effort people are prepared to put into being environmentally active and the perceived effort of becoming involved is reduced, then it is likely that more people will become involved in environmental activities. The use of the Internet facilitates this in a number of ways. Groups can much more easily keep contact with members or participants – this sustained interaction may mean that people are less likely to drift off. Also the organisational potential of the Internet means that more people can be contacted when activities are occurring, and that more can be involved in decision making processes.

The survey results indicate that for some groups the Internet plays a role in encouraging increased involvement. 34% of those who responded to this question said that it was “very important” in this way, and 86% selected importance levels of “moderately” or higher. These ratings are significantly higher than the importance given for “gaining new members” – only 21% said that the Internet was “very important” for this. This indicates that in some cases where the Internet does not play a major role in attracting new members to the group, it nevertheless helps to strengthen levels of participation for existing members.

5.2.7 Technical Support For Online Environmentalism

Whether or not a particular environmental group has access to computer expertise largely depends on the skills of those who happen to be involved, especially in the case of small grassroots organisations. Groups are often made up of people who have come together because they are concerned about certain issues – in some instances one or more of those people will have some computer skills, in others none will have had any computer experience. Certainly very few environmental groups can afford to pay a consultant to set up their databases and networks, design their web site, and install email servers. Of the 97 offline environmental organisations who responded to Zelweiro’s (1998) survey, less than one third suggested lack of interest as a reason for not using the Internet. 68% cited lack of funding, and 34% said that they were not using the Internet because of a dearth of expertise (some respondents picked more than one reason).

Fortunately there are numerous individuals and organisations who are willing to provide advice and training to activist and non-profit groups free of charge (Rheingold 1995b: WWW, Motavelli 1996: WWW). This type of assistance ranges from the creation of web pages and e-zines¹¹ which give advice on how to use the Internet for activism purposes to groups who will install servers and create web sites without charging for labour. Some examples include:

¹¹ Online magazine, either on the WWW or in email format.

- A grassroots support network called OneNorthwest was set up in 1995 to bring the estimated 250,000 environmental activists in the United States Pacific Northwest region online.¹² OneNorthwest offers assistance to environmental groups in the form of roving computer experts called “circuit riders.” As well as connecting activists to the Internet and interconnected local area networks, the organisation works to set up electronic conferences to link activists into regional discussions, and to provide an “action alert system” to quickly respond to emergencies, like oil spills or forest clearings (Motavelli 1996: WWW).
- Converge offers free Internet services to New Zealand environmental groups and other non-government organisations. This includes free web hosting, email addresses, web site design and email listservers.¹³
- A free email newsletter, NetAction Notes, provides advice and information relating to the effective use of the Internet for activism purposes.¹⁴

5.3 Problems With The Use Of The Internet

As is the case with any other communication medium, there are a range of potential problems and difficulties with the use of the Internet, and these are being encountered in various forms by environmental groups who are utilising the Net. 61% (48/79) of survey respondents said that their group or organisation had experienced problems in their use of the Internet. The types of problems are shown in figure 5.4¹⁵.

According to the survey the main problems environmental groups have experienced with the use of the Internet are technical hitches. This covers a wide range of difficulties, from problems with the compatibility of different versions of Internet browsers, to occasional inability to connect to the Internet, to problems associated with the servers where web sites and mailing lists are hosted. Most respondents who cited technical difficulties as the main problem appear to view this as a minor frustration, rather than a factor which seriously hampers the Internet as an effective tool.

Lack of training and skills are also viewed as an important barrier to effective use of the Internet by some groups, as is expense. In general, it appears that the problems environmental groups are aware of relate primarily to practical issues. This reinforces the importance of organisations who provide technical assistance to environmental groups.

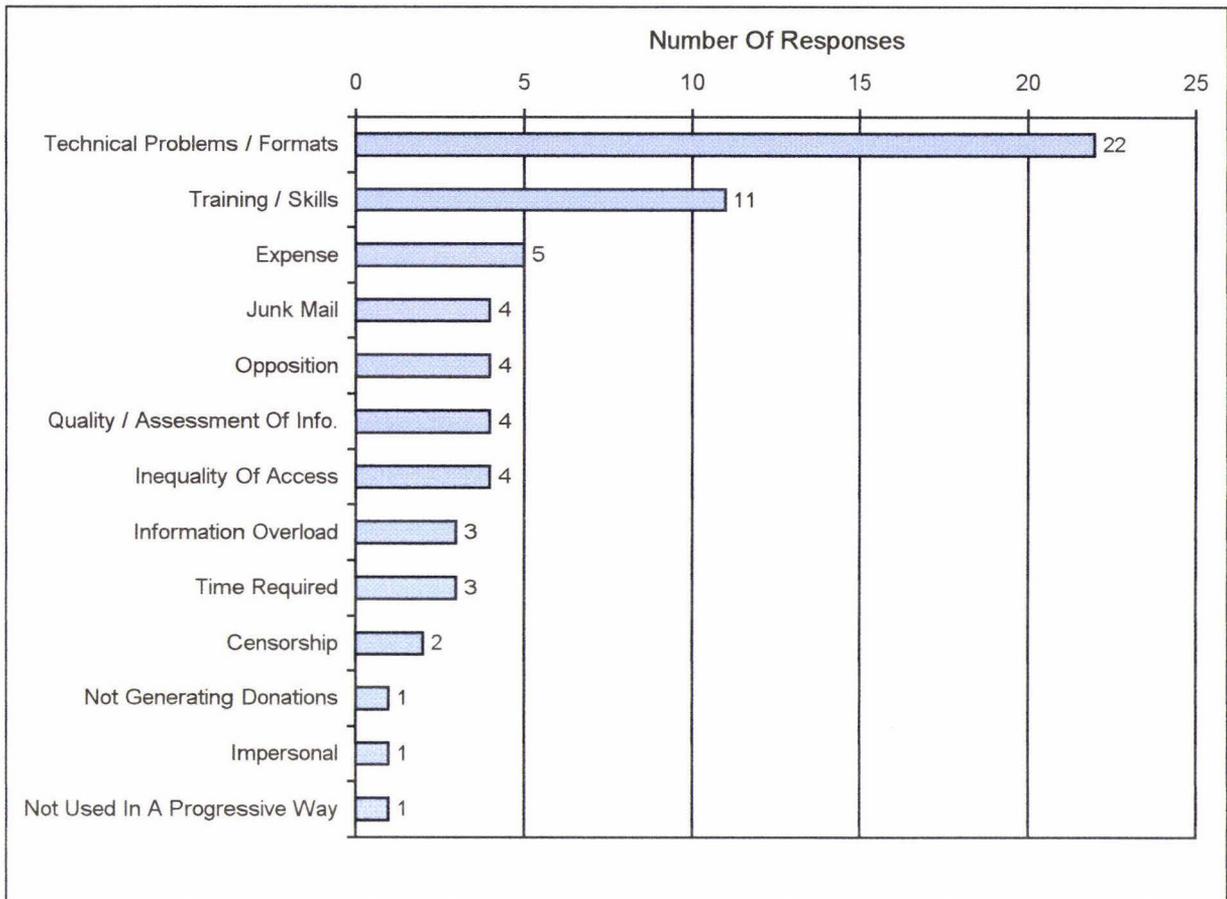
¹² The OneNorthwest web address is: www.onenw.org

¹³ The Converge web address is: www.converge.org.nz

¹⁴ The Netaction web address is: www.netaction.org

¹⁵ This was an open ended question, so the categories were created at the analysis stage.

Figure 5.4: Problems Experienced By Environmentalists



Note: 48 respondents answered this question. The total number of responses are greater than this because some answers were coded in more than one category.

Another slightly less prominent range of issues concerns the amounts and of types of information that those using the Internet have to deal with. This relates to problems of unwanted information (junk email and spam), how to assess the value of information, and being overwhelmed by the sheer volume of information on the Internet.

5.3.1 The Internet's Impact On The Environment

If the goal of environmentalists is to protect the environment, then the direct or indirect damage the Internet inflicts upon the environment should be taken into account in evaluating the effectiveness of the Net to meet this goal. This section looks briefly at some of the ways the Internet may be impacting upon the environment, and considers the implications of this for environmentalists who use it as a tool.

Is There Pollution in Cyberspace?

One consequence of the increasing geographic separation of production facilities and sites of consumption is that it is increasingly difficult to tell where the pollution is coming from. The “post industrial” age has not been marked by the death of industry, or by a reduction in the rate at which Western societies consume goods. Rather, it has seen the production of these objects move elsewhere, to places invisible to the societies that consume them (for discussions of the globalisation of production and the international division of labour, see Sassen 1996, Shiva 1997, Sivanandan 1989).

In wealthy sectors of western societies, life can appear simultaneously clean and abundant because contact is rarely made with the enormous bi-products of that abundance. Things can be promoted and accepted as environmentally friendly because their effects are not experienced by the consumer. For example, the electric car is often promoted as an example of how technology can help overcome environmental problems without needing to alter the way people live. The development of these vehicles is a much publicised aspect of many manufacturers research and development operations¹⁶. However it is rarely pointed out that this simply moves “the source of pollution from the tailpipes of automobiles to the smokestacks of power plants” (Krause 1997: WWW). Technology such as this may have the potential to help solve environmental problems, but there is a danger in uncritically accepting it as intrinsically good, especially if the environmental effects are less obvious.

The Internet provides an excellent example of this phenomena, both metaphorically and practically. Cyberspace has in some instances been promoted as a space existing alongside “real life,” free of the usual constraints, costs, and limitations associated with living in the physical world (Jordan 1999: 2, Wertheim 1999 223-252). People can, for example, hold conversations across enormous geographical distances without having to travel, and read documents without obtaining a physical copy. The huge scope of the physical network required to sustain this communication and the cycle of consumption it encourages is rarely considered. As Audrie Krause, editor of online activism newsletter NetAction Notes, puts it:

Like electric cars, the Information Highway isn't an obvious source of pollution. There are no deadly fumes spewing from our personal computers, and we don't add to air pollution when we telecommute. But, as is the case with electric cars, pollution on the Information Highway is occurring somewhere else. Technology is a very dirty industry, and the toxins produced in the electronics manufacturing process are just as dangerous as fossil fuel emissions and spent nuclear fuel rods. (Krause 1997: WWW).

¹⁶ For examples see: <http://www.toyota.com/times/safety/feature/fuelcell.html>
<http://www.hondainsight.com/environment.html>

The environmental consequences of computers are not small. The production of silicon chips is particularly harmful, requiring the use of a cocktail of extremely hazardous chemicals which numerous studies have shown to pose great danger to both the people who work with them and the surrounding ecosystems and human population (Glosserman 1996, Maclachlan 1998, Schmit & Smith 1998, Schultz 1998,). In more specific terms:

Production of a single PC requires 33,000 liters of water, generates 290 kg of waste and consumes 5,000 kwh of energy. Average use during one year sucks up 85 kwh, although being attentive and careful can cut that figure to about 40 kwh. (Those numbers are courtesy of Harald Preissler and Burkhard Jaerisch of the Society and Technology Research Group of Daimler Benz AG.) Take the entire production process, including the mining of the rare metals and the manufacturing of chips, and you've got a lot of petrochemicals and silicon in that box on your desk. (Glosserman 1996: WWW)

Once they have been purchased computers continue to pollute through energy consumption. One US Environmental Protection Agency report claims that simply by powering down computers that are *not in use* in the states of Vermont and New York, "CO₂ emissions would drop 200 million tons (the equivalent of taking 5 million cars off the streets), SO_x emissions would fall 140,000 tons and NO_x would shrink by 75,000" (quoted in Glosserman 1996: WWW).

Taking a different perspective, James H. Snider argues that the Internet has the potential to indirectly damage the environment by influencing the ways in which populations position themselves. He says that the ability to telework allows people who would prefer to live in the country but who need to live in the cities to maintain employment, to move much further away from their places of work. Snider believes that this trend, if adopted on a large scale, has the potential to create a much more spread out population, and therefore to cause the destruction of wilderness and the reduction of "open spaces" (Snider 1995: 16-19). Although the adoption of information technology does not yet appear to be significantly curbing trends towards world wide urbanisation (Short & Yeong-Hyun), it is nevertheless important to consider such possible indirect effects of Internet related technology on the environment.

The Environmental Dilemma

Given that the physical aspects of the Internet are themselves a major source of environmental harm, is it not a contradiction to use it to try to save the environment? This type of problem has been fundamental to environmentalism throughout the history of the movement. Modern technology has enabled massive extraction and processing of resources, the heart of most environmental problems, but solutions to these problems often appear hopeless without using the technology. Furthermore, effective environmental action will usually require using similar technologies to those employed by mainstream society.

For example, petrol powered boats may be used to protest against an oil rig, or a group campaigning against nuclear power in their region may continue to use electricity in their offices. Groups that reject commonly used technologies because of their environmental effects may struggle simply because their opponents have access not only to much greater resources, but also a wider range of options for the use of those resources.

There are several reasons why the use of the Internet, or another environmentally harmful technology, may not seem illogical to groups that are trying to save the environment:

- A particular group may be formed around a single issue, or a particular geographic region. The environmental effects of the Internet may have no impact on that issue or region, and therefore not be a problem for that group. However most of the environmental Internet sites, and communication with environmental group members themselves, reviewed in the course of this study indicate that there are few groups who consciously hold such an attitude. Many environmental groups *focus* on a single localised issue, but most are concerned about all aspects of environmental issues, on a global level.
- Members of an environmental group may not be aware of the potential for computers to cause environmental harm. This possibility is supported by the results of one 1997 US survey in which 23% of respondents indicated that they believe the computer industry helps solve environmental problems, while only 12% believe it causes them. Every other industry included in the survey was viewed as a cause of environmental problems more often than a solution (Wirthin Report 1997: WWW). This possibility is also supported by the results of the survey conducted for this thesis. When asked if they had encountered any problems with the use of the Internet, no survey respondents mentioned the environmental effects of the Internet itself. It is therefore possible that this is an issue that many environmental groups have not considered.
- Many environmentalists do not believe that it is realistic or desirable to completely do away with technologies that we know are environmentally harmful. More often groups are concerned with the unencumbered levels of consumption of this technology, or with methods of production that are unnecessarily unsafe.
- Although the Internet relies on environmentally harmful technologies, the effects of these may be seen to be countered by the reduction in paper use and physical transport.
- If the use of the technology helps the group to achieve its goals, then this may greatly outweigh the negative effects of using that technology. For example, using a few computers may help campaigners obtain stricter regulations on the output of toxic waste in the computer industry, therefore reducing the harmful effects associated with thousands of computers. However, such a calculus becomes more difficult when applied to qualitatively different situations, such as balancing the destruction of trees caused by using paper against the toxic waste and power consumption associated with computers.

- Many of the environmental dangers associated with the Internet are related to the acquisition of equipment – for example, the purchase of a computer. It could be argued that because most people in a particular group who are using the Internet have a computer anyway, using these to help achieve the goals of the group are is not doing any further harm.

There is evidence that many environmental groups who are using the Internet perceive this to be a more environmentally inert medium than paper. For example, Barry Weeber of conservation organisation Royal Forest And Bird Protection Society has been quoted in the *New Zealand Herald* as saying that he hopes companies who produce unsolicited mail would start to use the Internet as a replacement for mass mailouts (Wells 1998). The text and graphics used in some environmental web sites also appear to suggest that the Internet is an environmentally friendly medium (see Figure 5.5).

Figure 5.5: Images Implying The Internet Is Environmentally Freindly



Silicon Valley Toxics Coalition

One example of an environmental group using the Internet to help in the fight against the harmful effects of computers is the Silicon Valley Toxics Coalition (SVTC). Formed in 1982, this group aims to:

document and expose the hazards of the high-tech industry and to promote environmental and economic sustainability and accountability in the electronics industry, the fastest growing manufacturing sector in the world.
(SVTC Internet Site, <http://www.svtc.org/>)

SVTC has an extensive web site including local and global information relating to the environmental effects of the computer industry, archives of newsletters, and other resources. Users are invited to join the organisation through an online form, and email is used for internal and external communication.

According to executive director Ted Smith, the Internet is one of SVTC's most important organising tools, and is helping the organisation to work with groups around the world (Maclachlan 1998: WWW). Smith is aware of the apparent contradictory nature of this situation:

It's ironic that we spend our time warning about the hazards of this industry, but we benefit from it. ... We want to use the technology to make this a clean industry. (quoted in Maclachlan 1998: WWW)

The use of computers to fight the computer industry in Silicon Valley (or the use of petrol-powered boats to protest against an oil rig, or the use of paper to produce posters denouncing forestry practices) appears less contradictory if the distinction between a technology and the industry which relies upon that technology is made. In some cases environmentalists argue that there is no place in our world for a particular technology. This argument is often made against potentially catastrophic technologies, such as nuclear energy and genetic engineering (see, for examples, Oser & Brown 1996, Rigby 1997). But more often it is the way the technology is used which is viewed as problematic -- both in terms of the absence of environmental protection measures and the scope of industrial enterprises.

5.3.2 Internet Demographics

As noted in Chapter 4, white, middle class professionals in Western countries have traditionally been the major participants in the mainstream environmental movement. In a generalised sense, the population profile of the Internet bears some close similarities to this trend. While different studies of access to the Internet vary in their specific findings, it can be demonstrated that the Internet is overwhelmingly utilised by demographics who have higher incomes, and who are well represented in positions of power and influence. According to a recent UN report, "the typical internet user worldwide is male, under 35 years old, with a university education and a high income, urban based and English speaking" (quoted in Denny 1999: 14). Some examples of Internet access disparities are listed below:¹⁷

- The industrialised countries, with only 15% of the world's population, contain 88% of all Internet users. South Asia, which contains a fifth of the world's population, has less than 1% of the Internet users. (Denny 1999: 14)
- Around 80% of Internet sites are in English, a language understood by only 10% of the world's population (Denny 1999: 14).

¹⁷ Reliable statistics for New Zealand Internet demographic representation are not available.

- Income is a strong determinant of household Internet access. For example in the United States households earning incomes over \$75,000 are over twenty times more likely to have home Internet access than those at the lowest income levels. (NTIA 1999: WWW¹⁸)
- Ethnic disparities are also evident. For instance, American data suggests that Black and Hispanic households are two-fifths as likely to have home Internet access as white Households. Even when income differences are accounted for, these ethnic groups are much less likely to have Internet access in the home. (NTIA 1999: WWW¹⁹)
- At every income level, United States households in rural areas are significantly less likely –sometimes half as likely – to have home Internet access than those in urban or central city areas (NTIA 1999: WWW²⁰).

The generalised correlation between the populations who access the Internet and those who take part in the mainstream environmental movement has both positive and negative implications. It is encouraging in that it means that a relatively large proportion of environmentalists are likely to have access to the Net – a factor of vital importance if it is to be used as a primary means of communication. As Howard Rheingold points out, environmental activists have been among the most successful early adapters of computer communication, with environmentalists in scientific and academic institutions well placed to adopt the technology (Rheingold 1994: 262-3).

However, as discussed in Chapter 4, new types of grassroots environmental groups with explicit positions on social justice issues are now claiming a stake in environmental debates. Populations who suffer directly from the effects of environmental degradation and pollution, and who are exploited by the same industries and economic systems which inflict environmental harm, are usually those who are extremely under represented on the Internet. Some larger ecojustice groups can afford computers at the organisational level, and this may offer considerable advantages. For example, such an organisation will have access to online environmental information, can network with other environmental groups, and may be able to contact those in positions of power more easily. However many smaller ecojustice groups representing impoverished populations may not see the purchase of a computer and Internet account as a priority, or even a possibility.

¹⁸ Specific page: /factsheets/income.htm

¹⁹ Specific page: /factsheets/native-americans.htm, factsheets/racial-divide.htm

²⁰ Specific page: /factsheets/rural.htm

One environmental group representative, from People Organized in Defense of Earth and Her Resources (PODER), who work in a predominantly African American and Latino community in East Austin, Texas, describes the sense of exclusion from the wider environmental community:

"We feel left out, definitely," Almanza says. "It's hard when people say they found this or that out from the Internet. We're feeling like we're way up there just because we now have computers and a fax machine." (Ruben 1995: 17)

Furthermore, the economically and technologically disadvantaged do not have the opportunity to mobilise *as communities* through the Internet in the same way as wealthier populations. For these groups there is no scope for spontaneous collective action arising from online communication, or for the organisation of protests through the Internet. Families in destitute regions who are suffering the effects of industrial pollution do not have the choice to go online to find information and support. In short, on the Internet the poor do not speak for themselves.

Therefore it is important to recognise that there are sectors of the environmental movement, potentially representing very large proportions of the world's population, whose views are rarely represented on the Internet. If the Internet is a democratic form of communication, then it is an exclusive democracy and there is a danger in taking trends in opinion as representative of any society that contains ethnic minorities, poor people, or any other disadvantaged group. If the Internet is popularly accepted as a microcosm of (any) society then the information divide has the potential to make the views of already marginalised groups even more invisible. But if it is acknowledged that alternate views are held by those not connected to the Internet, and if there is a willingness to give adequate weight to the contributions of the few who represent these groups online, then the Internet may offer new opportunities for participatory communication.

Chapter 6 examines the roles and limitations of mainstream media for communicating environmental messages, and discusses whether the Internet is likely to change these dynamics or replace other media by offering new information outlets.

Chapter 6: The Internet And Other Media

One of the central concerns for environmentalists has always been to have their point of view conveyed in the media – as accurately and to as wide an audience as possible, and in a sympathetic context. However environmental groups have rarely found the mainstream media ideally suited to their purposes. Access barriers generally restrict exposure, and once exposure is gained the messages conveyed may be far from those that environmental groups want to get across (Ryan 1991; Chomsky & Herman, 1988; Beder 1997: 242).

This section consists of an inquiry into whether the Internet is likely to influence the ability of environmental groups to convey their message to large numbers of people. This involves an examination of two broad areas; the ways in which the Internet may be changing the relationship between environmental groups and mainstream media, and the degree to which the Internet is taking over the role of the mainstream media for some groups.

6.1 Environmentalism And Mainstream Media

Before examining the ways in which the Internet may be changing the relationship between mainstream media and environmental groups it is necessary to look at the nature of that relationship prior to the Net. This is a subject upon which entire books have been written (Anderson 1997, Gauntlett 1997, Hansen 1993, Neuzil & Kovarik 1996), and one which is too complex to comprehensively cover within the scope of this thesis. However some clear trends are evident, and these are alluded to here.

It needs to be stressed that the following outline describes tendencies, trends, and overarching pressures. It is not assumed that “the media” acts as a whole or that it can be understood as a monolithic entity which can be represented by a single theoretical model. There are numerous examples which contradict the trends described here, and the pressures which create patterns of media behaviour are at times met with effective resistance. However, although counter examples are important, the current analysis takes a wider scope. The aim is to outline the systemic factors which tend to influence the treatment of environmental groups and issues in the mainstream media.

There are a number of overarching reasons why traditional media sources are not always suited to the needs of environmental groups:

- The types of stories the mainstream media want to cover are not always compatible with the types of messages environmental groups want to convey.

- Mainstream media often share interests with, or are partially or fully owned by, entities whose interests are potentially threatened by the types of ideas and policies environmentalists may want to perpetuate.
- Environmentalists often do not possess the resources to produce pre-packaged media material of the type released by corporate public relations companies.

Each of these factors is discussed in more detail below.

6.1.1 Media Formats And Environmental Messages

A number of studies indicate that in recent decades the boundaries between media designed to entertain and media designed to convey information have become increasingly blurred (Dorman 1992, Graber 1994, Holland 1994). This is evident in the tendency of news and current affairs programmes to gravitate towards short and shocking stories, preferably with elements such as suspense, scandal, action, personality and human interest (Dorman 1992, Pope 1996: 12).

Several commentators argue that such trends have led to a de-politicisation of the media in general. This does not mean that the media no longer contains political messages, but rather that it is failing to provide a forum through which issues can be explicitly discussed (for examples see Beder 1997: 242). As Charlotte Ryan argues, this often frustrates the efforts of protest and activism groups to convey a comprehensive message:

The difficulties facing ... any group protesting government or corporate policies often concern not what mainstream news criteria include but what they omit. Mainstream media pay little attention to the history, the economic and political development of an issue, and the differential effects of events on groups or classes of people; instead, they personalize issues, and package fragments of information into short, entertaining reports about identifiable characters. When stories are ripped from social context, power operates with an invisible hand. (Ryan 1991: 47, original emphasis)

The problem with this type of treatment is that political issues are presented as if they are apolitical, with no relevance to historical circumstance or societal structures. Events or situations may be portrayed and interpreted as “bad” or “good,” but there is little scope for relating these judgements to the wider circumstances through which they were produced (Ryan 1991, Dorman 1992).

To some degree the environmental movement (particularly mainstream components) has tended to mould itself to meet the requirements of commercial media. This has often been accomplished by providing the media with personalities and events, which are manufactured by pointing to short term, highly visible environmental disasters, and constructing protests as dramatic events designed specifically to suit the needs of the press (Beder 1991: WWW, Tokar 1997: WWW).

This dramatisation of protest situations also carries the additional danger of groups being labeled “media hounds”, a derisive portrayal which has sometimes been used to challenge the motives of environmental groups (Ryan 1991: 48). Furthermore, only certain types of environmental issues can be presented in a way that is exciting, dynamic, and therefore attractive to the mainstream media (see Illing 1993: 59).

6.1.2 Political Economy And Elite Consensus

Another set of issues fundamental to environmentalists’ frustration with the mainstream media relate to the mechanisms of ownership, control and influence which tend to shape media messages. This includes issues such as the tendency of advertisers to support only media made for particular audiences, the influence of advertisers on media content, and the overlap between media ownership and other political and business interests.

Audience Desirability

Within a free-market system where most popular media rely heavily upon advertising revenue to survive, “democratic” patterns of proportionate consumer desire do not simplistically determine the type of media product which is available (Chompsky & Herman 1988: 14, Hellinger 1996: 10). This is because advertisers do not merely want to give their money to a media outlet which will provide them with an audience of a certain size – they also need to know that they are getting an audience that will *buy their product*. Therefore media forms which cater to sectors of the population who tend to spend more money gain the greater share of the resources (Chompsky & Herman 1988: 15, Schiller 1999: 140).

An important criteria for defining money spenders is obviously income (only those who have money can spend). But advertisers also require audiences weighted on the basis of other demographic criteria, such as age and marital status (for example, younger people with less commitments may spend a greater proportion of their income). Desirable market segments must generally be “identifiable, measurable, and accessible” – those which are too small, or too diffuse to be reached are of little use to advertisers, and therefore overlooked (Ryan 1991: 48).

Chompsky and Herman argue that the concentration of advertising revenue in media created for particular sections of the population tends to smother media created for others. This is because the extra income from advertising means media catering for more affluent audiences can lower their subscription rates while retaining quality. Subsequently, they are able to pick up a significant proportion of the less affluent audience. Groups that are not primarily targeted by advertisers consume the mainstream product because it is cheap and of high production-quality, even if it does not really relate to their own life experiences. The result is that media forms which enjoy large audiences sometimes collapse because they are not able to provide advertisers with the right type of viewer or reader, and are no longer able to compete with the price and quality of other media. Groups that do not fall into the target market segments consume the media products, but the media products are not made specifically for these groups (Chompsky and Herman 1988: 14).

Such patterns are relevant to environmentalists, because they mean that the media will tend to focus on environmental stories only if they are perceived to be of interest to the advertisers' ideal demographics. If a large proportion of people who are likely to be interested in environmental issues, or certain types of environmental issues, fall outside of the market segment for which media products are being made, then these issues may receive less coverage. This may result in a bias for certain types of environmental coverage. For instance, it may (and this is speculation) mean that there are plenty of reports about saving dolphins and stories urging people not to litter in the countryside, but less representation of toxic waste dumping in poor communities and effects of industrialization in the third world.

Direct Advertiser Influence

Large business entities exert considerable influence on media content due to the media's reliance upon the advertising dollar. The amount of influence a single company has on any particular media outlet largely depends on the proportion of the media outlet's income derived from that company. For example, only very large multinational corporations are likely to be able directly influence what international television networks portray, but a local business may be able to put pressure on a community newspaper if it advertises frequently. However, media messages are usually shaped less by the demands of a particular company than by the general tendency of advertisers to support media which are willing to perpetuate, rather than challenge, dominant discourses (Chompsky and Herman 1988: 33). This often means a commitment to the free-market ethos, with a particular stress on the importance of consumption.

Chompsky and Herman (1988) argue that the direct pressure of advertisers on the media reinforces the systemic bias discussed above, whereby the press tends to create products primarily for specific target audience segments:

Political discrimination is structured into advertising allocations by the stress on people with money to buy. But many firms will always refuse to patronize ideological enemies and those whom they perceive to be damaging their interests, and cases of overt discrimination add to the force of the voting system weighted by income. Public television station WNET lost its corporate funding from Gulf + Western in 1985 after the station showed the documentary "Hungry for Profit," which contains material critical of multinational corporate activities in the Third World. Even before the program was shown, station officials "did all we could to get the program sanitized" (according to one station source). The chief executive of Gulf + Western complained to the station that the program was virulently anti-business if not anti-American, and that the station's carrying the program was not the behavior "of a friend" of the corporation. The London Economist says that "Most people believe that WNET would not make the same mistake again". (Chompsky & Herman 1988: 16-17)

The WNET / Gulf + Western example described by Chompsky & Herman is not exceptional. On the contrary, this is viewed as common-sense business practice by those who embrace free-market ideologies (Stauber & Rampton 1995: 193). For example, US House Speaker Newt Gingrich has advised media conglomerates to ensure that their news coverage reflects "their business and economic interests" (Pope 1996: 13). In practice, the ideal that news is selected on the basis of what is most important, or even of what is likely to have the most popular appeal, succumbs to the concept that businesses should view profits as the overriding factor in all decision making.

Mainstream media has by no means entirely avoided environmental issues (see Lowe and Morrison 1984). However regular referrals to "the environment" and "environmental issues" should not be taken uncritically as evidence that the media is by and large a friend of the environmental movement. Chompsky & Herman (1988) cite an example which illustrates the specificity of the types of environmental messages that corporate pressures on the media will tolerate:

Erik Barnouw recounts the history of a proposed documentary series on environmental problems by NBC at a time of great interest in these issues. Barnouw notes that although at that time a great many large companies were spending money on commercials and other publicity regarding environmental problems, the documentary failed for want of sponsors. The problem was one of excessive objectivity in the series, which included suggestions of corporate or systemic failure, whereas the corporate message "was one of reassurance." (Chompsky & Herman 1988:17)

Cross Ownership

The increasing monopolisation of the mainstream media, and cross ownership with other industries, is reinforcing the tendencies caused by direct advertiser influence (Secunda 1993: 34). Cross ownership means that the influence is even more direct, because companies who have large shareholdings in media entities can apply pressure to encourage favourable content. From a media outlet's perspective, it may be in the media corporation's interest to show content that will help businesses in which it has significant shares (Johnson 1968: WWW).

This has implications for environmental groups. For example, if an environmental group is protesting against the actions of a company that has ownership links with a major media corporation it will be against the interests of the associated outlets to portray the group's claims in favourable light.

6.1.3 Resource Limitations

Another factor limiting the usefulness of mainstream media for environmentalists is a lack of resources, and the reality that media entities are often more likely to utilise already-produced material. The ideal of journalists starting from scratch, going out into the field and investigating all angles of a story is, to some extent, a myth (Stauber & Rampton 1995: 1995). Many small media outlets simply do not have the resources to do this for every story. Large outlets may have the resources, but will happily cut down on news gathering costs if they can (Dale 1996: 109, Stauber & Rampton, Chapter 11).

Therefore those who have the ability to produce large amounts of usable material for media outfits have an opportunity to directly shape media content and presentation. It is common for public relations and corporate advertising companies to churn out well produced television items, carefully edited to meet the requirements of the format for which they are being targeted, often complete with voice-overs. These are often shown in their entirety, with no reference to the source, and presented as if researched and constructed by an impartial news team (Beder 1997: 113-121, Stauber & Rampton 1995: 183-186). As Stephen Dale puts it, "the only way to get the TV news peoples' attention is to do their legwork for them" (Dale 1996: 110).

Environmentalists also have the opportunity to produce their own offerings for the media, and some have been quite successful in using techniques employed by corporate public relations companies. For example, Greenpeace's protest missions sometimes include a complete television crew, whose primary role is to film material to be used in television news and documentary shows. Greenpeace also adopts the same standard format as the public relations companies – a Video News Release containing an “A” reel (a complete, finished report) and a “B” reel (other footage, carefully indexed, which news companies can use to create their own reports) (Dale, 1996: 109).

However, there are barriers that mean the videotapes of environmental groups are likely to be shown far less frequently than those of their opposition. For a start, all of the problems relating to the ownership and control of the media are likely to come into play in this context.¹ But more specifically, the production of news, particularly for television, is far from cheap. Free footage saves networks money, but only if it is of high enough quality to maintain the ratings. Even if a news editor perceives no pressure to represent a particular point of view, and has no bias of their own, they may be more likely to show a complete, nicely packaged and custom-produced item from Monsanto or Shell than footage from an environmental group which has been shot on cheap cameras and been poorly edited (Dale 1996: 108).

6.1.4 Other Perspectives

Not all commentators believe that the mainstream media is ill-suited to environmental agendas. For example, Philip Lowe and David Morrison (1984) argue that environmental issues attract a lot of media coverage, “the environment” enjoys sustained rather than transient media coverage, reporters are often sympathetic to the environmental agenda, and environmentalist are treated better by the media than other pressure groups. However Lowe and Morrison seem to be evaluating the effectiveness of the media only for the type of environmentalism which is accepting of the basic structures and working of contemporary society, and which deal with environmental problems as isolated events or instances. The following exert illustrates this point:

Should the environmental lobby ever become more radical in praxis or militant in tactics such that it became seen as posing a threat to the existing order, then it is probable that it would have to contend with a more skeptical and less sympathetic environmental reporting. (Lowe and Morrison 1984: 88)

¹ For (a hypothetical) example, a television company may be more likely to show a news reel provided by one of their major advertisers discussing their environmentally friendly production processes than one provided by an environmental group highlighting the same advertisers' appalling environmental track record.

This statement overlooks the fact that the philosophies of important components of the environmental movement *do* in fact challenge the existing social order, and that these are often invisible simply because they do not get covered in the mainstream media. In saying that the media has played an important role in raising awareness of environmental issues, and that it has been vital in ensuring numerous environmental victories, Lowe and Morrison are making a valid and important point. However, by stating that the mainstream media is effective for environmental groups as long as they are not calling for any significant societal change, their analysis appears to set different benchmarks for assessing the worth of the media than those of many environmental groups themselves.

There are also authors who argue that the environmental movement receives *far too much* media attention, and that environmentalists have hijacked the media to embark on a panic campaign. For example, Dixy Lee Ray (1993) argues that media conspiracies promote environmental panic, and Julian Simon (1998) puts forward a theory that environment coverage in the media is a result of an in-built bias towards “doom and gloom”. However the views of such commentators are rarely backed with solid evidence, and the works are often authored or sponsored by those who have direct interests in realigning public opinion. For example, Simon is affiliated with the Cato Institute, which consistently campaigns for unencumbered consumerism and the removal of environmental restrictions (Beder 1997: 79-80). Dixie Lee Ray has been associated with a variety of anti-environmental organisations, including being a member of the Board of Directors of the Montana States Legal Foundation, a prominent “wise-use” organisation (Rowell 1996: 137). Chapter 7 continues this theme, discussing organised opposition against the environmental movement.

Overall, the trends which tend to create a less than ideal relationship between environmental groups and the media appear to be becoming more deeply entrenched. According to an article in the Sierra Club’s magazine, environmental coverage on the three American television networks declined 60 percent between 1989 and 1996 (Pope 1996: 13). Multinational media conglomerates continue to solidify their monopolies, and business links with other industries continue to grow (Crispin 1996: WWW). The free market ethos, which suggests that media related companies should act purely in the interests of profit, also continues to be heralded as a common sense principle (Pope 1996: 13). These factors mean that there is little hope in the mainstream media becoming a genuine ally of the environmental movement in the foreseeable future.

6.2 Is The Internet Different?

The mainstream media seldom meets the needs of environmental groups due to limits on the types of stories perceived as desirable by editors and programmers, space restrictions curbing the ability to communicate complex environmental issues, and patterns of ownership, control and advertiser pressures. The remainder of this chapter contemplates whether the Internet is likely to change this situation.

6.2.1 Web Sites And Online Publishing

The World Wide Web offers environmentalists a medium through which they can make their views and information available to a potentially global audience at very little cost. The ability to control content is very important, as it means environmental groups can represent their own perspectives and provide large amounts of information to support their arguments without the space restrictions associated with other media.

Practical restrictions on space and time in other media are not the only problematic aspects for environmentalists – frequently, it is simply not in the interests of the media to portray environmental perspectives in a favourable light. This advantage of the Internet was expressed by several survey respondents and interviewees – for example, one survey respondent said “we can control what we publish instead of relying on media corporations paid by our adversaries.”

Web sites also differ from other media in that the creation of an impressive presentation with a professional appearance does not rely heavily upon the ownership of expensive production, transmission or reproduction equipment. High quality film footage and flashy brochures are publicity mechanisms which are usually within the reach of only those with considerable wealth. But a web site developed on an entry-level personal computer can be made to look very similar to that of a resource rich corporation. This is important for environmental groups, because whether or not a message is presented in a medium or format that is considered authoritative by the recipient population may influence the credibility attributed to that message (Motavelli 1996: WWW). As one commentator puts it:

The environmental movement, which has always prided itself on a ceaseless flow of solid, scientifically-based information, won't reach its intended audience if it's still communicating through smudgy newsletters. (Motavelli 1996: WWW)

6.2.2 Online Environmental Journals

Virtually for as long as the environmental movement has existed there has been an “alternative” environmental media. This has been one mechanism through which environmentalists could make information available that the mainstream media would not cover, to present their point of view free of the lens of the mainstream media, and to convey enough information to make a compelling argument (Detjen 1996).

At times the environmental media has played an important role in raising the awareness of environmental issues (see, for example Detjen 1996 and Burch 1995). However it has always faced two major problems – limited resources and the tendency for the vast majority of people who read the journals to be those who are already aware of and concerned about environmental issues. A lack of resources means that environmental magazines and journals are usually cheaply produced, and frequently discontinued. It is also very difficult to gain access to more than a local audience without going through the mainstream distribution channels, which may be influenced by the same structures of power and control that hold other media in check.

The use of the Internet as an outlet for environmental media means that some of the issues relating to limited resources can be overcome. Once a connection to the Internet and some space on a web server has been obtained there need be very few ongoing costs associated with production or distribution. Factors such as the frequency of publication, the geographic dispersal of the audience, the size of the “print run” (or the number of people who access the publication) and the amount of material published in each issue have no impact upon the cost of production. Furthermore, back issues can be easily archived and accessed, which means articles enjoy a greater longevity, thereby providing the opportunity for each to be more widely read. All of these factors mean that the Internet makes publication much more accessible to small alternative media outlets.²

A list of some Internet-based environmental journals, with their web addresses and brief descriptions, can be found in Appendix 4.

6.3 The Internet As Substitute For Mainstream Media

The survey and interviews conducted as part of this research suggest there is evidence that some environmental groups are beginning to use the Internet to supplant or supplement the role of other media. However, in general the Internet has not diminished the importance of mainstream media for environmental groups. In terms of mass exposure, the Net is not perceived to be in the same league as offline media such as television and newspapers.

² See Detjen (1996) for a discussion of the role of the Internet in facilitating increased public environmental awareness through dedicated environmental media.

Because of the diversity of organisations that were included in the survey the relationships with and importance of mainstream media varies. Some groups place a great deal of emphasis on raising awareness of issues through the media, while others utilise approaches that rely very little on media strategies. One survey respondent felt that the attention given to the media in the questionnaire was unwarranted, and said that this is a peripheral issue for non-profit organisations. However, a qualitative interpretation of interview and survey material indicates that, for most of the environmental groups who took part in this study, media exposure is a significant concern. This is also something which helps to shape the on-line activities of these groups, with 89% of survey respondents indicating that they use the Internet in conjunction with other media in some way.

Although a small number of groups said that they use the Internet almost exclusively to convey information most (87%) representatives surveyed said that the Internet had not decreased the importance of other media. There were a range of reasons for this, the most frequent being problems with accessing “mass” audiences through the Internet. However five respondents who indicated that the Internet had not reduced the importance of other media said that this was because they had never used other media to a large extent. For three of these, this was because they could not get exposure in television, radio and newspapers. One said it is because they are more involved in activist training than publicity, and the other is an Internet based media outlet.

Another respondent said that their site was quite new, and that it is possible the Internet may mean other media become less important in the future. Seven groups said that all media are equally important, indicating that even if the Internet was offering opportunities for more exposure, this should be seen as supplemental rather than substitutive of other media. Six groups said that the Internet is mainly a tool for internal communication, or for supplying information to people who are already aware of the issues.

Zelwietro’s (1998) study also provides some information about the relative importance of the Internet in comparison with other media, as shown in Table 6.1. Only 7% of the organisations surveyed by Zelwietro indicated that the Internet is the most important medium. It should be noted, however, that the selections include telephone and face-to-face contact – mediums which could be associated as much with networking and co-ordination as with publicity. The “print form” selection could also include a wide range of communications: letters to politicians, letters to members, internal correspondence, newspaper and magazine articles, pamphlets stating the group’s position, posters, and so on.

Nevertheless, these results do appear to support the findings of this study, which indicate that the Internet has not reduced the importance of other media forms for most groups. The low ratings for television and radio in Zelwietro’s study are probably because the majority of groups rarely get access to these media, which therefore do not play a major role in their activities.

Table 6.1: Importance Of Medium To Organisations

Medium	% Of Orgs. Which Ranked It Highest
Print Form	53
Telephone	27
Face-to-face	11
Internet	7
TV	1
Radio	1

Source: Zelwietro 1998: 51

6.3.1 Why Are Television, Newspapers And Radio Still Important?

The primary reason that exposure in offline media outlets remains crucial for many environmental groups is that the products of television, newspapers, magazines, and radio are consumed by consistently large audiences, of a size that would dwarf that of the typical web site. Other media still play a far more pivotal role in terms of creating public awareness and shaping public opinion across wide populations, and (according to survey results) most environmentalists are aware of this.

In this way, aspects of traditional media which are supposedly less “democratic” than the Internet may in fact be necessary for building awareness about an issue, and for creating consciousness of environmental issues in general. People who are not already actively interested in environmental issues may not take the trouble to find the web sites of environmental groups, but they may become concerned if they happen to see or read a news item. In other words, the ability of mainstream media to pump messages to a relatively captive (or at least predictable) audience may be an important component in the struggle to keep environmental issues alive in popular discourse.

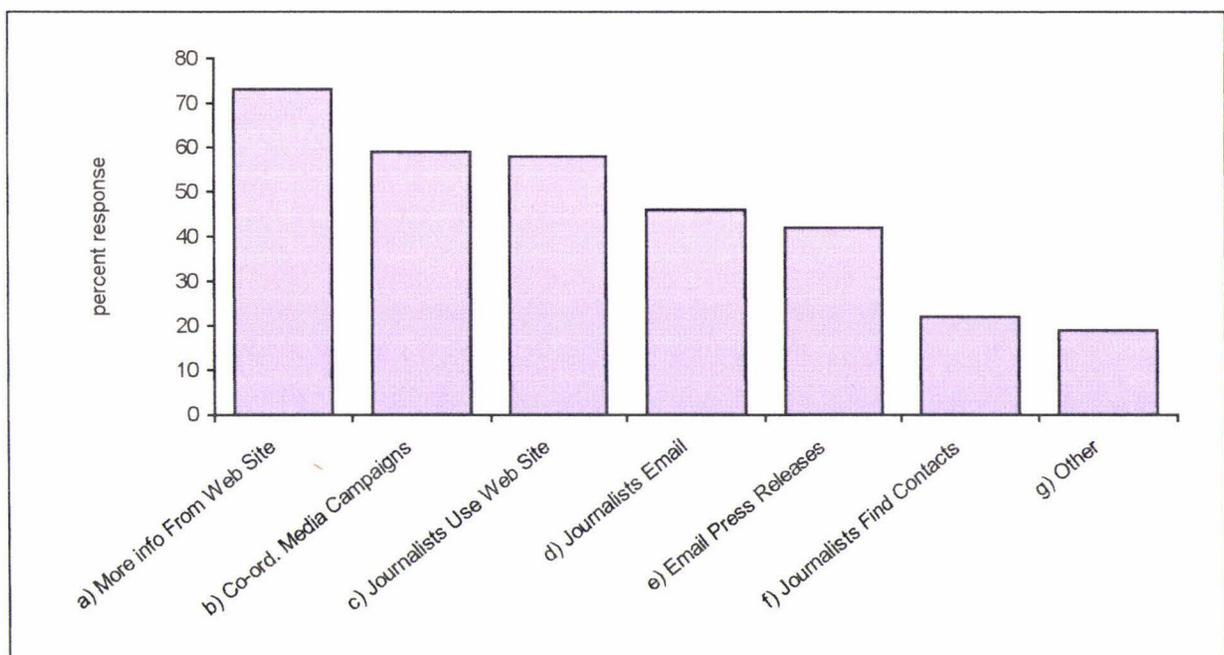
Also, even in developed countries the Internet is still accessed by only a minority of the population, and very few have access to the Net in poorer nations (see Section 5.3.2). A small number of survey respondents pointed to this as a limitation of the Internet, and indicated that their organisations were careful not to rely entirely on the Internet as the only outlet of information.

6.4 The Internet And Access To Mainstream Media

For some environmental groups, the Internet is more important as an interface with the mainstream media than it is for getting information directly to the public. The survey suggests that the Internet is frequently becoming an integral part of environmental groups' media strategies. The technology can be used to make information available to reporters, to present a more professional image to the press, and to elaborate on stories presented in short news items. For some groups the Internet is viewed as a means of accessing other media, or a way of reinforcing messages gained from exposure elsewhere rather than as a replacement for more traditional forums.

Figure 6.1 shows the percentage of environmental groups surveyed as part of this thesis who use the Internet to strengthen their profile in other media. The categories used in the graph are not entirely self explanatory, so this chart should be interpreted alongside the more detailed discussion which follows.

Figure 6.1: Accessing Mainstream Media



Note: There were 79 valid responses for this question. Respondents were asked to indicate if they did use Internet to access the media in this way, so non-response can not be differentiated from a negative answer.

Below are the questions as worded in the survey, with the proportion who answered “yes” and a brief discussion of the implications of each. As is the case with all the results from this survey, the fact that a significant proportion of groups have only been using the Internet for a short time needs to be taken into account in the interpretation of these media related questions.³

(a) People go to the web site to find more information after the organisation is mentioned in other media: 73% (58/79).

Nearly three-quarters of respondents said that people used their web site as a source of further information after finding out about the organisation in other media. This is an observation which also came through in some of the unstructured interviews. (Information from these interviews is drawn on in the following discussion).

This relationship is an important aspect of the Internet / media interface because it creates the potential for the Internet and other media to work in a complementary way, each compensating for the shortfalls of the other. As discussed above, the Internet allows environmental groups to make available their points of view, and to present as much supporting information as they want – but there are problems with getting a large audience to visit a site. On the other hand, if a group is able to gain exposure in the mainstream media they will probably be seen by a large number of people, but they may not be portrayed favourably and will rarely be given the time or space needed to create a compelling argument. The use of offline media in conjunction with the Internet means that people can use the mainstream media as a starting point and quickly find more information on the Internet when they become interested in something.

Of course, this relies upon the ability of groups to gain some kind of media exposure in the first place. It also assumes that people will actually use the Internet in this way, and that they will be able to find the group’s web site (something which can be facilitated if the media can be persuaded to publish the Internet address, especially if the address is easy to remember⁴). Also, although the survey results indicate that the web sites of a lot of groups are being used in these ways, they tell us nothing about the significance of this in terms of scale. For example, no differentiation can be made between a group which receives thousands of hits to their web site after being featured on television, and one which has had a response from only three or four people after a newspaper article.

³ One group which had made 3 selections noted that their site was only a few months old, and another which had made only 2 selections said that they only established their site one month previously, but expected that if the question were asked in six to twelve months all would be ticked. See Section 5.1 for a profile of the amount of time survey respondents have been using the Internet.

⁴ If a group’s web site has its own domain name, and this is closely related to the name of the group, then the site will be much easier to find as people can remember or guess the address, rather than having to use a search engine to find it. For example, “greenpeace.org” is probably easier to remember than “http://www.freenet.cdmonton.ab.ca/compost/home.html”. However, there are costs associated with registering a domain name (US\$70 for one ending in .org), and the ongoing monthly hosting costs are also usually higher.

(b) Media campaigns / strategies are co-ordinated with web site material: 59% (47/79).

The fact that a majority of the environmental groups surveyed utilise the Internet to co-ordinate media campaigns and strategies indicates that they consciously use their web sites to reinforce efforts in other media, as opposed to viewing the Internet as an entirely independent medium.

For example, one respondent stated that they can offer supporting documentation for their campaigns that is “too extensive to offer any other way.” Another said that all their campaign material is posted to their site, for the use of campaigners, journalists or as educational material.

(c) Journalists use the web site to find information: 56% (44/79), (d) Journalists use email to make requests for information: 38% (30/79), (f) Journalists use the web site to find interview contacts: 23% (18/79). 65% (51/79) of respondents indicated that journalists use at least one of these three methods to find information about their group via the Internet.

The web site of an environmental group can act as a continually updated “press release”, which journalists can access any time they want to refer to the organisation. A lot of environmental groups also publish press releases in their sites, and archive old press releases. This helps to address the tendency that journalists are generally pressed for time and resources, and are much more likely to cover a story if they have easy access to useful information. The archiving of press releases within the web site means that journalists and others have easy access to the history of the group’s struggle, without having to keep files at their own location.

There is plenty of evidence that, in a general sense, journalists are using the Internet as a tool. Online press release services, which email press releases to journalists who subscribe to the service, are beginning to emerge⁵. Several people have written about the ways in which the Internet is influencing the methods journalists use to obtain and disseminate information (Borden & Harvey (eds.) 1998, Halcrow 1998, Kawasaki 1997 and Noack 1996). Internet political consultant Jonah Seiger argues that the online release of the complete Kenneth Star report on the Clinton / Lewinsky sex scandal shows that the Internet is having an important effect on democracy, because having access to the whole report on the Net allows journalists to take their own angle on the story (Reuters, 1998).

⁵ See, for example, Internet New Bureau at <http://www.newsbureau.com/>

That almost two thirds of survey respondents say journalists use the Internet to access information on their groups via the Internet does not in itself *prove* that this is helping the groups to achieve greater exposure because of their Internet presence. After all, in many cases the reporters may have phoned the groups, or requested a faxed press release, if they did not have Internet access. However, by making the stories easier and cheaper to cover the chances of exposure are almost certainly increased⁶, so it is very likely that this is having some effect. That the direct use of the web site to find information is the most frequently adopted approach is also interesting, because this indicates that reporters may often be seeking ready-to-use information. Emailing a group for further information (if all the necessary details are not in the web site) is another step, and emailing someone to set up an interview involves even more involvement on the part of the journalist. Each of these steps in finding the information required to complete a story is a potential point where the journalist may lose interest, and move onto something else.

(e) Press releases are emailed to newspapers / television etc.: 57% (45/79)

Using email, press releases can be sent to a large amount of media outlets very quickly. This can be important when groups need to create instant public awareness about an event (such as a law which is about to be passed, or a forest which is about to be bulldozed), and it means that stories may be more likely to be covered because they can be billed as “up to the minute.” This also helps overcome resource limitations, meaning that environmental groups can send their press releases to a greater number of outlets with more geographically dispersed headquarters.

Furthermore, returning to the theme of ease of use for reporters, well written email press releases can be copied and pasted directly into news items for the print media, whereas in the case of faxed or posted press releases the desired sections need to be typed out again. As well as saving journalists time, this may also increase the chances of material being used verbatim.

No literature relating to the relative weight given by journalists to email press releases, as opposed to postal, fax and other methods of delivery, has been located. This, however, could be an issue. For example, a number of people in the environmental movement have observed that politicians are more likely to take letters or phone calls as indicators of public opinion (see for example, 20/20 Vision, date unknown: WWW). On the other hand, journalists are perhaps more likely than politicians to understand and be comfortable with electronic communication. Technological literacy is a requirement of many journalism jobs (Kawasaki 1997) and the average age of journalists may be lower than that of politicians.

⁶ See Stauber and Rampton 1995, Chapter 11, for a discussion of the pressures on journalists' time and resources which make the use of easy-access material necessary.

The extent to which journalists use the Internet is likely to depend on both the individual journalist and the organisational culture of particular media entities. Some interviewees and survey respondents indicated that they are aware of the press using the Internet as a source on a regular basis. One survey respondent said that their Internet site had become the first “port of call” for the media. On the other hand, another respondent expressed surprise at the limited extent to which the media were using the Internet, despite the availability of sophisticated computer systems in most media-related workplaces, and said that they believe a large reliance on telephone contact and external news providers such as Reuters remains. Therefore knowledge of the extent to which the local media use the Internet could be an important factor in decisions relating to how much emphasis should be placed on the use of the Net in an environmental group’s media strategies.

(g) Other Ways The Internet Helps Environmental Groups’ Media Profiles: 19% (15/79)

Some groups indicated that there were other ways the Internet helps to maintain profile in or alongside other media. These included placing information in newsgroups and other online forums, the provision of resources for students, companies and governments, an online petition, the sharing of media lists amongst groups, people contacting the group after learning about issues through the web site, the use of email for mass campaigning, and the transfer of web site material into an organisation’s journal.

6.5 Ownership And Control On The Internet

As we have seen, structures of ownership and control in the media pose major problems for those seeking environmental reform, especially when this constitutes a challenge to dominant discourses and structures of power. In at least some respects, the Internet strongly contrasts these characteristics – anyone with a computer hooked up to the Net can publish whatever they want, and people all over the planet are instantly able to view it.

However we have also seen that for a lot of environmental groups the content of their Internet site remains less significant for creating awareness than a small article in the local paper, despite the fact that millions of people log onto the Internet every day. This calls into question the validity of regarding the Internet as a form of “mass media.” Traditionally, the term “mass media” has referred mainly to formats where large numbers of people view the same message (Ryan & Wentworth 1999: 9). The Internet offers an almost infinitely more diverse range of options than do most media, and the experiences of all of the people who are online at any one time are likely to be enormously varied. Therefore concepts of mass media on the Internet need to be more specific, and perhaps should be applied to particular loci on the Internet which attract a “mass” audience (Samarajiva 1997:287).

An example of pressures to regulate content on the Internet can be found in the case of the *Lycos Saves The Planet* Internet site and the EnviroLink network. Lycos is a major Internet search engine and portal site, which means that a huge proportion of Internet users have contact with this service when seeking information on the Net. The "portal" component of the Lycos service incorporates the review and presentation of material on a vast array of subjects, brought together in pages with summary information so that users can access key sites without plowing through search results.

In May 1998 a new Lycos portal was set up in conjunction with EnviroLink, one of the largest environmental networks on the Internet. EnviroLink indiscriminately includes information about, and links to, numerous environmental and animal rights groups from a wide range of positions. EnviroLink was contracted to provide information for the *Lycos Saves The Planet* page, which included daily coverage of environmental issues, an index of "green" businesses, and information on activist groups (Silberman 1998: WWW). EnviroLink was offered US \$40,000 per year, with further payments based on the amount of traffic generated by the site. This fee constituted a significant proportion of the non-profit organisation's \$200,000 annual operating costs, and the opportunity for exposure this created for EnviroLink was perhaps of even greater importance (Hoffman & Chihara, 1998: WWW; Newman, 1998: WWW).

At the beginning, Lycos were keen to trumpet the value of the project. A link to the *Lycos Saves The Planet* page was placed on the Lycos home page (which attracts hundreds of thousands of visitors daily), along with the announcement "Lycos is pleased to join with the EnviroLink Network in bringing you the information you need to help save the planet" (quoted in Lenhart, 1998: WWW). Lycos CEO Robert Davis proclaimed that the company's "support of EnviroLink is another example of the commitment Lycos has made to promoting important issues like the environment" (quoted in Silberman 1998: WWW).

The initiative came at a stage where Lycos was following a strategy which saw the creation of a sense of "community" as essential to maintaining high traffic and profits (Silberman 1998: WWW). The EnviroLink agreement was just one of many partnerships and acquisitions that Lycos was undertaking at the time. It appears likely that the image of a service driven by social conscience, and conducive to the progressive aspects of the Internet, was part of this strategy. As Hoffman & Chihara point out, "what better PR could there be than taking credit for saving the planet?" (1998: WWW)

The relationship between Lycos and EnviroLink was not to last, and the apparent grounds for its termination brings the commitment of Lycos to save the planet into question. A few months after the launch of the site, links from the main Lycos page suddenly disappeared, and without any notice the passwords used by EnviroLink staff to place information on the site stopped working.

On the same day, Envirolink staff learnt of an article published in Off-Road.com, an online magazine for four wheel drive enthusiasts which relentlessly promotes the anti-environmental messages of the “wise-use” movement.⁷ The article, which is written by Off-Road.com senior editor Norm Lenhart and preceded by the summary “Search Engine Giant Sides with Radical Environmental Web Haven - May Soon Find Itself Searching For Customers,” is deeply critical of Lycos’s support of EnviroLink (Lenhart 1998). Lenhart focuses on the extreme fringes of EnviroLink, to paint a picture of a strongly radical organisation with a hunger for mayhem and anarchy and no concern for human wellbeing. He disregards the actual principles of the organisation, which provides a forum for all types of environmentalism without endorsing any one perspective, and the fact that EnviroLink includes over 400 organisations, the majority of which are far from “radical” (Kornblum 1998: WWW).

Much of Lenhart’s article consists of text and images taken from the sites of the more extreme members of EnviroLink, and are put together in such a way as to strike fear into the hearts of those who view the environmental movement as a fanatical menace, and as a threat to profits and freedom. Featured groups include EarthFirst!, Hunt Saboteurs, Animal Liberation Front and PETA (People for the Ethical Treatment of Animals).

Figure 6.2: Image From Off-Road.com Article



⁷ Off-Road.com and Norm Lenhart’s affiliations with anti-environmental groups is outlined at <http://www.waste.org/~oak/facts.html>, part of a “Friends Of Envirolink” site set up in response to the scrapping of the EnviroLink contract. This document contextualises the Off-Road.com attack on the *Lycos Saves The Planet* site, showing it to be part of the organisation’s ongoing campaign against pro-environmental ideas. The page mentions monthly anti-environmental columns in Off-Road.com, and provides numerous quotes which illustrate the anti-environmental position.

Wise-Use and other anti-environmental activities are explored in more detail in Chapter 7.

Throughout, Lenhart emphasises the point that companies and the public are going to suffer if these type of groups are permitted to flourish, and says that it is strange that Lycos is promoting an organisation whose members are likely to damage to some of its key advertisers. He argues that by challenging companies which allegedly harm the environment EnviroLink is threatening the interests of the public, because stock holders in both Lycos and other industries are likely to suffer. Lenhart also lists examples of nineteen different boycotts maintained by organisations in the EnviroLink network, all against large corporations such as BP, Exxon, Dow Chemicals, Mitsubishi, Nike and McDonalds.

Upon publishing this piece Lenhart sent a letter to Lycos (addressed to around thirty key members of Lycos staff, as well as representatives of other companies). This politely said that Lycos is an excellent search engine, but asked whether they knew what they were supporting. Recipients were invited to read the article, which Lenhart said would be published on the front page of Off-Road.com, with a monthly readership of over 300,000.

For a short time, the *Lycos Saves The Planet* page remained, although there were no links to it from other Lycos pages (Silberman 1998: WWW). The EnviroLink content has now been completely removed, and links to the page now bring up a list of "Environmental Regulation" web sites. The search engine appears to be playing it especially safe now; none of the 20 links listed on the page are environmental groups (they are primarily government and companies, and also include two military bodies and one educational institution).

Lycos officially maintains that the cancellation of the *Lycos Saves the Planet* site shortly after the Offroad.com criticism was "purely coincidental," and that it was due to a failure on the part of EnviroLink to fulfill their contractual obligations (Newman 1998: WWW).

We can never be certain of Lycos's actual motivations for removing the site – it's possible that there were reasons unrelated to the Off-Road.com article. However the evidence certainly suggests that it was a result of external pressure. Both allies and adversaries of EnviroLink believe this to be so, as do the authors of all of the news articles and newsgroup postings on this subject that have been accessed in the course of this research⁸.

That the reality of Lycos's internal decision making, and external pressures, can not be known absolutely is not crucial for the current analysis. Even if this example were completely hypothetical, it serves to illustrate the ways in which structures of power which continually influence media content can also come into play on the Internet.

⁸ The timing of the move, comments from Lycos staff (see Silberman 1998: WWW), the fact that the reasons for dissatisfaction with EnviroLink have not been made clear, and the fact that the concept was scrapped completely (as opposed to going ahead with saving the planet without EnviroLink, or with a revised approach) all support this. It is also possible (perhaps probable, if we take into account the history of corporate interaction with other media) that Lycos may have been pressured by other companies listed in Lenhart's boycott section.

Internet sites which attract large audiences, and those which are used to find and access other sites and information on the Internet, are overwhelmingly controlled by corporate entities (Schiller 1999: 109-118). Many of these sites are driven by advertising, and there is no reason to assume that in the online context major advertisers will not continue to apply strategies of pressure to protect their interests. Furthermore, ownership and control of major Internet sites is increasingly falling into the hands of a few big players, as acquisitions of online entities proceed at an astonishing rate (Schiller 1999: 109-118).

Of course, the Internet is different from other media in that powerful entities do not normally have the ability to exercise any kind of exclusive control on content. They are not able to prevent any individual from posting whatever they like on their home pages or in a newsgroup (unless some legal argument can be made, such as defamation, and even then it near to impossible to cleanse the Internet entirely of particular claims or information). In the Lycos / EnviroLink case, every troublesome example cited by Lenhart remains on the Internet, and can still be accessed anywhere in the world.

The potential problem for environmental groups, is that search engines, portal sites, and other mega-traffic sites play a huge role in bringing people to other web sites, and thus influence the type of content the majority of people will be exposed to. We have already seen that, in comparison to other media, the Internet is often not ideal for creating popular awareness of environmental issues due to the paradox that people need to actively seek information on environmental issues to find out that the issues exist. Therefore links in other locations on the Internet are essential, and the effectiveness of these links will depend on the traffic magnitude of the sites where they sit.

The ability to access populations who are not already involved in environmental issues is also important. The link from the front page of Lycos was of huge value because people surfing the Net through this search engine could be reminded that they are among the majority of people who care about environmental issues, regardless of whether they went online with any intention of finding environmental information.⁹ Interested individuals then had the opportunity to proceed to sites that reflected their own interests and perspectives, whether this be learning about recycling, saving seagulls from six-pack ties, or sabotaging forestry machinery. The risk is not that information about the environment will be unavailable on the Internet, but that most people will never know that it is there. Mark Crispin Miller (1996) puts this in vivid terms:

⁹ For examples of surveys showing that overwhelming majorities are concerned about environmental issues, and believe that more controls are necessary, see Dowie 1995: 260, Stauber & Rampton 1995: 126, Wirthlin Report 1997: WWW.

The same gigantic players that control the elder media are planning shortly to absorb the Internet, which could be transformed from a thriving common wilderness into an immeasurable de facto cyberpark for corporate interests, with all the dissident voices exiled to sites known only to the activists and other cranks. (Miller 1996: WWW)

The influence of corporate owned portal sites is likely to continue, and for most users of the Internet these services will appear neutral and non-exclusive. As Hoffman and Chihara (1998) suggest, the Lycos example may be representative of a growing trend towards corporate influence upon the Internet's discursive terrain:

As the Web becomes bigger and messier, more people will rely on their portals for guidance. How and why those portals will circumscribe the range of voices delivered to the mainstream has yet to be determined. But profit does not have a particularly good record for motivating progressive, radical or dissident speech. (Hoffman & Chihara, 1998:WWW)

The rapid acquisition of a wide range of online services is a strategy which has been undertaken by virtually all major Internet operations. For example, around the same time Lycos started to buy up other services Yahoo was also busily striking deals to provide users with specialized content, free electronic mail, games, community offerings, and shopping services, and Excite acquired eight companies to build additional features to attract a larger regular audience (Schiller 1999:121). As Dan Schiller explains, the rationale behind this is simple:

Users – who would have to stick around at its site for longer periods to use these new offerings – would thereby become more accessible to the advertisers that furnished the bulk of Yahoo's revenue. (Schiller 1999: 121)

The potential for mainstream discourse to be massively influenced by a few power holders is further exacerbated by the increasing degrees of cross-ownership between traditional media and Internet based ventures. Companies such as ABC News, Fox News, CNN, Bloomberg News, Disney and CBS are fast becoming some of the most important financial players in the Internet (ibid. 100). Many of these ventures involve deals with, or acquisitions by, the most important computer and Internet companies. For example, in 1997-1998 Microsoft struck deals with two dozen major media partners, such as Disney, Time Warner, and Dow Jones, to showcase online offerings via packages of entertainment, business, news, sports, and lifestyle channels (ibid.101).

Those who have the most to gain from the Internet financially will not succeed by reinforcing aspects of the Internet that are usually associated with democratic, participatory communication.

On the contrary, the aim is to “draw millions of consumers – and the advertisers hoping to reach them – to a particular corner of cyberspace” (*Business Week*, quoted in Schiller 1999: 140, see also Rheingold 1994: 277).

Many of the general trends described at the beginning of this chapter which make favourable media exposure difficult to attain for environmentalists and others seeking social change, have been carried over and amplified on the Internet (Schiller 1999). The reliance on advertising continues, and media monopolies are likely to remain as prevalent as ever. Schiller also believes that the tendency for content to be produced primarily for audiences who fit advertisers’ ideal demographics continues on the Net, and that this is “not simply a matter of basic access” (ibid. 141). Audience segmentation and targeting may in fact be extended through the Internet’s “vastly enhanced apparatus for surveying and tracking audience behaviour” (ibid. 141, see also Rheingold 1994: 280). Finally, as is the case in other media, advertising does not exist in isolation to other content. Some commentators believe that the influence of advertising on the views and information in major Internet sites is possibly even greater than in other media (ibid. 127, Secunda 1993: 43).

Examples of the overlap between advertising and editorial can be found on a regular basis on the Microsoft home page¹⁰. For example, on September 15, 1999 the “Today on MSN” section of the site, which usually carries a mix of selected news and “advertorial” headlines, presented several articles relating to Cyclone Floyd, which was threatening to devastate Florida at the time. Indistinguishable from the “News” headlines was a link labeled “Disasters: Are You Covered?”, which takes the user to an article within a Microsoft insurance services site, with links to a range of insurance policies and quote services. The event of the storm, and the decision to headline information about it on the Microsoft home page, provides the company with an opportunity for increased insurance policy sales.

Figure 6.3: Section of Microsoft Home Page, September 15, 1999



¹⁰ This is the page that all users who use the Internet Explorer programme are directed to when they log onto the Internet, provided they haven't changed the default settings. The address of this page is <http://www.msn.com>.

This example is probably of greater concern for rival insurance companies than it is for activists. However it illustrates one instance of commercial interests shaping what is presented as “news” in the online context. Sometimes these interests may involve selling insurance policies, at other times they may involve helping a major advertiser or subsidiary communicate to the public that genetically engineered foods are safe, or that global warming is going to end world hunger by promoting crop growth.

6.6 Reflections

The examples and trends discussed in this chapter illustrate that some characteristics of the Internet offer environmental groups opportunities to overcome selected limitations with other media forms. However other Internet characteristics would appear to reinforce familiar problems.

Environmental groups can now make views and information widely available without having to worry about shaping their communication to the needs of the media. There are virtually no limits on the amount of information which can be published on the Internet. This overcomes the limitations associated with substantiating claims within the time or space available in other forums. The Internet can also be used in conjunction with other media, either to provide people with further information after a group gains exposure in a news item, or to make it easier for the media to cover environmental stories.

On the other hand, it is often difficult for an environmental group to use the Internet as a “mass media” outlet, and many of the opportunities for mass exposure on the Net are subject to structures of power and control similar to those which influence other media. Many of the Internet sites that attract large audiences share ownership with the corporations which dominate other media. Environmental groups often need to get messages across to people who are not already thinking about or aware of environmental issues, and in many cases the Internet has not proven to be ideal for this purpose.

In summary, the Internet has the potential to act as a media source which is more democratic than other media. There is the possibility of expressing a wider range of views. But it also has the potential to replicate and amplify familiar structures of power and control. Perhaps the most important point is that neither trend represents something that is intrinsic to the technology of the Internet itself and neither is inevitable. This is important because the way we perceive the Internet is likely to have a bearing on what it becomes. For those who seek social change, the assumption that the Net is intrinsically democratic is dangerous because it may mean a lack of vigilance with regards to developments which may threaten online freedom, or failure to identify and question structures of power where these do exist. Likewise, to view the Internet as something which can only support existing inequalities and patterns of domination may be to surrender something which has the potential to create very real and positive change.

We have seen that some of the most important factors influencing the ways environmental issues are portrayed in the media arise from pressures from powerful entities. Chapter 7 explores the role of such environmental adversaries in the struggles of the contemporary movement, and discusses the ways in which the Internet may be helping to change the dynamics of these struggles.

Chapter 7: Environmental Adversaries

A comprehensive review of what has become known as the public relations disaster of the century indicates that Shell had it all wrong about its own influence on the media. There was a new factor in the game, which had been completely missed out: the role of the Internet. That would not be allowed to happen a second time. (Lubbers 1998: WWW)

Environmental concerns are nearly always sites of struggle. In generalised terms, the changes environmentalists would like to have put in place are frequently at odds with the interests of powerful entities, and these entities tend to have considerable resources with which to protect their interests.

In seeking to gauge whether the Internet is helping to revitalise the environmental movement, it is important to look not only at its usefulness for environmental groups but also at the ways in which entities that oppose these groups are making use of this medium. The political context which anti-environmental activities have helped to create is a hugely influential factor in shaping the nature and likely reception of discourse relating to environmental issues. As environmentalists begin to achieve success in the off-line world there is usually reaction from those whose interests are being compromised. As we shall see, there are already examples of adverse reactions to environmental successes on-line, and this is likely to increase as the influence of the medium on public perceptions becomes more apparent. At the same time, environmentalists are using the Internet to counter and expose the practices of the anti-environmental backlash. The pertinent sociological question is whether the on-line balance of power will be different than that previously experienced.

This chapter provides a brief background of the backlash against environmentalism, explores the ways some anti-environmental entities are using the Internet, and outlines the perceptions and experiences of environmental groups with regard to green backlash activities on the Internet. Attention is also given to the use of the Internet as a vehicle for countering anti-environmental activities.

7.1 The Green Backlash – An Overview

Perhaps the most visible form of anti-environmentalism is the American “Wise Use” Movement, a diverse network of organisations brought together to challenge the progress of environmental activism and legislation (see Beder 1997, Dowie 1995: Chapter 4, Helvarg 1994, Rowell 1996). The Wise Use Movement was launched in 1988 by Alan Gottlieb and Ron Arnold. It aimed “to destroy the environmental movement” (Arnold, quoted in Dowie, 1995: 94).

The organisational hub of Wise Use is the Centre For The Defense Of Free Enterprise, whose goal is to defend free-market capitalism from the menaces of environmentalism, socialism and government intervention (Dowie 1994: 93). Gottlieb and Arnold believe that “the only way to defeat a social movement is with another social movement,” and have proceeded to manufacture a supposedly “grassroots” network of groups to challenge the environmental movement (Dowie 1995: 94).

Wise Use instantly attracted generous financial backing from corporations whose interests have been threatened by the environmental movement. At the same time, it began to attract support from certain sections of American society who were willing to accept Gottlieb and Arnold’s claims that environmentalists are self interested, hysterical communists / nazis who seek to broaden the influence of big government, impose unjust restraints upon individual liberty, and destroy civilization (Beder 1997: 51, Dowie 1995: 49). Participants in the Wise Use movement are typically based in rural areas. They include those who object to restrictions on the use of public lands (such as off-road vehicle enthusiasts and hunters), those who believe their jobs are threatened by environmental legislation, and those who object to restrictions on private land use (Beder 1997, Brick 1998: 201, Dowie 1995: 96-103).

However, the environmental backlash is far more widespread and diverse than Wise Use. Moreover, it is more the invention of corporate public relations experts than it is a social movement in the usual sense. The illusion of a spontaneous, grassroots response is a carefully nurtured component, but the environmental backlash can be better described as a well organised and extremely well resourced set of strategies orchestrated by a small number of individuals in positions of economic power (Rowell 1996: 30).

The rhetoric of anti-environmental proponents often draws heavily upon principles of free market environmentalism (see Section 2). This approach supports rightwing principles of unencumbered privatisation, free market economics, and hands-off government. The only difference between general free market policy and free market environmentalism is that the latter explicitly claims that this is also the best strategy for protecting the environment. The idea that the free market is the only fair and sustainable way of structuring an economy is reaffirmed, but the amendment that it is the also only way to save the planet is added.

For example, Paul Easterbrook claims that corporate capitalism is inherently environmentally and socially responsible, and that if government leaves industry to its own devices all pollution will be phased out (cited in Stauber & Rampton 1995: 138). Ron Arnold makes the distinction between “ideological environmentalism” and the type of environmentalism that he supports (the unrestrained use of natural resources in the context of a free-market economy). The claim that the free market is somehow inevitable is portrayed as an extension of nature itself, and therefore as the only system that is in harmony and equilibrium with the natural world.

7.1.1 Techniques Employed Against Environmental Groups

Organisations and companies seeking to undermine the efforts of environmental groups often employ a variety of the following strategies (examples of these approaches can be found throughout Beder 1997, Brick 1998, Dowie 1995: Chapter 4, Hager 1999, Helvarg 1994, Rowell 1996, and Stauber and Rampton 1995):

- The formation of seemingly grassroots (often dubbed “astroturf”) organisations aimed at countering the environmental movement’s actions, both through direct confrontation and counter-government pressure. These groups claim to represent the views of the masses in debates which have previously been dominated by environmental groups. However in most cases they are organised and funded by those who have a specific interest in limiting the effects of environmental action and ideas. For example, People For West! is a large American wise-use organisation which uses many of the tactics of environmental groups, such as knocking on doors to collect signatures for petitions, organising letter writing campaigns, picketing government buildings and testifying at public hearings. The principal message of People for West!, who are funded by mining and petroleum companies seeking cheap access to resources, is that environmental regulations cost jobs and impose upon individual freedom (Beder 1997: 57-59).
- The illusion of popular dissatisfaction with environmental regulations and support for industries which may threaten the environment is also created through telephone, mail and email strategies. Citizens are contacted, and the details of an issue are explained to them from the perspective of the company, public relations outfit or Wise Use group. They are then invited to contact a government representative to express ‘their’ views on the issue. Sophisticated selection techniques are used to identify likely participants, so that the type of people who are invited to communicate with their representative are more likely to resent environmental restrictions. Politicians frequently respond to this activity, because it is assumed that for every person who feels strongly enough about an issue to write a letter or make a phone call there must be hundreds or thousands of others who feel the same way (Stauber & Rampton 1995: 81).
- Manufactured popular support for anti-environmental campaigns is complemented by the production of scientific and academic evidence to back claims. This is accomplished through the funding of conservative think tanks – organisations of so-called experts which resemble “universities without students.” These corporate front groups do little in the way of original research, but produce large amounts of material to support the perspective of their funders, thus giving the latter’s position a “scientific” and authoritative backing. They provide press releases and journal articles, and representatives are often called upon to give “expert” statements in the media (see Megalli & Friedman 1992: 20-25).

- Material produced by the institutions described above is often presented in educational packages distributed free to schools and other educational institutions. These are normally attractive packages with extensive information, of a production quality that far outshines that of the educational resources available to schools in many low-income areas. The information is presented to appear objective and unbiased. Again, contrary evidence from the wider scientific community is usually ignored, or represented as extreme fringe viewpoints (Beder 1997: Chapter 10).
- Division within the movement is also sought. Mainstream or conservative environmental groups are adopted and given apparent support and success through compromise. Groups who are unwilling to compromise and accept industry's terms are labeled extremists, radicals, or anti-human, and strategies are undertaken which emphasise the supposed differences between these organisations (Beder 1997: 133-135). This is especially pertinent given that some social theorists stress the importance of coalitions between radical and mainstream environmental groups in achieving substantial social change (Kamieniecki et. al. 1995: 325, Castells 1997).
- The proliferation of SLAPPs (Strategic Lawsuits Against Public Participation) has also had an effect upon environmental action and debate. SLAPPs are lawsuits filled against groups, individuals or media who speak against particular companies or organisations. This type of legal action relies upon the vastly disproportionate resources of industry in comparison to environmentalists. The cases will often be based on shaky legal reasoning and have little chance of success if taken to the point of resolution. Nevertheless, they often force environmental groups to back down because they do not have the resources to fight a lengthy legal battle, or because even if the chances of loss were minimal the financial consequences would be disastrous. Beder suggests that these law suits are profoundly undemocratic in that they stifle free speech and prevent public participation in the political process (Beder 1997: 73-74).
- In some case there have been instances of direct sabotage of an environmental group's resources and activities, or threats and violence against activists themselves (see Helvarg 1994: 362-365). Environmental groups have also been infiltrated by agents sent in by corporations, who attend events and even take active roles in the groups' organisation. These people collect information about the groups' planned activities, and sometimes also attempt to disrupt meetings (Helvarg 1994: 324, Stauber and Rampton 1995: 18).

7.1.2 Greenwashing

Not all green backlash activity is designed to directly damage or hinder environmental groups. More commonly, activities aim to disseminate misinformation. For example, a company may over-emphasise the dangers of its market competitors (or stress the actual dangers, but without comparison to the potential harm of its own products or activities).

In other instances companies may label their existing products as "environmentally friendly", "from sustainable resources" or "biodegradable", or claim to be doing environmental good deeds. In reality, the products themselves often undergo very little redevelopment for environmental purposes, and the "good deeds" are often things that the company is required to do by law. For example, US oil company Chevron has run successful advertising campaigns showing employees protecting the natural habitats of wildlife such as kit foxes, grizzly bears, and eagles. However this is actually restoration work which the company is legally required to carry out before it can destroy other habitats. At the same time, Chevron was actively lobbying to have the laws that necessitate these activities removed (Helvarg 1996: 40).

Contrary to declaring war against environmentalists (as do some "Wise Use" groups), greenwashing involves claiming that the company is on the side of the environmental movement (Stauber & Rampton 1995: 125). The utilisation of slogans and imagery associated with the environmental movement in advertising has become commonplace. For example, the petrol company Shell has recently engaged in a large-scale advertising campaign boasting that it is helping to save the Southern right whale (for other examples see Switzer 1994: 33).

Greenwashing is not directly harmful to environmental groups in the same way as other forms of anti-environmental activity, such as SLAPPs, personal threats and derisive media campaigns. However, by deliberately distorting the public's perceptions of environmental issues, this type of activity helps to create a discursive climate in which less weight is attached to the claims of environmental groups.

Greenwashing not only helps to sell particular products, but also help to create the impression that big business and environmental groups are really saying the same thing, and have the same goals. Groups who openly challenge industry can be portrayed as unrealistic extremists, unwilling to work alongside corporations to create a better world. The mindset that environmental issues can be dealt with by going about business as usual, but making small changes to the way we do things, is reinforced. Any sense of an environmental *crisis* of the kind required to create popular anxiety which might mobilise widespread public action is curtailed (Tokar 1997: WWW).

Greenwashing has the effect of redefining environmental concepts so that their very presence reinforces, rather than challenges, the social, political and economic structures which threaten the environment. This systematic production¹ of misinformation impedes progress towards actual environmental solutions and undermines the very possibility of a democracy based on an informed citizenship (Helvarg 1996: 41).

7.2 Backlash Activities On The Internet

Cursory Internet searches reveal that there is plenty of evidence that the anti-environmental activities are taking place on the Internet. Numerous web sites which are contemptuous of environmentalists and environmental ideas exist, and unmoderated newsgroups frequently contain large numbers of anti-environmental messages. However it is more difficult to gauge the actual or proportionate amount of this activity and the impact it is having upon environmental discourse. It is easy to demonstrate that there are plenty of examples of something on the Internet, but because of the size of the Net it is more difficult to find out whether this is significant compared with the number of contrasting examples or whether anyone is paying attention to them.

The range of approaches to utilising the Internet for anti-environmental agendas bears similarities to methods previously used offline. For example, the Junk Science Home Page set up a facility through which individuals could send a message urging President Clinton to refuse to agree to preventative global warming regulations prior to the Kyoto and Buenos Aires Conferences. Those who sent a message were entered into a draw to win US \$1000². The Greening Earth Society, which claims that carbon dioxide emissions from cars are environmentally friendly because they are good for trees, has developed a web site which aims to portray a popular grassroots movement, as well as support from expert "science advisors." The Cato Institute has created an online presence of a respectable academic institution, portraying itself as professional, authoritative, and firmly grounded in science. More detailed descriptions of these, and other anti-environmental web sites, can be found in Appendix 5.

¹ It is likely that a primary motivation for greenwashing activities is normally simply to create better product associations in the minds of consumers, and therefore increase sales. However there is also a continuum between this and other anti-environmental activities aimed entirely at a discursive re-framing of environmental ideas. Greenwashing techniques will often be used by the same entities who engage in more direct anti-environmental activities, with the interconnected purposes of increased sales and reinforcing particular ideologies.

² The competition page is located at: <http://www.junkscience.com/global-warming-contest.html>

7.2.1 Mirroring The Environmental Movement

Anti-environmental activities often bear close similarities to the activities of environmental groups themselves. For example, tactics frequently involve claims of 'grassroots' origins and membership. This stems from the realisation that the views of large corporations are not usually given as much legitimacy as the views of a non-profit citizen's organisation. The creation of (at least the illusion of) widespread support for a cause also draws on a concern fundamental to all politicians – the need to be re-elected for another term in office. Furthermore, by setting up a counter movement against the environmental movement, environmental groups lose their perceived status as the voice of the people against industry and are cast as just another interest group, representing its own specific agenda (Brick 1998: 200).

This tendency has important implications for online environmental groups in adversarial positions. As discussed below, the results of this study indicate that numerous groups believe the Internet is altering the balance of power between themselves and their opponents, and that the advantage provided to them is greater than that provided to their adversaries. The experiences of these groups is positive, and there are logical reasons why the Internet may be of more assistance to actual grassroots groups than to entities who are merely trying to create the illusion of popular support.

However this is a very new medium, and nothing resembling an equilibrium has yet been established. If the Internet has given environmental groups a greater advantage than it has their opposition, this could be because the Internet is better suited to actual grassroots organising and democratic communication. However, it could also be because anti-environmental interests are simply taking longer to realise the potential of the Internet for shaping public opinion, and to analyse and adapt the ways environmentalists have used the Internet.

7.3 Experiences Of Environmentalists

Most representatives of environmental groups surveyed or interviewed in the course of this study have indicated that their adversaries have not been effectively using the Internet to counter their efforts. Furthermore, the majority of groups who are aware that they have some type of adversary believe that the Internet is altering the balance of power in their own favour.

A survey question asked respondents to identify their main type of adversary,³ and 61% (48 / 79) of survey respondents identified at least one.⁴ Table 7.1 provides an overview of the responses given to this question.⁵

Table 7.1: Main Adversaries Of Survey Respondents

Adversary	Responses
Multinational corporations	32 (67%)
Local government	12 (25%)
Local companies	11 (23%)
State government	10 (21%)
Other non-government organisations	4 (8%)
Wise Use/Environmental backlash movement	1 (2%)
Conservative public	1 (2%)
Science skeptics	1 (2%)
TOTAL	72

Note: Percentages of the “first selection” do not add up to 100 because of rounding. Percentages in the “total selection” do not add to 100% because respondents could provide more than one answer. Percentages are based on the total number of groups who indicate an adversary (48), not the whole survey population.

Other non-government organisations included “Racist/anti-Indian organizations” and “a few other environmental organisations.” One respondent wrote “all of the above,” and one respondent that was not counted as having selected an adversary stated, “I don't think our organization has any specific opponents. Rather, the peoples we work with in the Amazon do, and certainly there is a clash of ideologies.”

³ A list of possible adversaries was supplied, and a space was provided for entering others that were not on the list. See Appendix 1 for the complete questionnaire.

⁴ Only 9 who did not identify an adversary either selected the “don't have adversaries option” (or indicated as much in the space provided to write an alternative adversary) so it is difficult to tell what proportion chose not to answer this question, and what proportion meant that they had no adversaries. Five of those who did not enter a response indicated in a separate question that the Internet is helping to change the balance of power between themselves and their opponents, so it can not be assumed that in all cases where no selection has been made the group is in a non-adversarial position.

⁵ Although the survey question asked only for one main adversary, half of the respondents also indicated a second type of opponent in the box for answers that were not listed. In hindsight, it would have been better to make this a multiple-response question.

55% (32/58) of respondents believe that the Internet has altered the balance of power between themselves and their adversaries (see Figure 7.1).⁶ Of the 32 groups who believe that the Internet has altered the balance of power, 28 gave some indication of why or how this occurred. All of these comments suggested that the balance of power had been altered in the groups' favour.

A number of respondents said that the Internet provides them with capabilities their opponents have had for a long time, but which they have not had the resources to use. Some groups feel that the removal of these barriers means that they are able to compete on a more equal footing with other entities. An example of such a response is:

I think on the whole it's been better for us than for them. This is because in general our opponents have much more economic influence and political power than we do. The interactive nature of the internet makes it more difficult for powerful institutions to control the flow of information, and thus levels the playing field.

Several respondents also said that other media are largely controlled by their opponents, and that the Internet gives them a medium by which to get their messages out. For example, one respondent stated, "It's a straight-forward propaganda war. The Multinationals have the newspapers and television, and we have the Internet."

Some indicated a belief that the Internet tends to favour those who are promoting the "truth", while other media were more often used to promote the hidden agendas of powerful entities. One such response was: "The truth is our most powerful asset. It's an asset the bad guys don't have; and the Internet helps us leverage that advantage."

Access to information was another frequently suggested reason for why the Internet is changing the balance of power in favour of environmental groups. For example, one respondent said, "Information is power; and we have much greater access to information now." Another stated:

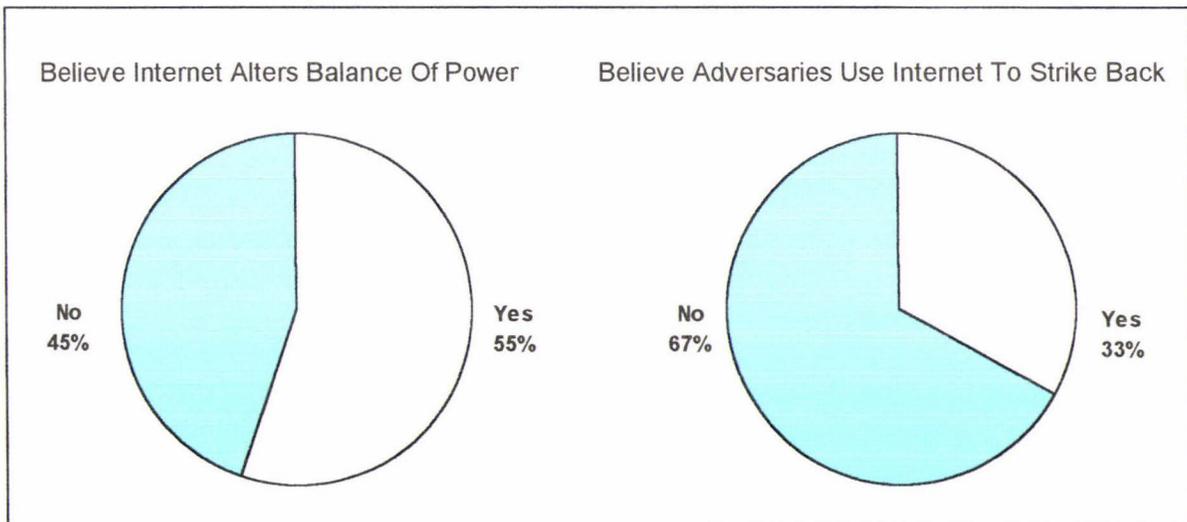
It levels the playing field. At a very minimal cost we are able to access information, network and distribute information that prior to internet use would have been cost prohibitive for an organization of our size.

⁶ Those who selected the "don't have adversaries" option in the question discussed above were excluded, leaving a total of 70, from which 12 were non-responses. Of the remaining 58 groups, 32 (55%) answered yes and 26 (45%) no.

A number of people, in survey responses, face-to-face interviews, and email communication, have suggested that industry and government opposition often do not have the skills to use the Internet to effectively counter environmental groups. On the face of it, this claim seems surprising – such entities usually have ready access to stocks of highly trained IT professionals, and the resources to hire them if they are not already on board. However effective use of the Internet as a political tool often relies less upon technical knowledge of the medium than it does an understanding of the social dynamics of the online context. Therefore environmental groups who have been using the Internet for grassroots level communication for several years may have a better understanding of the medium than corporate public relations experts, who are perhaps more used to working in a context where a more top-down communications strategy is applicable, and where there is greater potential for control.

This study also sought to canvass the extent to which anti-environmental entities are using the Internet. One survey question asked whether groups' adversaries had used the Internet to strike back at them. The results of this are shown in Figure 7.1.⁷ Only 19 survey respondents were aware of their adversaries using the Internet against them, and 10 of these indicated that this has been limited and ineffectual.

Figure 7.1: Beliefs About Balance Of Power



Note: There were 58 valid responses to these questions.

⁷ Again, the 9 groups who said that they had no adversaries were excluded, and 12 of the remaining groups gave no response. Of the 19 groups who said that their adversaries had used the Internet to strike back in some way, 16 provided further comment.

A few examples of concerted efforts by the adversaries of environmental groups were evident. For example⁸:

A fraudulent letter writing campaign by a "Wise Use" group convinced a major "portal site" to breach its content production agreement with our Web host, nearly knocking them off the Internet.

One respondent mentioned Shell's full time employment of a person to monitor and improve the company's image on the Internet, presumably referring to Simon May (discussed later in this chapter). Another said that they had been "mail bombed" by their opponents (a method of online attack where thousands of email messages are sent to one address in an attempt to overload the server).

Several people referred to attacks by anti-environmentalists on environmental discussion groups, involving mass postings denigrating the views and actions of environmentalists, often using abusive language. Such actions can have the effect of limiting the usefulness of an open discussion forum, as it becomes difficult to follow threads of actual conversation and isolate useful information.

Several survey respondents and interviewees suggested that many of these postings were not being perpetuated by individuals acting on their own initiatives, but by employees of public relations companies and others who have an interest in limiting the effectiveness of environmentalism. For example, one survey respondent claims:⁹

Netnews has been flooded and rendered pretty much unusable by all but fanatics. Some of the flooding has been done by known paid "Wise Use" flacks. It's a real shame this wonderful resource has been lost. You could write a book on the organized sabotage.

This type of attack is consistent with standard anti-environmental practices, in that individuals are employed to prevent effective communication and reasoned debate. On the Internet it is even more difficult to determine whether these people are paid or affiliated with a particular company or organisation because identity can be more easily hidden. However one interview respondent named a prominent public relations representative who is purportedly known to be paid to spread anti-environmental rhetoric on newsgroups.

⁸ This example may refer to the Lycos / EnviroLink case discussed in Chapter 6.

⁹ It is important to note that this is a claim made by a survey respondent rather than a finding of the research process.

7.4 Internet Responses To Anti-Environmental Activities

Environmentalists are using the Internet to directly counter both online and offline anti-environmental activities. For example, Global Response, a Colorado based environmental organisation, has set up an international Quick Response Network (QRN), designed to get information about violence against environmental activists out quickly enough for action to be taken:

QRN works like this: Global Response receives information describing an incident against an environmentalist. Global Response confirms the report and sends out a Quick Response Environmentalist Action (QREA) to QRN members via the information superhighway. The QREA includes name, address, fax and phone numbers of officials who can make a difference in the case. Members can immediately contact those officials. (Delicious Online 1996: WWW)

Malcolm Campbell of Global Response says that, "Large corporations or governments try to perpetrate schemes that directly affect the environment. They'll suppress dissent and concern by taking the easiest route, which is to harm activists." Quick Response Network is intended to make environmental activists more capable by altering this "climate of fear" (Delicious Online 1996: WWW)¹⁰

Other environmentalists use the Internet to counter the environmental backlash simply by publishing information about it. Anti-environmental activities generally rely upon the actual motives and funding behind their actions being obscured. If it becomes widely known that a supposedly "grassroots" campaign is being manufactured by a public relations company, or that a scientific institution that says the practices of a certain industry are safe receives significant funds from that industry, then those initiatives are likely to become useless. In a more general sense, an awareness that organised anti-environmental activities are occurring on a wide scale may help alter the overall public perception of environmental issues, especially in terms of the credibility given to the views of environmental groups relative to industry.

¹⁰ See Helvarg 1994 for numerous examples of threats and violence against environmentalists.

One of the most comprehensive efforts being made to utilise the Internet to document and expose anti-environmental actions is that undertaken by US organisation CLEAR (Clearinghouse on Environmental Advocacy and Research).¹¹ CLEAR continually collects information on anti-environmental groups (with a focus on the American 'Wise Use' movement), and currently has a database of over 2100 groups which can be accessed through the organisation's web site. A twice monthly newsletter, *A CLEAR View*, is published on the web and delivered to an email subscriber list. This tracks the activities of anti-environmental organisations as well as discussing strategies employed by environmental groups to counter the backlash.

Another example is the Corporate Watch web site (an organisation that monitors the human rights and environmental records of corporations), which has a "Greenwash" section. As well as including articles on greenwashing, this site features a regular "Greenwash Award," which presents a mock honor to a company which has recently engaged in particularly blatant and ironic greenwashing. A short article is written on the "winning" company, comparing claims made in its advertising with its actual environmental record.¹²

7.5 Response From The Opposition Of Environmentalists

Anti-environmental activities can be interpreted as a gauge of the effectiveness of environmental action (Stauber & Rampton 1995: 235). As we have seen, when environmental groups pose real threats to business or government interests in the off-line world there is often a concerted response from the effected entities. Therefore it can be expected that, if the Internet is in fact empowering environmentalists, there will be a response from those who are effected.

This by no means a perfect or generalisable measure of Internet environmental effectiveness. Only groups attempting to bring about changes that are incompatible with the interests of others are likely to attract this kind of attention. Furthermore, attempting to measure the levels of corporate or government response to environmental activism on the Internet is difficult. Much of this discussion is likely to take place in a closed setting rather than in publicly accessible media. The internal communication of public relations companies and corporations is likely to be fiercely guarded. However there is some evidence that new opportunities for activism on the Internet are beginning to worry some industry sectors, and taken alongside other types of information this may be one useful indicator of the effect of Internet environmentalism.

¹¹ CLEAR is part of the Environmental Working Group, an information source for US environmental groups. The CLEAR web address is <http://www.ewg.org/pub/home/clear/clear.html>. The Environmental Working Group web address is <http://www.ewg.org>.

¹² The web address of the Corporate Watch Greenwash Awards is: <http://www.corpwatch.org>

7.5.1 Shell International

One example of the response from the corporate sector to environmental activism on the Internet is the case of Shell International's overhaul of its Internet strategies.¹³ The following account draws on a 1998 article by Eveline Lubbers.

In June 1998 a conference devoted to the growing influence of pressure groups was held in Brussels. Organised by public relations agency Entente International Corporations and attended by around 70 participants from the corporate world and the public relations industry, the conference examined the way corporations and pressure groups interact with each other. The aim was to identify the extent to which grassroots activism is damaging companies, and to identify ways of countering this damage.

According to Peter Verhille of Entente, grassroots activism can seriously impact upon the profits of corporations, and the greatest threat to the corporate world's reputation comes from the Internet, "the pressure groups' newest weapon":

A growing number of multinational companies - such as McDonald's and Microsoft - have been viciously attacked on the Internet by unidentifiable opponents which leave their victims in desperate search for adequate counter measures.

...

One of the major strengths of pressure groups - in fact the leveling factor in their confrontation with powerful companies - is their ability to exploit the instruments of the telecommunication revolution. Their agile use of global tools such as the Internet reduces the advantage that corporate budgets once provided. (Peter Verhille 1998, quoted in Lubbers 1998: WWW)

One of the conference speakers was Shell International's Internet manager Simon May. May was hired by Shell to develop Internet strategies for the company after harsh lessons were learned through the success of a Greenpeace campaign against the Brent Spar oil platform sinking and public reactions to human rights abuses in Ogoni-Land, Nigeria. Shell was initially complacent when activists began to mobilise on these issues, since previous experiences with Apartheid in South Africa had taught it that such dissent would have little impact. However a massive barrage of criticism flooded the Internet, and this soon began to have real implications for Shell – motorists boycotted the petrol pumps in droves, and governments began to take notice of the groundswell dissent. According to May:

¹³ Another example of industry concern about online environmentalism is US Chamber Of Commerce vice president William Kovacs. Kovacs told delegates that the information dissemination potential of the Internet is perhaps the biggest threat to industry around the world, and that the use of the Internet by environmentalists will "create fear and allow the sabotage of industries" (ABC News 1998: WWW).

There has been a shift in the balance of power, activists are no longer entirely dependent of the existing media. Shell learned it the hard way with the Brent Spar, when a lot of information was disseminated outside the regular channels. (quoted in Lubbers 1998: WWW)

It came to light during May's presentation that most of the conference attendees did not have systems in place by which to monitor and respond to the effects of online activism. This perhaps indicates that, as with the case of Shell, companies often need to experience the effects of online activism before they will put counter strategies in place. These were, after all, companies for whom activism is likely to be a concern – otherwise why would they be attending a conference on the effects of pressure groups on corporations? May argues that many corporations have been overtaken by activists in the use of the Internet for shaping public opinion, and that new strategies need to be developed to deal with this kind of activism:

Pressure groups were aware of the potential of the Internet far earlier than the corporate world. There are pressure groups that exist only on the Internet, they're difficult to monitor and to control, you can't easily enroll as member of these closed groups. (quoted in Lubbers 1998: WWW)

However, May illustrates that when powerful and resource-rich corporations do decide to counter the effects of online activism in a concerted manner, they are able to do so with precision, and in a way that adapts some of the longstanding techniques of the public relations industry.

May argues that if corporations ignore the effect of the Internet, or approach it in a non-comprehensive manner without carefully planned strategies, then pressure groups and unmediated public opinion are likely to pose a threat. However, if comprehensive policies based on a well-researched understanding of social climates on the Internet are developed, then the Internet may present new opportunities for the corporations.

According to May, companies should look at the ways in which their grassroots adversaries have successfully used the Internet, and make use of it in similar ways. Companies, too, can take advantage of the ability to cheaply publish huge amounts of information to promote their perspectives in numerous locations around the Net. Shell's website is designed to create the impression of openness, including articles about previously sensitive subjects such as human rights abuses in Ogoni-land and an unmediated forum. Systems are in place whereby anyone can email the company, and will receive a reply within 48 hours (see Knott 1996 for an overview of the merits of the Shell web site).

All this creates the impression of an open and responsive company, while at the same time allowing Shell to present *its* version of reality to a wide audience. As might be expected, articles in the site take a fairly defensive stance (including claims of “totally exaggerated and unproven accusations”, and that most of the environmental damage was caused by activist saboteurs). Some topics are still not mentioned, such as Shell’s more recent exploits in the West African country Tshad (Lubbers 1998: WWW).

It could be argued that any move by a company to make information about its own practices more widely available is positive, even if that information is incomplete and framed in such a way to invite favorable interpretation. However there is another side to Shell’s Internet strategy which contrasts with the open and responsive feel of their site. In order to help counter the effects of activism, May established policies aimed at gathering intelligence about the activities of Shell’s activist opponents, and their effects on wider Internet discourse. In this way, Shell is adopting the stock “good cop, bad cop” approach described by Stauber & Rampton (1995: 126-8), whereby an apparently open, pro-environmental image is presented to the public, but behind closed doors cynical, heavy handed tactics are employed to prevent any meaningful criticism or constraint. May’s strategies involved the employment of two Internet monitoring companies, eWatch and Infonic. The role of these companies is discussed below.

7.5.2 Activism-Monitoring Companies

Companies who are worried about the effects of Internet activism on their public image can now employ specialised monitoring services, which provide instant information relating to what is being said, and by whom. Examples include eWatch, Infonic and Invigilator¹⁴.

The focus of these companies on monitoring activism varies, and they usually offer a range of Internet monitoring services (including customer response and consumer trends). The rhetoric of their marketing material appears to be designed to play on the deepest fears of corporate leaders, and portrays a dark new cyber-world full of unknown dangers, and where traditional mechanisms of control and surveillance are no longer reliable. For example, the opening blurb in the Invigilator site begins with the following:

¹⁴ The Web addresses of these companies are: Infonic, www.infonic.com; eWatch, www.ewatch.com; Invigilator, www.invigilator.com

Over the years the Internet and World Wide Web have quickly grown into a force to be reckoned with. Access is affordable and immediate, communication is lightening speed fast, and the potential audience for any message is immeasurable. For many companies this has become a problem as 'net rumours have brought stock prices tumbling, online orchestrated boycotts have affected the bottom line, and at times even impacted on reporting by the established media.

Another example is the “welcome” text in the Infonic site, which begins with the statement “The Internet is a vast anarchic medium of free-speech.” This may intend to convey the connotation that unmediated and unmonitored free-speech is intrinsically bad for business. The Invigilator blurb seems to carry similar inferences – that easy access to the Internet, and the possibility for anyone (not just companies) to get a message across to a wide audience is a problem. The Infonic welcome continues:

Infonic specialises in monitoring the Internet. Operating within distinct sub-cultures, we currently assist some of the world's most recognised corporations with this sensitive and confidential task.

Infonic includes no further information as to its activities or services - the potential client is asked to contact the company by phone, mail, or through an on-line form. This, alongside the claim that the company operates within “distinct subcultures” may suggest an infiltrative, covert approach, similar to that employed by some public relations companies who have sent “agents” into environmental groups to find out what they’re up to, and to disrupt their activities (see Stauber and Rampton 1995, 18).

It would be useful to gain more information about Infonic. However the guarded and mysterious nature of the Internet site suggests that an inquiry from a sociology student in New Zealand studying the effectiveness of the Internet for environmental activism would be unlikely to get an open response. For this reason the researcher decided to send a message posing as a potential purchaser of the companies’ services. The decision to do this was made after careful consideration of the ethical implications of this type of deceit. Finally it was decided that a company that specialises in infiltrating Internet subcultures to convey information to their adversaries has, in doing so, shifted the ethical parameters which it could expect to be applied to itself.

The query submitted through the company's on-line form (October 21, 1998) was:

I have a client that is concerned about the potentially harmful ways in which particular Internet sites and discussion groups may be impacting upon their otherwise successful public relations efforts. How could your company help to:

- 1) Measure the likely influence of this on the wider public (i.e. beyond just the few activists who are perpetuating it)?*
- 2) Identify who is responsible for the sites and postings?*
- 3) Eliminate the problem?*

Just over a week later the following reply was received:

Dear C White,

My apologies for not getting back to you earlier.

Indeed your client's problem is what we specialise in and we could assist in all 3 of the areas you raised. However, without further details it would be imprudent of me to elaborate further as to the techniques and methods we would employ to achieve your client's aims.

If you wish to discuss this further, please feel free to contact me directly.

This reply does not convey a great deal of extra information, but it does confirm the types of activities that the company is involved in. The fact that they are willing to identify individuals who may have wished to retain anonymity, and to "eliminate the problem" also tends to confirm that any ethical concerns regarding this method of inquiry could be placed aside. That Infonic would consider it "imprudent ... to elaborate further on the techniques and methods" they would employ also seems to reinforce that this company does not want people beyond their client base to have knowledge of their practices. There are a number of possible explanations for this. For example, they may not want to divulge trade secrets, their techniques may be less effective if they were widely known, or they could be worried that their methods may be interpreted as underhand and unethical.

7.5.3 Significance Of Activism Monitoring

Companies such as Infonic and eWatch do not currently appear to be a huge factor in Internet based environmental activism. Extensive searches of websites and newsgroups, using terms such as "Internet activism monitoring," indicated that there is not a lot of discussion of this topic on the Internet. No environmental groups surveyed or interviewed mentioned them, although most were not specifically asked about this.

However it is possible that many environmental groups are not aware that their own communication, or public response to the issues they are addressing, may be being closely monitored by such services.

The existence of these companies does appear to suggest that some sectors of the business community are starting to become worried about the effects of activism on the Internet. eWatch claims that "more than 400 of the world's largest corporations trust eWatch to help them accurately track what is appearing in cyberspace". While it is impossible to tell what proportion of this client base uses the service to monitor activism related content, the fact that these services mention the problem of activism on their introductory pages suggests that this contributes a significant proportion of their revenue.

Regardless of what effect these specific companies are having, they do point to an aspect of the Internet that is potentially problematic for environmentalists. The Internet is in some senses very big and diverse, but with the application of specialised computer programmes, and perhaps a good many hours of human labour, sophisticated methods can be developed to keep track of trends in public opinion on an almost instantaneous basis. In this way communication on the Internet relating to a certain topic can be encapsulated, and snap decisions can be made by the companies' public relations experts¹⁵.

This capacity for companies to monitor communication relating to environmental issues may not, on first consideration, appear to be a major problem. After all, environmental groups and the public would probably *like* companies to know when they are appalled by their practices. However, it is important to understand the role that public opinion monitoring plays in corporate environmental and public relations strategies. Its purpose is to provide companies with knowledge of what practices attract the most public outrage, and what events are causing significant antagonism towards the company. Companies are primarily interested in antagonism which may influence the buying habits of consumers of their products, or which may put pressure on politicians to impose regulations or penalties. Regardless of what activities actually inflict the worst environmental harm, this information means that companies can put their efforts into making a show of cleaning up those which attract the most attention.

¹⁵ See Stauber & Rampton 1995: 189 for a discussion of the use of similar techniques with telephone surveys conducted immediately after current affairs shows, the results of which are used to redesign public relations strategies for the following day.

The ability of public relations companies to quickly manufacture grassroots campaigns is, according to Stauber and Rampton, “a direct result of technology” (1995: 96). As well as providing up-to-the minute information about what is working and what isn’t, sophisticated profiling and communication technologies enable companies to identify who is likely to take part in an astroturf (manufactured grassroots) campaign. It also provides the means of contacting these people *en mass*, and providing them with an instant and effortless channel for communicating their opinion to policy.

In some ways the web is ideally suited to the practices of public relations companies, as it facilitates the gathering of marketing and opinion information, new techniques for targeting reporters with particular political biases, and reaching specific audiences more directly and reliably than before (Stauber & Rampton 1995: 196).

7.5.4 Positive Responses

Aside from helping environmental groups uncover the misinformation perpetuated by greenwashing and anti-environmental activities, it is possible that the Internet is actually forcing both companies and government agencies to be more open with their information, and perhaps to even implement more environmentally friendly policies.

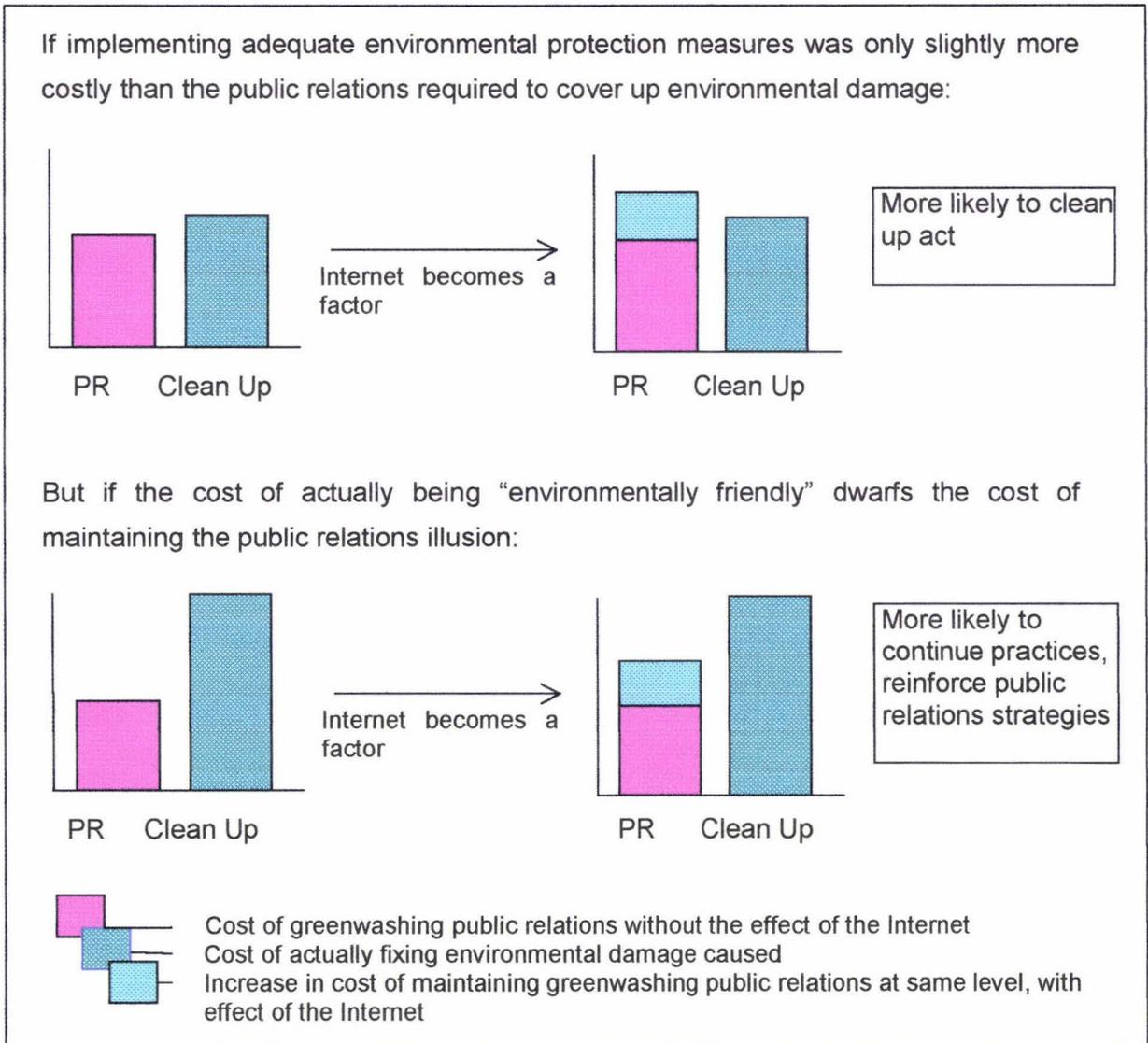
Covering up harmful activities, manufacturing a clean image, and suppressing dissent can be very expensive. The more difficult it is for companies to control information about themselves, the more expensive these activities are likely to become. In some cases, the point may be reached where it is simply cheaper to implement better protection measures than it is to continue fueling the massive public relations misinformation machine.

An article in the *Environmental Management* journal points out that companies have very little control over what is said about them on the Internet, and that environmental activists and others are free to post any publicly available information. Sites such as the Environmental Defense Fund’s Chemical Scorecard¹⁶ are forcing industry to provide information to the public in easily understood formats (Anonymous 1998:1-5, see also Bray 1997). A recent newsletter of the American metal finishing industry advises companies to be aware of this type of information, and to ensure that “no one has due reason to publish negative information about you” (A Finishing Line 1998: WWW).

¹⁶ The web address of the EDF Chemical Scorecard is www.scorecard.org/

In cases where industries clean up their act as a result of pressure from the Internet, it is likely that this new hassle will have become the last straw, tipping the cost-benefit balance away from public relations efforts and towards protection measures. However, companies for whom the cost of implementing significant protection measures grossly outweighs the cost of maintaining a green illusion may be more likely to simply pursue more aggressive greenwashing and anti-environmental efforts in response to Internet environmentalism. This hypothesis is represented in Figure 7.2:

Figure 7.2: Clean Up Or Greenwash?



Of course, this is a very simplistic model which does not take into account considerations such as what “adequate environmental measures” are. Moreover, it assumes that corporate decisions always take place on such a calculated basis. The actual effects are likely to be more incremental, with companies cleaning up some of their more visible and easily dealt with problems, and those which are most often discussed on the Internet and in other media, while at the same time stepping up the public relations efforts to hide the rest.

Also, in some cases sophisticated uses of the Internet by public relations companies themselves may actually mean that the Internet has the overall effect of *decreasing* the cost of maintaining a good image.

7.6 Reflections

It is evident that the Internet is a potentially powerful tool for both environmental allies and adversaries, and that the online context is likely to become an increasingly important locus for these struggles. Currently the Internet appears to be benefiting environmental groups more than their opponents. Most environmental groups surveyed believe that the Net is changing the balance of power in their favour and few groups were aware of the Internet being used to effectively promote an anti-environmental agenda. There is also evidence that some powerful interests see the use of the Internet by environmental groups and other non-governmental organisations as a potential threat.

Alongside the use of strategies which are very different from those of the environmental movement, elements of green backlash activities sometimes mirror the strategies of environmental groups. Often there is a time lag between the adoption and success of an approach used by environmental groups, and the adoption of that approach by their adversaries. Therefore, if this pattern is applicable to the Internet, it could be that anti-environmental interests will 'catch up' to the environmental movement in their use of the Internet. An example of this is the Shell case, where the company realised that they could make the same use of information technology as the environmentalists who were harming their reputation.

However, the Internet may have the potential to offer greater benefits for environmental groups than it does to their adversaries, and these advantages could continue even when all sides are using the medium to their full capacity. For one, the dissemination and promotion of ideas on the Internet is less reliant upon resources than approaches utilising advertising campaigns in traditional media, direct lobbying and mass mailing to politicians. This means that a large resource base can no longer be assumed to be an automatic advantage. Traditionally, popular sentiment towards environmental protection, together with the usually more empirically defensible position of environmental groups, has been pitted against the massive resources of anti-environmental interests. These interests have at times been able to use the strategies pioneered by environmentalists with more impact than environmentalists themselves, simply because they are able to fuel their campaigns with inexhaustive funds. If the Internet makes access to resources a less important factor in the struggle, then this will benefit environmentalists by lessening one of the key advantages of their adversaries.

Of course, this is likely to remain a partial trend. On the Internet access to a massive resource base may not be crucial, or a guarantee that impressive results will be achieved, but it certainly helps. The Shell example illustrates that the Internet has some characteristics which are more conducive to the strategies of public relations companies than those usually associated with grassroots activism – an entity with sufficient resources can closely monitor the effect of their public relations strategies on the Internet, and make instantaneous changes based on this data. And as we saw in Chapter 6, the content of sections of the Internet which attract significant proportions of traffic is likely to continue to be shaped by patterns ownership and advertiser influence.

The availability of ubiquitous information from a wide range of sources may also be a factor that benefits environmentalists more than it does their adversaries. This has the potential to create greater transparency, in effect giving corporations less control over information about their activities and affiliations. This will provide an advantage to environmentalists simply because environmental groups are generally less likely to have a hidden agenda than their anti-environmental counterparts.

Granted, this is an assumption, but it is supported the by logic that there is rarely direct personal benefit to be gained from advocating less consumption, saving trees or fighting for stronger regulations against pollution. The immediate benefits of companies lobbying against costly regulations, or falsely portraying themselves as environmentally friendly, are usually obvious. This assumption can also be backed up by the weight of empirical evidence – despite the vast information campaign against the environmental movement, anti-environmental interests have rarely been able to convincingly show that environmentalists are gaining personally from their endeavors, or that they are fronting another interest with a devious agenda.

The next chapter considers the implications of this research for the continuing use of the Internet by environmental groups.

8. Conclusions

This thesis has explored the variety of ways in which Internet technology may be influencing parts of the environmental movement at the close of the twentieth century. The capacity of the Internet to facilitate alliances irrespective of geographical distance, allow greater organisational possibilities for groups with limited resources, more extensive access to wider audiences, and create new forms of environmentalism have been discussed. Attention has also been given to questions regarding the ability of the Internet to change the relationship between environmental groups and the mainstream media, and to the role it is playing in the struggle between pro and anti-environmental forces. Some potential problems associated with the Internet have been considered. These include the harm computers and networks themselves do to the environment, problems of access for already marginalised populations, the use of the Internet by anti-environmental interests, and the increasing cross-ownership between major Internet sites and other media.

This concluding chapter seeks to bring together these disparate factors, and to question whether these findings help increase the understanding of the potential of the Internet as a tool for social change.

8.1 Creation Of A More Connected Movement

In a practical sense at least, the Internet appears to be helping increase the ability of many environmental groups to achieve their goals. The majority of groups surveyed believe that the internet has helped them to become much more successful, and none indicated that it had no value in terms of success. Often the most important perceived advantage of this new technology was the provision of internal communication capacities which had not previously been within the reach of under resourced organisations. The Internet has also given environmental groups far greater access to information, and has given groups more scope for conveying information and messages to the wider public. All of these factors mean that environmental groups are able to accomplish more with the limited resources they have available.

In addition to helping existing groups, the Internet is assisting new types of environmentalism to emerge, whose existence has been made possible largely by the inception of the Internet. Most of the data collected in this study has focused on environmental *groups*, which may not always fit the term “organisation”, but nevertheless have some form of collective unity or continuity.

However the Internet also facilitates another type of environmentalism – action undertaken by individuals outside of the umbrella of any explicit group. Through web sites, newsgroups and mailing lists, people who are concerned about an environmental issue are able to find each other, exchange information and establish some sort of collective action. This can help to remove the sense of isolation often felt by those who seek change, particularly when challenging financial and socio-political ‘heavyweights’ such as corporations or government entities.

Equally important is networking between environmental groups, sometimes achieved by individual groups finding each other through the Internet, and sometimes facilitated through online networks such as Envirolink, EcoNet, and the Rainforest Network. This networking capacity is important for individuals and groups because it enables them to share resources and experiences, and take on challenges which may have otherwise appeared insurmountable. It also has implications for the “environmental movement” as a whole. Rather than constituting disparate actions dotted around the world, the movement has the potential to gain a new measure of unification than would otherwise be possible, both in terms of action and philosophies. As environmental issues increasingly cross national boundaries, calls from activists for a global response accelerate. This does not necessitate a homogenisation of the environmental movement, but instead means that where shared perspectives and goals exist there is greater potential for developing the debate and acting collectively.

8.2 Structures Of Power And New Possibilities For Resistance

There are indications that the Internet may be helping to change the balance of power between environmental groups and entities that oppose environmental reform, such as some industries and government bodies. Evidence for this comes not only from environmentalists themselves, but also from the concerns of industry leaders who are beginning to realise the implications of the medium.

It is also possible that more resistance to environmental gains can be expected through the Internet, as entities which oppose the environmental movement come to better understand the impacts of this medium. Anti-environmental activities tend to lag behind initiatives or strategies adopted by environmental groups themselves. Therefore environmentalists may need to be aware of the possibility of others “fighting back” against their efforts on the Internet, or utilising the Internet in more effective and sophisticated ways themselves.

There are numerous examples of anti-environmental activity on the Internet, in many of the forms previously encountered offline (from corporate ‘greenwashing’, to claims that particular environmental problems have been grossly exaggerated, to extreme Wise-Use rhetoric and attempts to sabotage the resources of environmental groups).

It is difficult to estimate the degree to which this type of online material is influencing perceptions of environmental issues, but in general its existence does not appear to be viewed as a major problem by environmental groups. The prevailing view of environmental groups (as expressed in the survey, interviews and literature) appears to be that the presence of opposing ideas is not a problem as long as there is sufficient openness to allow the inclusion of everyone who has something to add to the debate. The basis for this perspective is that most involved in the environmental movement believe that their views are more likely to stand up to reasoned debate, that if treated fairly the empirical evidence will overwhelmingly support their position, and that the majority of the public is sympathetic towards environmental protection.

The Internet does, however, have some characteristics which would appear to suit the practices of environmental opponents. The ability to monitor communication on a massive scale is one example. An understanding of public perceptions, and the ways in which those perceptions can be altered, has traditionally comprised a key component of public relations campaigns initiated by those who aim to discredit environmental ideas. Technology such as the Internet amplifies the opportunity for companies to collect, filter and analyse huge amounts of information from numerous sources almost instantaneously. For companies seeking to shape public perceptions of environmental issues, any reduction in the unknown factors in public opinion is likely to mean an increase in the ability to manipulate views. For example, public relations campaigns can be fine tuned as they are carried out on the basis of up-to-the-minute information about the ways perceptions are changing and what people are or are not accepting as true.

Despite this potential for use by environmental adversaries, the Internet may offer significant opportunities for environmental groups to alter the balance of power between themselves and their opponents by focusing on aspects of the medium which rely less on resources and more on popular participation.

8.3 Other Media

For most groups who took part in this study, more “traditional” media such as television, print and radio still remain the most important outlets for conveying messages to the wider public. This is because far greater numbers are likely to receive a particular message through mainstream media than can normally be accessed through the Internet. These media forms are also important for creating an awareness that environmental issues exist.

The advantages the Internet offers environmentalists need to be considered in the context of the full potential of the medium to impact upon public opinions and perceptions. The fact that web sites which attract the largest audiences tend to be owned by large corporations does not necessarily mean that they will be used in ways that are detrimental to environmentalists, or even that these outlets will refuse to provide a forum for environmental debate. However outlets and services on the Internet are subject to similar pressures and incentives to other types of media. Reliance on advertising-generated revenue often remains a pivotal factor, so it would be myopic to assume that content is not influenced in the ways described by Chompsky and others (see Section 6.1.2). The example of Lycos's sudden termination of their contract with Envirolink, apparently in response to pressure from advertisers, highlights this point (see section 5.5.1).

The use of the Internet to create popular awareness about environmental issues often relies upon exposure in the mainstream media – whether this be traditional media such as newspapers, television and radio, or mainstream corporate Internet sites. Either way, there is a continuation of the pressures influencing the type of content that makes it into the media and what is avoided.

It could be argued, however, that concerns about the ability of the Internet to attract an instantaneous mass audience miss the point of what the Internet really has to offer. It may not always matter that individual environmental sites are attracting small numbers of visitors in comparison to mainstream media or corporate mega-sites. The *combined* effect of numerous small instances of environmental communication is possibly more significant.

This is especially true when people begin to participate in debates through mechanisms such as newsgroups and to create their own web sites, since divisions between publicity and public involvement are blurred. Furthermore, by giving people the *opportunity* to find extensive information about environmental issues, one barrier to change is removed. The relentless promotion of the Internet as passive entertainment and a giant shop may help to create a discursive climate in which that opportunity is utilised less often than desirable, but nevertheless the opportunity remains. A technical basis for a more informed citizenship is in place, even if the culture in which it exists does not always promote the tendency to find and use that information.

8.4 The Net Impact

A contradiction exists between environmentalist desires to protect natural resources and environmentalism's complicity in the maintenance of a resource-depleting and environmentally-polluting global network of computers. There can be little doubt that the communication potential of the Internet is accelerating the processes of economic globalisation, and therefore reinforcing systems which many believe are key contributing factors to some of the world's worst environmental problems.¹

Furthermore, the physical aspects of the Internet itself embody a host of environmental menaces. The production of computers and related products creates large amounts of very toxic substances, and computers are themselves large consumers of energy. The use of computers by environmental groups is unlikely to have a major impact upon the overall environmental damage caused by computers, and can probably be justified by gains which could not have been made if environmentalists refused to use any potentially damaging technology. However, the increasing use of the Internet by environmental groups may be helping to implicitly promote the medium as intrinsically good for the environment, a perspective which should not be unquestioningly accepted.

8.5 Environmental And Informational Inequality

The demographics of populations who have traditionally taken part in the environmental movement, and those who are currently accessing the Internet, bear similarities in terms of geographic spread, income levels and ethnicity. This can be seen as either fortunate or limiting, depending on the perspective.

On one hand, this would appear to suggest that the Internet is particularly appropriate for environmental purposes, as people who are likely to become involved in environmental action are also likely to have access to the Internet. But this pattern may have the potential to reinforce tendencies for environmentalism to be viewed as something for the well-off in developed countries.

Furthermore, new types of environmentalism which view environmental and social justice problems as inseparable issues are currently emerging. Environmental justice groups recognise that environmental problems tend to disproportionately effect people in poorer ethnic minority neighbourhoods and in developing countries.

¹ For discussions relating to the environmental effects of globalisation see Shiva (1997), Karliner (1997).

They maintain that the systemic root of environmental problems is frequently also the basis for the exploitation of the powerless. What opportunities does the Internet offer these communities, for which even a simple telephone is often out of reach?

Depending upon the context, there may be considerable advantages for some *groups* representing these populations, as they will have access to information, the chance to take part in mainstream communication, and the ability to network with other organisations with similar goals. Successful campaigns against environmental injustices in third world countries have certainly taken place on the Internet, an example discussed in this thesis being the actions against Shell in Nigeria (see Section 7.5.1). However, not only is it less likely that these groups will have computers in the first place, but many of the advantages that the Internet offers more well-off populations will not be available since most people effected are unlikely to have access to the Net. For example, there is little scope for poor communities to mobilise and organise grassroots action through the Internet.

Participation on the Internet is far from equal, and it is possible that environmental gains made through this medium will disproportionately reflect the needs of the populations who have access. Therefore, the Internet could have the effect of drawing attention to the environmental problems of well-off communities at the expense of those effecting poorer regions, thus increasing the rift between environmental protection afforded to the rich and the poor.

Speculative concerns aside, the author is not aware of any empirical evidence that suggests this is actually happening at present. However, the fact that the environmental struggles of many are not represented on the Internet is something that needs to be addressed if the marginalisation of large sections of the world's population is to be avoided.

8.6 Cultural Appropriation And Discursive Negotiation

The social and cultural climate of the contemporary Internet could be argued to be very much a product of dominant discourses, underneath which numerous but far less prominent strands of resistance reside. The use of the Internet by environmental groups, or the location of environmental groups within the Internet, can be articulated in terms of Hebdige's theories of subculture:

Hebdige argues that subcultures take up the objects, spaces, and signs available to them within the larger system of late industrial culture in order to turn such objects and signs against the system. Through processes of negotiation and hybridization, subcultures articulate their counter-hegemonic styles and identities. (During 1993: 357)

This experience is paralleled by online environmentalism. The Internet has very much become a mainstream and commercialised phenomena. Furthermore, services which make the medium accessible to those without large financial resources are virtually always owned by huge corporations and driven by commerce and advertising. These include free email services (for example Hotmail), places where web sites are hosted for free (for example Geocities), and the manufacturers of free software to access various aspects of the medium (such as Microsoft). The infrastructure of the Internet is controlled by large commercial entities such as telephone companies.

This negotiation of the mainstream also applies in a more metaphorical sense. The imagery, layout and language adopted by environmental Internet sites mirrors or subverts those which can be found on commercial, government, and other mainstream sites. At times an environmental group may want to portray a “professional” image to add credibility to their message. In such instances the state of the art in corporate web design may set a benchmark, even if the corporate ethos is being explicitly criticised. For other groups the subversion of well known cultural icons is sought. For example, McSpotlight distorts well known images and slogans of a massive hamburger chain to help highlight claims being made against the company.²

However, at the same time as environmental groups are redefining and staking a claim to online space, their own messages, signs and symbols are becoming appropriated and distorted within dominant discourses. Antonio Gramsci (1971) argues that the absorption of apparently subversive messages within the mainstream is an integral part of the maintenance of hegemony in contemporary societies. This adds legitimacy to the state and other systems as an inclusive and pluralistic framework, while allowing potentially subversive ideas to be redefined and refined to superficial slogans of little social consequence. Tony Bennett outlines this approach:

As a consequence of its accommodating elements of opposing class cultures, 'bourgeois culture' ceases to be purely or entirely bourgeois. It becomes, instead, a mobile combination of cultural and ideological elements derived from different class locations which are, but only provisionally and for the duration of a specific historical conjuncture, affiliated to bourgeois values, interests and objectives. (Bennett 1998: 220).

² The McSpotlight Internet address is www.mcspotlight.org

This framework appears to fit well with descriptions of the greenwashing activities discussed in Section 7.1.2 and referred to throughout this thesis. Opposing ideas from environmental groups have not been obliterated, but have instead become affiliated with the interests of the powerful. However it can also be used to provide another way of thinking about the existence of apparently subversive elements on the Internet. The existence of environmentalism and other critiques of contemporary society on the Internet may be things that are permitted a place within this predominantly commercial and mainstream medium, but that will be kept under control through their articulation via dominant ideologies and discourses.

The discursive construction of the Internet itself also helps shape the types of communication that are likely to take place online. The mainstream media (both traditional media and corporate Internet super-sites) are likely to be a major influence on this. Within these contexts the Internet is most commonly promoted as mega-television or an enormous shopping mall. Media hype about the Internet rarely focuses on the formation and growth of community, and often relates to the development of new gadgets or services providing enhanced entertainment and shopping experiences.³ The Internet is often heralded as something which is empowering and interactive (Internet World 1999: WWW), but frequently empowerment means being able to apply for a mortgage at 2am, and interaction means being able to play the latest video game online. Those who seek a progressive use of the medium need to communicate that there is more to the Internet than this. According to Rheingold, "What used to be a channel for authentic communication has now become a channel for the updating of consumer desire" (Rheingold 1994a: 286).

Some environmentalists themselves have recognised this tendency for uses of the Internet to be shaped by dominant media habits, and this point is articulated vividly by one survey respondent:

Most of the "end users" have been sold "the Internet" as a new form of television; a passive entertainment product. They don't know how to do the work of finding stuff and evaluating sources; and most aren't interested in learning. And when folks do find our Web sites, they gawk at them like drivers passing a wreck on the freeway, insulated in their cars.

³ For example, a cursory scan of recent Internet-related articles in the New Zealand Herald reveals a high frequency of headlines such as "IBM clicks on to e-business" (1/6/99), "Internet changes the corporate landscape" (21/4/99) and "Internet bookseller delivers the goods" (28/9/99).

The Internet passed through a brief period as a haven for counter-culture and alternative thought before being overwhelmed with advertising and hyper-consumerism (Rheingold 1994a). Of course, the medium is now far more inclusive, and because of this it may have much more potential for social change. A challenge for environmental groups and others seeking to use the Internet to dispute the status quo is to present (an) alternative construction(s) of the medium. These might emphasise aspects such as the potential for community building or increased participation in debate and decision making.

8.7 Directions For Online Environmentalism

It is hoped that when environmentalists read this work they will come across sections that relate especially well to their own situation, and that these will provide ideas or inspiration for new or improved ways of using the medium. The diversity of environmental groups means that there is no single Internet strategy that will achieve the goals of all. However some general practical suggestions can be made. The relevance of these will differ depending on the focus of various groups, but the points made are fairly non-specific and should have some resonance for most groups.

Some of the most important steps that environmental groups can take to improve the effectiveness of their Internet communications may involve adopting a reflexive and investigative approach. Environmental groups are often under-resourced and short staffed, which means that time is taken up getting things done rather than developing strategies. However by collecting reliable information about what Internet tactics are working best, the role of the Internet in improving the overall impact of the group may be greatly enhanced.

For example, Chapter 6 suggested that many groups use their Internet sites to interface with other media. Records of the amount of media references that come from the Internet site or emailed press releases may help groups make decisions about how much effort should be committed to these endeavors. By investigating the ways journalists and others use their sites, environmental groups can intensify the relevant aspects. Information about which media sources and journalists are likely to use the Internet can be compiled so that more traditional and time intensive methods can be reserved for outlets who make less use of online information.

This reflexivity can also be extended beyond an analysis of a group's own Internet activities to an investigation of the wider Internet context, and the effects of that context on perceptions of issues and the group itself.

The need to be aware of anti-environmental activities on the Internet has been suggested above. Environmental groups could also engage in ongoing monitoring of and responses to greenwashing activities, and analyse what people are saying about the environmental group or the issues it represents after events or media coverage occur. The latter might be used in much the same way as the opinion gathering activities of public relations companies – to determine what approaches are more likely to get a positive response.

The presentation of Internet sites may be considered an important identity-creating element for environmental groups. This is something which may benefit from conscious thought about intended messages and likely forms of interpretation. For example, a grassroots-style group may wish to create a feel of openness, and encourage anyone who encounters the site to feel comfortable participating in discussions and activities. Some groups may wish to convey a professional image. This may be particularly important for those whose websites are used by the media to locate information, since journalists may be more likely to view well presented material as credible and authoritative.

A key theme which emerges from these recommendations is that it is worthwhile for environmental and other activist groups to spend time developing strategies for their Internet use. By formulating clear ideas about what they hope to gain from using the Internet, devising approaches to meet these, and testing the actual effectiveness of these approaches, activists can cut down on time-wasting elements of Internet use and focus on what really works. This may bear too close a similarity to output-orientated business planning for some groups who explicitly reject traditional modes of organisation. However these things do not need to be built into an overarching policy that determines all actions of the group. For some nonhierarchical grassroots groups it could simply mean having occasional sessions to discuss what online approaches have worked and what haven't, and whether there are other things that could be being accomplished with the Internet. We have seen evidence that corporations are beginning to see benefits of integrated and well coordinated Internet approaches for influencing public opinion about environmental issues. If environmental groups are to retain a prominent position in the online discursive context they may need to be equally rigorous in their approach.

It is the author's view that environmentalists and others seeking social change would be well advised to take full advantage of the potential of the Internet to bring together social movements across geographical boundaries and to coordinate large collective actions without the need for hefty bureaucratic structures. This capacity for collective unity without necessitating a homogenisation of perspectives may be a factor that differentiates the Internet from previous technologies, and therefore something that offers the possibility of tangible change.

8.8 Are These Findings Specific To Environmental Groups?

This thesis has sought to contribute to debates about the implications of the Internet for democracy by using environmental groups as a case study, through which the potential of the medium for the expression of dissent, protest and alternative views can be gauged. It is therefore important to consider the degree to which the findings can be generalised to other forms of activism.

One of the reasons that environmental groups were chosen as the focus for this study is that environmentalism is increasingly becoming interconnected with other struggles. Online coalitions between environmental groups and other social movements have existed since before the Internet became a popular medium – one of the largest and most well-known examples of this is the Institute Of Global Communications, which incorporates EcoNet, WomensNet, PeaceNet, AntiracismNet and LaborNet.⁴

Much of this thesis has discussed the Internet's role in mediating relationships between environmental groups and commercial power. The types of public relations campaigns and "astroturf" movements discussed in Chapter 7 impact on many other categories of activism. Stauber and Rampton (1995), who have provided some of the information about anti-environmental activities used in this thesis, also discuss examples that include human rights, employee safety and health reform issues. Commonalties in the adversaries of environmental groups and other social struggles are evidenced by responses such as the Corporate Watch Internet site. Corporate Watch documents the actions of corporations in relation to environmental issues, prisoner rights, labour rights, racism, oppression of third world populations, poverty and education issues, and the actions of activism groups focusing on each of these.⁵ Therefore there are likely to be similarities in the effects of the Internet on the power relations that underlie the struggles of environmental and other groups.

Regardless of whether commonalties exist between the goals and antagonists of various forms of activism, many of the concerns and practical barriers remain the same. Virtually any social movement will benefit from an increased ability to network, find information about the issues they are concerned with, and disseminate their perspective. Therefore many of the points discussed herein are expected to be relevant to a wide spectrum of activists.

⁴ The Institute Of Global Communications Internet address is www.igc.org

⁵ The Corporate Watch Internet address is www.corpwatch.org

However we have also seen that traditional participants in environmentalism tend to come from reasonably wealthy and mainstream sectors of society, and that these are the most likely to have access to the Internet. The demographics of participants in some other social movements contrast with this trend. Examples of these include groups seeking to improve conditions for the poor and those fighting for the rights of labour. The implications of the Internet for advocates of the underprivileged have been touched on here in discussions of online environmental justice groups. It has been suggested that the Internet may provide opportunities for these groups by allowing a small number of representatives to access information and participate in mainstream discourse, but that the involvement of the populations themselves in online organising and discussions is limited.

8.9 Directions For Future Research

Numerous issues examined in this thesis could be elaborated on in future research. For example, researchers could compare environmental messages in the online and offline contexts, focus more on what the Internet can do for environmental groups in poor communities or provide more information about online anti-environmental activities. It will also be interesting to see the outcomes of studies which examine Internet use by other social movements, and to compare these to the findings of this research.

One particularly important area for which empirical evidence has not been collected in this thesis involves the effects of online environmentalism and the wider Internet context on the perceptions and actions of “audiences.”⁶ This type of inquiry has the capacity to provide an empirical context for formulating and testing theories of the discursive effect of the Internet on environmental issues and democracy in general. It also offers the possibility of increased understanding of the discursive construction of the Internet itself, and the effects of this on uses and directions of the medium.

It is hoped that this thesis has identified key themes that can be utilised to shape future audience orientated research, and that the outcomes of such research may offer new interpretations for the information collected here. Examples of future research directions may include analysis of interpretations of activism related Internet sites and examination of the ways that this is mediated by the wider online context, which includes conflicting discourses and anti-environmental agendas. Quantitative research may provide valuable insight into the levels of exposure gained by subversive discourses on the Internet through comparisons of access rates for grassroots and commercial communication.

⁶ The term audience is used tentatively here, because in many ways the interactivity of the Internet means that the usefulness of conceptions of a receptive audience in one-way communication are questionable. However the term is retained because it is believed that, with suitable adaptation, existing media theories of audiences may have much to offer this field of inquiry.

Inquiries into modes of usage may also be worthwhile. For example, research could examine the frequency with which people use the Internet to find further information after hearing about an issue in other media, or investigate the type of uses and information they seek from environmental and other activism-related sites.

These research topic examples address quite specific empirical issues. However they are suggested as a means of entering into a broader investigation of the uses, interpretation and discursive effects and construction of the Internet. It is this form of inquiry which is likely to provide indications of whether activism and dissent are flourishing on the Internet or being marginalised to normally invisible discursive sub-currents.

This thesis represents one contribution to a relatively new, but rapidly growing body of work relating to the implications of the Internet for democracy and social change. Balances of power in the online context are rapidly changing, and the social dynamics of the Internet are sure to further develop in ways that have not yet been predicted. This lack of certainty and equilibrium means that complacency about gains already made could be perilous, but also carries hope for the continuation of the Internet as a vehicle for resistance.

It has been shown that there are many positive benefits of the Internet for environmental (and other) groups. However there is much that is still unknown about how the Internet is used and interpreted. It is hoped that both environmental groups and other researchers will be able to build upon the material presented here in order further knowledge about this emerging communication and ideological medium.

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Appendix 1

Definitions Of Internet Components

The Internet (The Net)

The Internet can be defined in terms of the global address systems and information transfer protocols which allow computers to find each other and exchange information through this huge worldwide network. It also includes communication services which employ extensions or additions to these protocols, but which rely upon the basic network.

A more technically orientated definition is provided by the United States Federal Networking Council) describes the Internet as the global communications system that:¹

(i) is logically linked together by a globally unique address space based on the Internet Protocol or its subsequent extensions / follow-ons;

(ii) is able to support communications using the Transmission Control Protocol / Internet Protocol suite or its subsequent extensions / follow-ons, and / or other Internet Protocol compatible protocols; and

(iii) provides, uses or makes accessible, either publicly or privately, high level services layered on the communications and related infrastructure described herein.

Email

An *email* is an electronic message sent to one or more recipients, which is stored on a server until it is accessed by the recipient(s). *Email* refers to the mechanisms through which such a message is sent (networks, software, addressing systems and so on).

Emails are usually plain text messages, but any type of electronic file can be sent (such as computer programmes, pictures, sound etc.). Non-text files are usually sent as attachments to the text message. Email can be sent through many different types of computer networks, which may or may not be connected to the Internet. However the Internet is now the most common way in which email is transported, as it permits a message to be sent to addresses at any location which has an Internet connection, and where the recipient has an email address. An email address needs to be registered within the network in which the email is sent. On the Internet the part of an email address after the “@” (the domain name) is registered with the Internet registry, and the part before is dealt with by the server which is administering the domain.

¹ (US Federal Networking Council official “Definition Of Internet” - http://www.fnc.gov/Internet_res.html)

Currently most email addresses are connected to the Internet, and they can usually be used to send messages, and access messages sent, through the Internet. Therefore in the course of this study *email* will usually refer to messages which are sent using the Internet, unless otherwise stated.

World Wide Web (WWW)

The World Wide Web (WWW) exists as the part of the Internet which is usually viewed using Internet browser software (such as Internet Explorer, Netscape or Mosaic). Prior to the WWW the Internet was virtually a text-only medium. The WWW is the multi-media component of the net that includes pictures, sound and video, as well as hyperlinks with which users can move from one WWW document to another. It has become fairly common for the WWW to be referred to as “the Internet”. This study uses the wider definition of the Internet based on the original meaning, as above.

Web Page / Web Site

A *web page* is a document which can be accessed through the World Wide Web and viewed in an Internet browser. Most web pages utilise HTML (Hyper Text Markup Language). Every web page has its own unique address, or URL, on the Internet.

A *web site* is a collection of web pages, put together by the same person, organisation, or group of affiliated people. The pages in the site are linked by internal hyperlinks. Usually a web site will be put together around a particular purpose or theme – for example to advertise a product, to put forward a political message, to make a set of related information available or to represent a person or organisation.

Newsgroup / Discussion Group

A newsgroup (or discussion group) is a forum through which people can post messages for others who have access to the group to read. Others can then respond to these messages with their own postings. Usually responses are grouped in “threads”, identifiable by the subject line, which is generally “RE:” followed by the subject line of the original message.

Newsgroups take a wide variety of forms. Some are based on the World Wide Web, and utilise software which is built into an Internet site. Others exist on special newsgroup servers, and require software for reading newsgroups to be accessed.

Mailing lists are newsgroups which utilise the email addresses of the subscribers – emails sent to the group are distributed to the personal email addresses of all others in the group. Newsgroups can also exist on local networks that are not connected to the Internet.

Some newsgroups are open for anyone to read or post on. Some require password access to be viewed, while others can be viewed by anyone, but require a password to post a message. A moderated newsgroup is one where messages are checked by one of the groups' administrators before they are posted for others to view.

The largest, and most well known, collection of newsgroups is Usenet. This has been defined as a “collection of thousands of topically named newsgroups, the computers which run the protocols, and the people who read and submit Usenet news.” Usenet existed prior to the Internet, but it can now be accessed through the Internet, and it uses the Internet to carry much of its traffic. However not all Internet hosts subscribe to Usenet, and not all Usenet hosts are on the Internet.

Real Time Chat

Real time chat is Internet communication which takes place while all involved parties are online, and in which recipients receive a message on their screen virtually as soon as the sender has written it. This is carried out using IRC (Internet relay chat) software and servers, scripts built into web sites, or “instant messaging” services such as *AOL Instant Messenger* or *ICQ*.

Real time chat is given little attention in this thesis. This is because it appears to be used little by environmental groups, and is perhaps more beneficial for those wanting to engage in social interaction than those who go on the Net to organise or publicise.

Appendix 2

Survey Questionnaire

A working version of this online questionnaire can be viewed at:

<http://arachna.co.nz/thesis/survey01.html>

Table A2.1 (included after the questionnaire) lists the drop-box selections. An email version of this survey, which included the same questions, was also available as an option for participants.

1. In what year did your organisation begin to use the following aspects of the Internet (approximately)? (select "Don't use" if you do not utilise this aspect, or "Don't know" if you can not make a reasonably accurate estimate.)

Also indicate how important you believe this aspect to be to the overall success of your organisation.

	Year	Importance
Email:	[Select year ▼]	[Select importance ▼]
The World Wide Web (to access information):	[Select Year ▼]	[Select importance ▼]
The World Wide Web (to publish information):	[Select year ▼]	[Select importance ▼]
Discussion groups or email list servers:	[Select year ▼]	[Select importance ▼]
Real-time chat (chat lines, IRC, ICQ etc.):	[Select year ▼]	[Select importance ▼]
Other aspect (name below): _____	[Select year ▼]	[Select importance ▼]
Other aspect (name below): _____	[Select year ▼]	[Select importance ▼]

2. Approximately how many Internet-connected computers are used in the running of your organisation (including computers owned by the organisation, those owned by members but used for the work of the organisation)?
[Select number of computers ▼]

3. Please rate the how important the Internet is for your organisation in each of the following areas:

	unimportant		moderately important		very important
Networking within the organisation:	○		○	○	○
Gaining new members:	○		○	○	○
Networking with other organisations:	○		○	○	○
Providing information / contacts for journalists:	○		○	○	○
Directly publicising issues:	○		○	○	○
Encouraging increased involvement in the organisation:	○		○	○	○

4. What are the main advantages of the Internet for your organisation?

5. Has your organisation come across any problems with the use of the Internet?

Yes

No

If yes, what are the nature of these problems?

6. Do you believe that the Internet has meant that your organisation is more likely to be successful in achieving its goals?

Yes, much more successful

Yes, but only a little

No, has been of no benefit

No, the Internet has been a hindrance

Why do you say this?

7. Does the Internet help promote your organisation in any of the following ways? (indicate all that are applicable)

journalists use the web site to find information

journalists use the web site to find interview contacts

journalists use email to make requests for information

press releases are emailed to newspapers / television etc.

people often go to the web site to find more information after the organisation is mentioned in other media

media campaigns / strategies are co-ordinated with web site material

other roles in media campaigns / activities:

8. Has the use of the Internet meant that other media (such as television, radio, print etc.) have become less important for getting your message across?

Yes

No

Comment:

9. Who (if anyone) are the key opponents of your organisation's practices and / or policies?

or other:

Remember that there is no obligation to answer any of the questions in this survey, and that you should leave out any that you do not feel comfortable answering.

10. Do you feel that the Internet has changed the balance of power between your organisation and it's opponents?
 Yes
 No

If so, how?

11. Have any of your opponents used the Internet to strike back against your organisation or the ideas it promotes?
 Yes
 No

If so, what measure of success have they achieved in doing so?

12.

In what country is your organisation based?
other:

13. Organisation name: OPTIONAL!

14. If there is anything else you would like to add that is not covered above, please use this space:

Important: You do not need to enter the name of your organisation if you do not wish to. Entering the name will allow me to go to your web site and collect further data which would be collated with that which you have entered here, but the information you have provided is useful even if I can't do this. If you do enter your organisation's name, confidentiality is assured - it will **not** be linked to results in the final report, or any other publicly available document.

Table A2.1: Questionnaire Drop-Box Selections

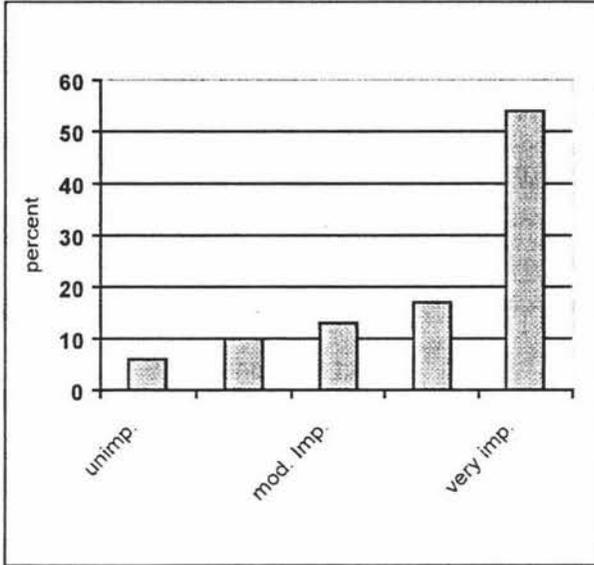
Question Number	Drop-Box	Selections
1	Year	Don't know Don't use 1975-1998 listed as options
	Importance	Very Important Moderately Important Slightly Important Unimportant
2	Number Of Computers	1 2-9 10-19 20-49 50-99 100-199 200-299 500-1000 more than 1000
9	Main Opponents	Don't have adversaries Multi-national Corporations Local companies State government Local government International organisations Other NGOs

Appendix 3

Spread Graphs Of Importance Of The Internet By Purpose

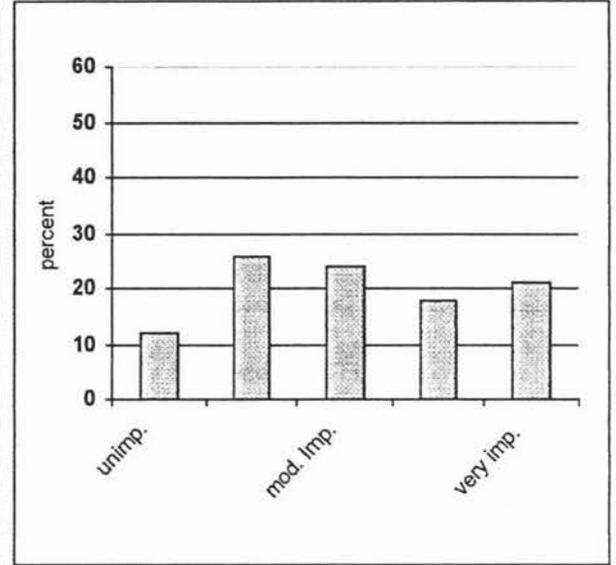
Survey respondents were asked to indicate the importance of the Internet for various types of uses. The results for this question are shown in Figures A2.1 to A2.6. See Section 5.2.1 for a discussion of this data, and a graph showing the averages for each of these questions.

Figure A3.1: Networking Within The Organisation



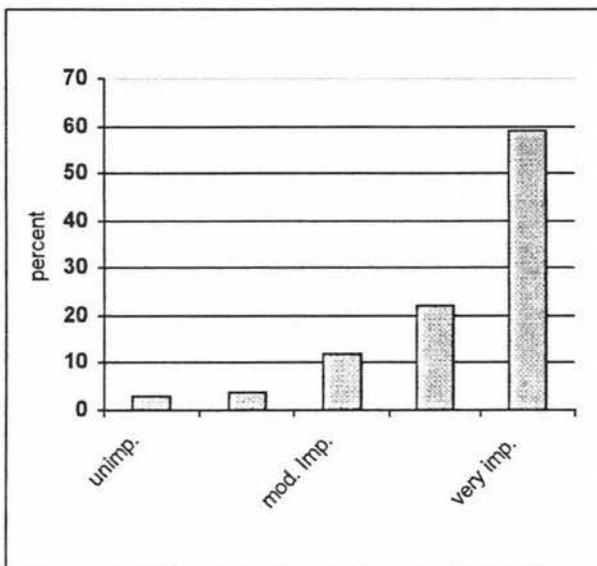
Valid Responses: 78

Figure A3.2: Gaining New Members



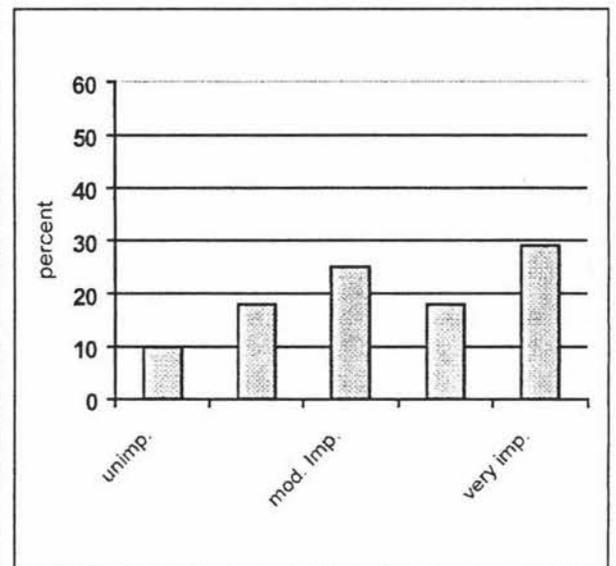
Valid Responses: 76

Figure A3.3: Networking With Other Organisations



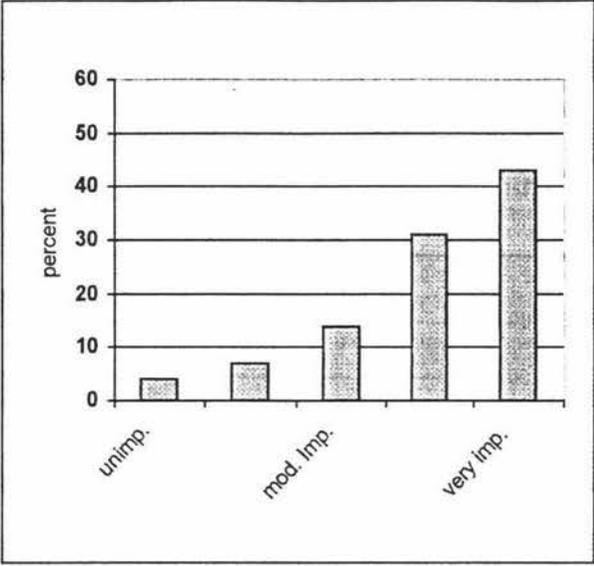
Valid Responses: 77

Figure A3.4: Providing Info. / Contacts For Journalists



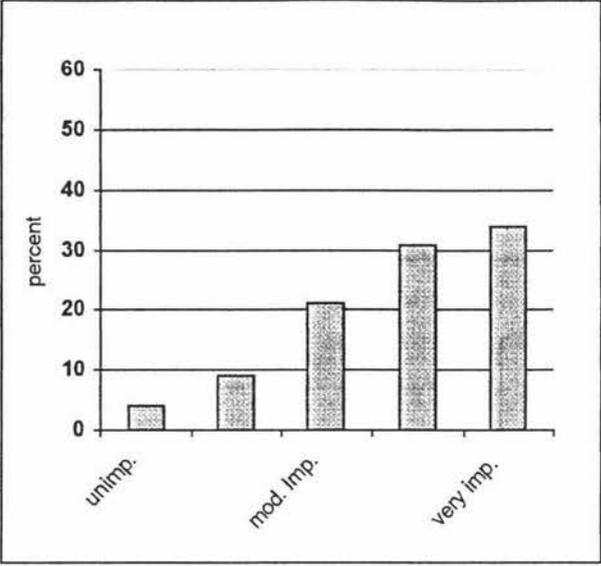
Valid Responses: 76

Figure A3.5: Directly Publicising Issues



Valid Responses: 78

Figure A3.6: Encouraging Increased Involvement



Valid Responses: 75

Appendix 4

Online Environmental Magazines And Journals

Below are some examples of magazines and journals which focus on environmental issues, and which are available in full through the World Wide Web. This is not anything close to a comprehensive list, but is provided to give an idea of the types of environmental publications available through the Internet. All descriptions are copied directly from the publications' Internet sites.

Better World 'Zine

URL: <http://www.betterworld.com/>

Description: *Better World is a combination online 'zine, the Better World 'Zine (BWZ), and a Web site collective, the Better World site. They are integrated together to provide depth, and designed to give you free and useful information to help you make informed, responsible decisions about the way you interact with your environment and your community.*

Access Cost: Free

Print Version: Unknown

E / The Environmental Magazine

URL: <http://www.emagazine.com/>

Description: *A substantial magazine, E is chock full of everything the budding environmentalist needs to know, from "rainforests to recycling" and from the "personal to the political." ... Most important, E helps readers become active! Over 700 readers responded enthusiastically to a recent questionnaire about actions they had taken in the last year.*

Access cost: Free

Print Version: Yes

Earth Action

URL: <http://www.nrdc.org/nrdc/field/acti.html>

Description: *Twice a month this bulletin calls out urgent environmental issues requiring grassroots action. Typically, it mixes new items with carry-overs from previous editions. The most important receive red check marks..*

Access Cost: Free

Print Version: Unknown

Earth First! The Radical Environmental Journal

URL: <http://www.enviroweb.org/ef/>

Description: *Earth First! Journal is a forum for the no-compromise environmental movement.*

Access Cost: Free

Print Version: Yes

Ecotopics

URL: <http://www.ecotopics.com/>

Description: *The environment and human rights are the chief concerns of Ecotopics. We seek accounts of successful programs designed to maintain our planet in livable, sustainable condition. Sadly, we often tell of desperate need, hard questions, and no answers. We want the news to spread that livable and sustainable mean that at least some of us can live together in harmony with our planet and with one another. Headed by career reporter Jo Campbell, Ecotopics is based on the environmentally and economically dynamic Eastern Shore of Maryland, but looks to the world we all share!*

Access cost: Free

Print Version: Unknown

Mother Earth

URL: <http://www.geocities.com/CapitolHill/2229/>

Description: *Mother Earth is the ecological magazine of Third Way a UK political party which stands for decentralisation, co-operative economics, social reform and direct democracy.*

Access cost: Free

Print Version: Unknown

Propaganda Journal

URL: <http://www3.pei.sympatico.ca/brad/index.html>

Description: *This public interest website is an electronic version of the uncensored Prince Edward Island "Propaganda Zine". The Propaganda Zine was created to provide P.E.I. residents with an "Intellectual Self Defence" against the daily barrage of propaganda they are subjected to. The Propaganda Zine is committed to publishing articles on environmental issues, deep ecology, human rights, social justice and democracy.*

We research and write in the age old muckraking tradition. We feel it is necessary for P.E.I. residents to defend themselves with independent research and opinions. Remember, Propaganda is to Democracy what Violence is to Dictatorship !

Access Cost: Free

Print Version: Yes

Rachel's Environment & Heath Weekly

URL: <http://www.monitor.net/rachel/rehw-home.html>

Description: *Providing news and resources for environmental justice. WWW version and email version available.*

Access Cost: Free

Print Version: Unknown

Whole Earth

URL: <http://www.wholeearthmag.com/>

Description: *Whole Earth is committed to a vision of what's needed to challenge ingrained patterns and stale assumptions. Curiosity. Exploration. Independence. Community. Living fearlessly. Principles. Tools and ideas. Whole Earth shows you ways to take back your power and put it to use. Here you'll find information about restoring your local ecosystem, citizen advocacy, and socially responsible investing. Here are the tools for producing knowledge, and creating communities according to your own values and ideals.*

Access cost: Free

Print Version: Yes

World Watch Magazine

URL: <http://www.worldwatch.org/mag>

Description: *Worldwatch is a nonprofit public policy research organization dedicated to informing policymakers and the public about emerging global problems and trends and the complex links between the world economy and its environmental support systems.*

Access cost: Free

Print Version: Yes

Appendix 5

Examples Of Anti-Environmentalism On The Web

Junk Science Home Page

<http://www.junkscience.com>

Techniques similar to those which have been previously used offline are now being pioneered on the web. For example, the Junk Science Home Page set up a facility through which individuals who sent a message to President Clinton arguing their position on global warming prior to the Kyoto Conference would be in the draw to win US \$1000¹. A similar system is now in operation asking citizens to email the president with their views on whether the US should attend the Buenos Aires meeting on global warming. It is stated that:

It does not matter whether you are 'for' or 'against' U.S. participation in the global warming negotiations, you enter the contest simply by expressing your opinion in an e-mail to President Clinton.

However, the page is located within a large site with a high frequency of claims which imply you would have to be an imbecile to believe that global warming is a problem, the sample letter is strongly against participation in the meeting, and the page contains seven links to web sites presenting only arguments that oppose greenhouse gas regulations. Furthermore, the email is sent through a form in the site, so the owners of the site have the opportunity to manually filter the messages that actually get sent. (This is not to say that they do filter the messages - it is perhaps more likely that the overall balance of “yeses” and “nos” is monitored.)

The Junk Science Home Page is a large site which regularly publishes material ridiculing science which supports the need for environmental reform. On the home page “junk science” is described as, “bad science used to further a special agenda, such as personal injury lawyers extorting deep-pocket businesses; the “food police,” environmental Chicken Littles and gun-control extremists advocating wacky social programs...”

The Center for the Defense of Free Enterprise

<http://www.eskimo.com/~rarnold/menu.html>

The web site of the Wise Use movement itself, fronted by leaders Ron Arnold and Alan Gottlieb, also presents stock environmental backlash rhetoric in an online form. Some environmental backlash sites give the impression of being very professional in terms of design and technical sophistication; this one does not.

¹ The competition page is located at: www.junkscience.com/global-warming-contest.html

The site makes constant references to the “grassroots” of the organisation, and it is possible that the amateurish, “thrown together” presentation is consciously aimed at creating the perception it was created by “everyday people”. It contains a section called the “Wise Use Action Net”, which mainly comprises links to the web sites of U.S. senators and representatives who “have either shown interest in property rights, wise use of resources, or free market issues, or are members of related committees.” The site’s bookstore includes some interesting titles, including:

- *The Asbestos Racket: An Environmental Parable* by Michael J. Bennett.
- *Ecology Wars: Environmentalism As If People Mattered* by Ron Arnold.
- *EcoTerror: The Violent Agenda to Save Nature - The World of the Unabomber* by Ron Arnold.
- *Fear of Food: Environmentalist Scams, Media Mendacity and the Law of Disparagement* by Andrea Arnold.
- *It Takes A Hero: The Grassroots Battle Against Environmental Oppression* by William Perry Pendley.
- *Trashing the Economy: How Runaway Environmentalism is Wrecking America* by Ron Arnold and Alan Gottlieb
- *Politically Correct Environment* by Alan Gottlieb and Ron Arnold.
- *Politically Correct Guns* by Alan Gottlieb.
- *Politically Correct Hunting* by Ken Jacobson.

The Cato Institute

<http://www.cato.org/>

The Center for the Defense of Free Enterprise web site seeks to portray a grassroots movement of regular working people. The Cato institute’s web site represents another side of the environmental backlash – the corporate front group. As such, the site appears to be designed to come across as professional, authoritative, and firmly grounded in science. The Cato institute claims to accept no government funding “in order to maintain an independent posture,” but freely admits to accepting funds from corporations (perhaps reinforcing the notion the corporations are non-political entities). The Cato web site does not name any of its corporate sponsors, which include the American Petroleum Institute, Coca-Cola, Exxon, the Ford Motor Company, Monsanto, Philip Morris and the Procter & Gamble Fund (Beder 1997: 80).

The Cato Institute’s site includes a section on “Natural Resource Studies”, which focuses on the promotion of numerous books and studies, all of which seek to show that the government should not intervene in environmental issues, or that particular environmental problems do not exist at all. Examples include:

Through Green Colored Glasses: Environmentalism Reconsidered, by Wilfred Beckerman

“This Cato Institute book argues that fashionable ‘crises’ like global warming, ozone depletion, natural resource consumption, and animal extinction deflect attention from the real issues, like access to clean water.”

The Hoodwinking of a Nation: Inside the Bad News Machine, by Julian Simon

“This Cato Institute book will expose the relentless doom and gloom bias of the media”

The Cato web site also boasts evidence that the institute is seen as a respected and objective source by leading American newspapers, and that has significant influence among politicians. For example, a quote from the *Washington Post* notes “the growing role of the Washington-based Cato Institute as a generator of ideas that find their way into Republican legislative proposals and rhetoric.” The site also includes congratulatory quotes from the *New York Times*, *Washington Times*, and *Atlantic Monthly*.

Greening Earth Society

<http://www.greeningearthsociety.org/>

Anti-environmental web sites also attempt to gain legitimacy through claims that they represent grassroots organisations. For example, Greening Earth Society, a group set up to show that increased CO₂ levels are in fact good for the environment, introduce themselves on their homepage as follows:

We are a nonprofit grassroots organization dedicated to promoting the truth about our planet's health: The earth is getting greener thanks to the carbon dioxide released into the air through the use of fossil fuels. Our purpose is simple: We educate the public about the positive effects of carbon dioxide on our environment so that they can make informed decisions that are beneficial to humanity and the planet. Greening Earth Society serves as a vehicle to provide information to educators, students, business people, media, community leaders, and policy-makers.

There are several classic anti-environmental approaches in this statement. The organisation is claiming to be fighting for the environment rather than against it, it claims to be a “grassroots” initiative, and it gives the impression of being a non-partisan provider of unbiased information.

The Greening Earth contents page also contains a link to FossilFuels.com, “a web site devoted to describing the importance of coal, oil and natural gas, and to address issues surrounding their use.”

One of the articles in this site, titled “The Internet Begins With Coal,” looks at the power consumption issues associated with the Internet described in Section 4.4.1 from a different perspective.

Whereas some may view reliance of the Internet upon large amounts of power from sources such as coal burning as negative because of the environmental implications, “Science Advisor Hills” (the author of the article) turns this relationship around to argue the importance of coal in our lives, implying if it were not for coal the Internet would not be possible.

The Heartland Institute

<http://www.heartland.org/>

The Heartland Institute is a right wing and corporate funded think tank specialising in environmental and education issues. The web site includes an “Activist’s Toolbox” which includes model legislation and information for contacting media and elected officials. A “PolicyBot” provides search and receive access to more that 7000 policy documents from over 300 other think tanks.

The site also holds the full text of *Environmental News*, a publication of the institute. Most of the articles in this monthly newspaper advocate less environmental regulation and seek to show the scientific basis for environmental claims to be unfounded.