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The Internet as Space, shifts in Territoriality

David Verge Bertram

A thesis submitted to the Faculty of Graduate Studies and Research in partial
fulfillment of the requirements for the degree of

Master of Arts

Department of Geography

Carleton University

Ottawa, Ontario

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Research acceptance of the thesis

The Internet as Space, shifts in Territoriality

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Abstract

The Internet as a communications vehicle is rapidly changing our lives. Its influence can be seen as technological change and also as a social influence. To understand its nature and its effect on the Institution of the State, one must consider its spatial component as a critical element in the equation. The State itself is anchored to a territory and it is this juxtaposition between the space of the Internet and the territoriality of the State that underlies the conflict.

The Internet is the space of the 'other', a metaphorical space; but yet, it has the aspects of space. By using the concepts in 'The Production of Space' by Henri Lefebvre, I have made the argument that the Internet is in deed a space by way of its social interaction. The State has sovereignty over a territory and is thus justified to govern the Internet within its territory. But, the Internet is an international communications vehicle and to some extent has lessened the State's ability to control it. By examining a number of incidents between the State and the Internet, I have set out the geo-political struggle between these two great 'spaces'. This struggle is on going and its conclusion has yet to be determined; however, I have mapped out this conflict to hint at where both the Internet and the State may be heading in the future.

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The Internet as Space, Shifts in Territoriality

In cyberspacetime, the social realm is engulfing and overwhelming the political realm. The 'social' is decomposing the body politic. Decay of politics is proceeding as quickly as the matrix is growing. (Thu Nguyen and Alexander; 1996, pg. 109)

1. Introduction

As the 21st century quickly approaches, a new phenomenon is beginning to take a foothold in our daily lives. This happening will influence how humans will work, communicate and play. Through a new communications vehicle we can meet academics, pedophiles, computer hackers, school children, business people and a host of others from all around the world. The Internet, (the Net), an idea that had its conception in the cold war environment of the 1960s, is providing us with more than just a new type of communications system.

As a physical entity the Internet is an array of computer networks joined together through an addressing system. But, it is through this interaction of humans and computer networks that a new entity is shaped, joining human interactions across territorial borders. Cyberspace, the space of the Net has enhanced our world-view; but with this new collection of technologies comes some new problems. The digital information system that is behind this movement is more than a collection of 'wires' and connections. It has become something greater than the sum of its parts, which I believe, creates a new type of space. Not a physical space; but none-the-less, a 'space' that influences and is influenced by social action.

This space that the Internet provides conflicts with our present political institutions ('spaces') that influence and control our lives. The state is affected by the "Net" (the Internet). I believe what is happening here is a case of conflicting 'spaces' or at least a disregard of one of these 'spaces' by the other.

The focus of this thesis is rooted in the idea that the Internet influences the state's ability to govern; however, it also points out my belief that 'space' has a powerful structuring effect. I propose that the Net affects a state's territoriality; a state's ability to control what goes on in its territory. When people and their activities cross state borders a new 'arena' is opened up and a new relationship develops.

This thesis suggests that the Internet is a social and technological phenomenon whose spatial component is a critical element in understanding both how it influences human activity and how States try to come to terms with this new entity.

This space is not a physical space, but metaphorical. We log on to the Net; we surf the Net; many of the things that we do on the Net are referred to, in our daily lives, as being in some sort of space. Though we are little more than sitting in front of a computer, I believe that more and more we are reacting to the Net as a space/place. It is our actions while we are 'on the Net' that has governments and political authorities concerned. Control of the Net at present is limited, some say technologically impossible to regulate. For the state's part, it must adjust or change the Net if it is to come to grips with this phenomenon. But by trying to control this space, problems occur and we realize the spatial properties of the Internet may well put it outside what we see as our everyday space living within a state.

1.1 Computer and Internet Usage

Growth of computer acquisition and usage has rapidly risen in the last decade especially in the industrial nations of the world. The threat of the 'Year 2000 date' (Y2K) problem has brought home to the world how dependent we are and how pervasive computers and their technology are in our daily lives. In the past, computers were seen as the tools of a select few associated with big government, major corporations or some academic elite. But, in today's world this is all changing. Computers have come out of the 'glassed off rooms' and moved onto the 'streets'. In the early 1990s commercial users began appearing on the Net, changing the makeup of users to include the commercial outfits from the previous exclusiveness of nonprofit computers, principally universities. The number of Internet hosts over the period from October 1994 to January 1995 grew by some 26%. (Treese; 1995¹) It has been estimated that somewhere in the range of 40 million to 10 million users were on the Net in 1995. (Lewis; 1995) On the CBS TV evening news, Dan Rather reports that traffic on the Net doubles every 100 days.² This wide range in the number of users is due to the uncertainties on how to count the number of users on the Net. Counting anything on the Net is difficult because each site and network that make up the Internet do not agree on the definitions or meanings of what IP (Internet Protocol) addresses are indicating in terms of machines and number of users associated with an address. Some addresses are indicating a single machine; some indicate 'hosts' where many users are located. In Canada, Statistics Canada, has reported for its 1994 General Social Survey (GSS), that computer usage has increased rapidly. "In 1994, 25% of Canadian

¹ treese@openmarket.com, Index #6, Win Treese edits a number of factual indexes that report on the statistical information about the Internet. Openmarket is a commercial site that looks at commerce on the Net for several major corporations: www.openmarket.com

² The CBS evening News 15/04/98, this figure of doubling in traffic size on the Net was also reported in January 6, 1999 on the Global evening News.

households had a home computer, up from 10% in 1986. Thus, 2.6 million households owned a PC in 1994 (excluding computers that were strictly for business purposes and those that could only be used to play games). One in three of these home computers (34%) were equipped with a modem. This device sends and receives information over telephone lines, and allows households to access on-line services, bulletin board systems and the Internet.”(Stats Can; 1994) However, as expected higher income families are more likely to have a computer than low-income families and families with children are also more likely to have these devices.³ Statistics Canada also reports that computer literacy has increased.⁴ The question of who has logged on to the Internet was not asked in previous General Social Surveys but was asked on the 1994 survey. “The 1994 GSS asked, for the first time, whether people had used any on-line services or had logged onto the Internet. That year, 17% of computer users (2.2 million) reported having used an on-line service or the Internet in the 12 months before the survey.” (Stats Can; 1994)

In 1997, the A.C. Nielsen survey research firm from Toronto has stated that home usage of the Internet has almost doubled since 1996. (Rowan; 1997) According to Randy Carr, Vice President of A.C. Nielsen, 31% of Canadians use the Internet, which equals a 20% household penetration. (Rowen; 1997) However, though the Nielsen survey predicted that 50% of households that have PCs would attach to the Internet, there was actually an

³ Computer ownership also varies by household type (which in turn is related to other factors such as income and age). Families with children under age 18 were more likely to have a computer (35%) than were those without children (24%). Furthermore, families with children were three times as likely as one-person households (12%) to own a computer. PCs were even less common in the homes of seniors. Less than 7% of households headed by people aged 65 and over had a computer in 1994. In fact, household type is related to ownership of many electronic leisure items, including VCRs and CD players. Families with children are most likely to have all of these devices. Stats Can 1994 survey

⁴ According to the 1994 General Social Survey (GSS), 56% of adult Canadians (12.3 million) were able to use a computer, up substantially from 47% in 1989. In addition, 41% of Canadians aged 15 and over in 1994 had taken at least one computer course. Computer literacy is most prevalent among youth, in part because most young people today are exposed to computers in school. In 1994, 81% of people aged 15 to 24 were able to use a computer. Computer literacy declined with each subsequent age group. Among seniors, only 10% were able to use a computer. As is the case with ownership of home computers, ability to use a computer is related to household income. In 1994, 86% of people living in households with incomes of \$100,000 and over knew how to use a computer.

11% drop in Internet usage from the 1996 survey. (Ibid.)

Neilsen Media Research announced in the spring of 1997 that in 18 months the Net has doubled. It also stated that nearly a quarter of the population of North America had been on-line in one way or another in the preceding month. "In a survey of Canada, Nielsen found that half of Canada's 10.5 million homes have computers. Toronto led the nation with 60% of homes having computers while Quebec outside of Montreal had the lowest with 40%. In 1995, 85% of those people that had access on the Net own their own computer, in 97 survey this was down to 70%." (Kapica; 11/04/97)

There is a problem here when trying to compare the growth of the Internet by breaking up the statistics on a country to country basis. There seems to be no set standard on how these statistics are collected. Each country's telematic development, history and economic circumstances are different and for some countries political decisions have prevented its citizens from connecting to the Internet.

Bob Metcalfe, inventor of the Ethernet and columnist with Info World, a computer trade magazine, predicts that the Net will collapse in the year 2000. (11/03/96) Taking statistics from an International Data Corp. survey⁵, Metcalfe predicts that there will be a 'backlash' to the Net because businesses will find the poor showing by Internet providers in providing high quality service and the proliferation of opening and closings of Web sites suggesting little profit is being made by the companies on the Net; this will cause the Network to be abandoned by corporations. However, according to Metcalfe the survey

Only 28% of people in households with incomes under \$20,000 were computer literate. (Stats Can)

⁵ www.idcresearch.com "International Data Corporation is the information technology industry's most comprehensive resource on worldwide IT markets, trends, products, vendors, and geographies. IDC provides data, analysis and advisory services to the world's leading IT suppliers as well as IS professionals in finance, insurance, entertainment, advertising, consumer goods and publishing. IDC's research and opinions are based on the results of more than 300,000 end-user surveys, in-depth competitive analysis, broad technology coverage, and strategic analysis. IDC is committed to providing global research with local content through its 500 analysts in more than 40 countries

states that 200 million users will be on the Net in the year 2000 and they will be spending 150-200 billion dollars (U.S.) on the Net. This figure is up from 1995 where some 8 million dollars was guessed to be spent on the Internet.(Metcalf; 1996a, pg. 36.) Kurton Cerf considered one of the co-founders of the Net says it is not going to crash, and he puts no limit on its growth and viability, but he says there are a number of 'traffic jams' as the Net grows, but he says the Net will adapt . Cerf sees reliability as a social issue but does see a need for international rules.(Surtees; 1996) The predictions that the Net is going to crash is an on going event. There are 'experts' on both sides of the argument; however, as Scott Bradner, a consultant with Harvard University's Office of Information Technology, points out; "it is effectively impossible for the global Internet to fail in a catastrophic way".(Bradner; 1996) But, Bradner states that this 'non-crash' does not mean that large numbers of users will not be affected by the different slowdowns, congestion and specific network outages.(Ibid.) Bradner points to the fact that the Internet is really just a collection of hundreds of thousands of interconnected networks.(Bradner; 1996) The Internet addressing system is designed for the inevitability of some networks going down.

The Net is also changing in terms of who is populating it. Businesses and women have become one of the fastest growing entities on the Net as the environment improves. John Carson of the Toronto Stock Exchange commenting on the News that in March of 1996, the Spring Street Brewing Co. of New York let its stockholders buy and sell their stocks on its Web 'trading post'; states, "for the Internet trading to survive, regulations similar to those governing traditional stock exchanges will be needed."(Maley; 1996) The news of the trading stocks on the Net caused a hurried investigation by lawyers for the U.S. Security and Exchange Commission but found that there was no law against it.(Ibid.)

worldwide." The above is a quote from the Home page of this site from the page 'about IDC'.

Carson worries about the potential for abuse. Hewlett-Packard, in an advertising supplement in the *Globe and Mail* (10/07/96) warns companies of security problems on the Net and the supplement sees the Internet as a “wild frontier” and warns businesses about publishing ‘issues’ on the Net. The above indicates that in 1996, businesses were starting to find the Net more attractive and as more and more stock offerings become available more and more the Internet becomes part of the business world.

It might be thought from the domination of the U.S. and its citizens on the Internet, that the U.S. would rank as number one for being most ‘wired’ into the Net. But according to Ted Swart of the Department of Computing and Information Science at the University of Guelph; Canada, on a per capita basis, is number one. (Kapica; 23/05/97) As of 1997, the U.S. had 28,470 computer networks attached to the Internet while Canada has only 4,796; however because of Canada’s small population, Canada is ranked number one. (Kapica; 23/05/97) The top seven countries, ranked by networks per million population are Canada (192); U.S. (114); Australia (110); France (37); Britain (24); Germany (22); and Japan (15). (Kapica; 23/05/97) Swart says that these statistics are important in being able to see where growth is occurring on the Internet; and, he predicts that Japan’s Internet connection rate is about to dramatically increase over the next five years. (Kapica; 23/05/97) Looked at in another way, the ITU in July of 1996, calculated statistics for Hosts per thousand inhabitants and found that the top five countries were Australia, New Zealand, Bermuda, Canada and the United Kingdom, all English speaking countries. (ITU; 1997, pg. 71) In yet another interpretation of the data from the Internet, a survey by the investment house of Morgan Stanley & Co. has stated that more than half of the computer networks that make up the Net are situated in the U.S. with Canada second. Other leading countries are France; 2,003, Australia; 1,875, Japan; 1,847, Germany; 1,750, and Britain; 1,436. (Chicago Tribune; (Globe

and Mail) 28/03/97, A6)

'Techno-theorist' Arthur Kroker, states that the techno-liberalism of the 1990s has created an underclass consisting of the old working class and the system-deleted nations such as those in Africa or Bangladesh. "These are surplus bodies that don't fit into the new virtual whirl and are disciplined and abused by the techno-élite", states Kroker.(McClellan; 1994) Kroker believes that a new 'class' is being formed:

The twentieth-century ends with the growth of cyber-authoritarianism, a stridently pro-technopia movement, particularly in the mass media, typified by an obsession to the point of hysteria with emergent technologies, and with a consistent and very deliberate attempt to shut down, silence, and exclude any perspectives critical of technopia. Not a wired culture, but a virtual culture that is wired shut: compulsively fixated on digital technology as a source of salvation from the reality of a lonely culture and radical social disconnection from everyday life, and determined to exclude from public debate any perspective that is not a cheerleader for the coming--to-be of the fully realized technological society. (Kroker & Weinstein; 1994, pg. 4)

As a profile of the typical user on the Net, there is a general agreement that he's white, single, English speaking and residing in North America.(Wellman et al.; 1995) He's also well educated and politically conservative.(Ibid.) There has been a trend in recent years to see more and more women, people of lower socioeconomic status and non-English speakers on the Net but they are still very much in the minority.(Gupta et al.; 1995⁶)

In a Nielsen survey it was reported that 1/3 of users on the Net were women.⁷ Some of the points that have been forwarded to explain why women are staying off Net: developed by US military, "it developed a culture that was more comfortable for men", says

⁶ found at www.wmich.edu/s Gupta/hermes.html This page is found at the University of Western Michigan as part of a course on the structure of the Internet, visited Oct. 1998

⁷the following sites discuss more on the survey results now.org/now/home.html, liven.sims.berkeley.edu/women.html, mevard.www.media.mit.edu/people/mevard/women.html

Stacy Horn founder of site Echo,⁸; Marleen McDaniel of Women's Wire⁹ comments that "women are not tinkerers, so you'll find that women were not the earliest adopters of the Internet." (Kapsia; 10/11/95) Aleza Sherman, 'Cybergrrl'¹⁰ states; "I think one of the things that has been keeping women off-line is misinformation. Actually, I have five myths that keep people off line: it's too hard, it's too expensive, it's too dangerous, there's nothing for me personally, and there's nothing for me professionally." (Kapsia; 10/11/95) But the numbers of women logging on is increasing especially in the Industrial world. Elisabeth Johanna Binder creator of 'Pheminist Cyber Road Show' in Linz Austria¹¹ states that "The Net subtracts even the human voice, women are more in keyboard professions, professional researchers; therefore, their numbers are sure to grow". (Kapsia; 10/11/95) Sherry Turkle sees a change in how we view computers as also contributing to women's acceptance of computers. (Turkle; 1995) Turkle points out that like the change from seeing the computer as a computational machine to seeing the computer as a simulation machine; linear programming and 'hard mastery'¹² have moved towards object oriented programming (bricolage¹³), and 'soft mastery'¹⁴. (Turkle; 1995, pg. 56) According to Turkle, women are

⁸ www.echonyc.com this site is run by the group ECHO, founder Stacy Horn. It was Founded in 1990, "we have over 3,000 members and 40% of them are female. An ad we're thinking of running - "Echo has the highest percentage of women in cyberspace. And none of them will give you the time of day."

⁹ www.women.com/wwire/html/wom.html; this page is found at women.com a magazine style website dedicated to Women's issues

¹⁰ www.cybergrrl.com plus their sister site Webgrrls International provides a forum for women interested in technology and/or the Net and its opportunities for women

¹¹ www.oeh.uni-linz.ac.at/~lisa/index.htm ; this has been called a 'rowdy feminist site' but it has some interesting articles on women and the Internet. Most of the articles, however, are written in German which I'm unqualified to read. I recommend Australian Women on the Internet - University of Wollongong Survey 1995) which gives similar information from the Australian perspective.

¹² The understanding of the computer from the top down, down to the workings of the software and hardware at the machine level.

¹³ A word Turkle took from the anthropologist Lévi-Strauss to be "used to contrast the analytic methodology of western science with an associative science of the concrete practiced in many non-Western societies". (Turkle; 1995, pg. 51)

¹⁴ 'Soft mastery' goes along with seeing negotiation, relationship and attachment as cognitive virtues. (Turkle; 1995, pg. 56)

trained in the component skills of a soft approach.(Ibid.)

In recent years, things have started to change. As the emerging culture of simulation becomes increasingly associated with negotiational and non hierarchical ways of thinking, it has made a place for people with a wide range of cognitive and emotional styles. In particular, women have come to feel that computers are more culturally acceptable. (Turkle; 1995, pg. 56)

The English language dominates the Net. (ITU; 1997, pg. 86 ft #6) This has allowed users from different countries to communicate more effectively but at the same time, this happening is putting pressure on those languages that are having trouble surviving in this electronic age. In a newspaper article from the Associated Press news service in Atlanta, linguists at a conference of the American Association for the Advancement of Science were warning that some 6,000 human languages would be extinct in the next century¹⁵. The dominance of English has a number of non-English speaking countries concerned about the spread of this lingua-franca. The English language and Western culture are a unique experience and are not known universally. As part of the difficulty on the Net for non-English speakers, “[T]he language frequently consists of a kind of interminable word play, irony, double meanings, subtle denigration and slippery insinuation (consider the flame).” (Interrogate the Internet; 1996, pg. 126)

The French adopted a law in August of 1994 that required all offers of goods and services on the Net (in France), to be in French. (ITU; 1997, pg. 87) This law was used to prosecute a French site for having information in English.(Ibid.) In Quebec, the provincial government’s Office de la langue française (OLF) informed a Montreal website to make revisions to its website to make its on-line advertising predominantly French.(Weller; 1997) The OLF gave the company responsible for the site 30 days to comply to their ruling or legal action would revoke the business license of the company.(Ibid.)

¹⁵ Ottawa Citizen; 19/06/95 – Staff, A10

However, a few of the developing countries where English is widely spoken have used this advantage to provide information technology services to the developed nations.(ITU; 1997, pg. 86) Countries such as India, Jamaica and the Philippines have set up facilities to process such things as Credit Card receipts.(ITU; 1997, pgs. 86-87)

As a tool for communicating to a large and diverse audience, the Internet is unparalleled. This is one of the reasons that corporations and businesses have made their presence felt on the Net especially on the World Wide Web. Business has not always been welcome on the Net. Until 1991, a long standing policy of the NSF (National Science foundation) stated that no commercial traffic would be allowed on its NSFnet backbone, however, business did setup the Commercial Internet Exchange (CIX) and established their own backbone as a way around NSFnet. (McLaughlin; 1996) “Advertisers are loath to put money into any Web site that can’t provide a large, stable and measurable audience, and Net surfers have so far proved to be fickle.”(McLaughlin; 1996, pg.6) Businesses are not only developing attractive websites to attract business but they are also promoting the new technology called ‘push’ software that allows information to be forwarded back to the user through ‘channels’ that the user has subscribed to, the user doesn’t have to go out searching, the user just supplies the parameters for the searching.. push software can help with making audiences captive adverts similar to TV (Kapica; 25/04/97), an example of this is Pointcast ; however, the atmosphere on Net is not necessarily conducive to corporations advertising. Kapica sees the culture on the Net clashing with corporate business practices.(Ibid.)

However, the corporations are making their presence known and with this move come the inevitable legal clashes. Ticketmaster, the giant purveyor of concert tickets claimed that Microsoft wronged it on the Internet and is taking them to court. In April 1997

on a Web page owned by Microsoft, in Seattle¹⁶; Microsoft noted a upcoming concert in Seattle and provided a link to a page about two levels down in Ticketmaster's Web site where tickets could be purchased. As a business practice, this move would amount at worst to a welcome referral and at best to free advertising. Ticket master complained that Microsoft was selling ads on the page containing the offending link. Microsoft, they claimed, was taking revenue that rightly belongs to them. (Kapica; 04/06/97) The possible result of this is that hyperlinks could be open to legal retaliation – the very heart and soul of the Web.

Such celebrities as Bill Gates, head of the Microsoft Corporation have been seen as positive and negative for the Net all in the same breath. Microsoft with its products DOS, and Windows have dominated the software industry in this latter part of the twentieth century. Gates and Microsoft along with a number of other influential computer related companies got their start as computer powers in the 1980's. At this time in the U.S. under the Reagan administration, the government was loosening restrictions on corporations in the hope that the resulting increase in business would cause a 'trickle down' effect and benefit ordinary citizens. (Kapica; 23/05/97) Jon Katz whose influential column, 'Media Rant for the Netizen'¹⁷, argues that Gates and Microsoft are trying to control the Net in a similar fashion that Gannell, Newhouse, Time Warner and Disney are trying to control traditional media. (Katz; 1997) According to Katz, "these conglomerates pose a greater threat to freedom than the U.S. government, which many Americans have come to believe is too intrusive". (Katz; 1997) There are a number of actors that have a stake or wish to control the Internet and including those individuals that are actually using the Net. But the ultimate

¹⁶ seattle.sidewalk.com this site is run by Microsoft . It is dedicated to the 'sights and sounds of Seattle'

¹⁷ www.netizen.com this site is basically a Wired magazine site. It doesn't have a lot of material but it has some good links to other sources including Wired Magazine and its different offshoots all concerning the Internet and 'wired' culture.

authority in today's atmosphere is still the sovereign political state.

The 1996 U.S. Presidential election was the first major election with a large constituency of 'wired' individuals. All the major candidates had Web sites. Kapica reports that the major parties web sites were very similar and newspapers lost interest in posting results after it was declared that Bill Clinton won on the east coast.(Kapica; 27/12/96)

During the 1997 Federal elections in Canada, Elections Canada were scrambling to 'jam its fingers in the electronic dike'.(Gooderham; 1997) Canada's election laws prevent the news media from publishing public-opinion polls 48 hours before an election. However, the 'Web' was not considered when the Canada Election Act was written. John Enright of Elections Canada was quoted to say, "we've got to figure out how it (Net) fits into the act".(Gooderham; 1997) Many of the 'blackout' rules in the act are difficult to apply to publishing on the Net.(Gooderham; 1997) Enright notes, "more and more parties and candidates are going on line every day".(Ibid.) "The immediacy and ubiquity of the Internet raises particular concern about the untimely dissemination of voting results on election nights."(Gooderham; 1997) The problem is how to police the above situation. Enright states, "[I]t's virtually impossible to have someone standing by every computer terminal in the country monitoring this".(Gooderham; 1997) In the above newspaper article, it is also noted that in the U.S., election information is very popular. The U.S. has no national laws governing the release of election results and a number of sites during the U.S. 1996 presidential election, were bogged down under heavy use on election night.(Gooderham; 1997)

Any way you look at it, access to the Internet, today and in the immediate future, is a privilege of an elite but yet it is becoming quite pervasive in the industrial world. The question of access is tied up in the cost of the hardware, education and for the most part one's location and geographical position. Those in the industrial world are privileged in their

ability to access the Net because of the telecommunications infrastructure that is in place. However, as Timothy Luke points out, while in the US, 35% of US families own computers and there are some 30 or so million PCs world-wide that still leaves 65% of US families without computers and some 5.96 billion people without PCs in the world. (1998; pg. 287-288) Yet the growth of computing facilities and the Internet is continuing at a rapid rate and will, I predict, continue. In the past, technological innovation was often associated with elites but this situation was only temporary. Proliferation of such technologies such as the automobile, telephone or television has become quite wide spread around the world. The Internet is becoming a household word in the Industrial nations of the world and it becomes increasingly more popular and integrated into our daily lives.

1.2 The Internet and its Importance to Geography

But why is any of the above of any interest to Geographers? To me, the initial spark in studying the Internet and its ramifications comes from a quote by E. L. Ullman (1953) given to me in a geography undergraduate course. "The main contribution of the geographer is his concern with space and spatial interaction." If you break up the word geography into its root words of geo and graph you might define geography as the spatial documentation of the earth. Geography concerns itself both with the physical world and the human world of social interaction. It has been said that as geographers, we are interested in the areal differentiation of the world. (Hartshorne; 1939) The Internet is physically just a series of connections between computers. It stretches around the world, though it is not universal. It is a communications vehicle with similarities and affiliations to other communication vehicles like the telephone, radio and TV. And yet, it functions as a collage of all that has gone before it. It has changed our beliefs of where we are in relation to others both 'on' and 'off' the Net.

Location, location, location may be the rallying cry of realtors but it might also be a mantra for geographers. Searching for and identifying patterns or aggregates is a fundamental skill of all researchers. But to me, geography takes a further step in examining the juxtaposition of the different elements in a field of research and it tries to show why areal positioning is important. How does an element get here and what is its relationship to other locations?

Geography gives us a strong explanatory power of the impact of spatial perception. While on the Net, you are still just staring into a monitor attached to a computer. However, you have the feeling that you've entered a space and there is a sense of place. You may be reacting to others, having a social experience, or just 'surfing' the Net, yet there is this 'feeling' of being some where. The Net is not just a 'free' space but a space that has links to real physical space, territory. If it was just a 'free' space it would not be of interest to the state but because this space is linked to people's actions and those people are situated in territories the space of the Net does matter. Geography helps to ask the question of where is this social experience taking place and how does this experience relate to others in the same location. All individuals live in a parochial world which covers but a small portion of the total realm available to us. (Johnston; 1991, pg. 162) We often view our individual experiences as mistakenly the consensus for the total environment. What I believe human geographers do is 'pattern out' these experiences and fit them into a wider experience. Whether this 'experience' is a region or the entire globe, human geographers try to show how positional experience of a part fits into the whole. As human geographers we try to map out decision-making in a behavioral environment. According to R.J. Johnston, human geographical inquiry must go through three stages to produce a good geographical scholarly work: "general statements about areal patterns and interrelationships; detailed local inquiries

which follow up the questions about processes raised by these general statements; and organization of the general and local material to produce explanatory generalizations.” (pg. 164) The Net to me is a behavioral environment and thus is open to examination by geographers. In order to understand this environment, we need to understand the relative position of its elements in relation to themselves and the ‘outside’. There is always an outside.

To reiterate, geography is a study of space, its patterns and its effects. Within these defined spaces, patterns of phenomena are mapped. Geographers have always been interested in territorial behaviour; how and why people organize on a landscape. It is by recognizing these patterns and attempting to explain the underlying forces at work in creating these patterns that geographers try to explain the world.(Demko & Wood; 1994, pg.5) Today on the Internet certain actions and behaviors are emphasizing its anarchistic nature which runs counter to state authorities and their ability to control actions that might be said to be physically happening within their own territories. A power struggle is going on. Who controls this phenomenon? The Internet as a space is ephemeral, yet I believe it profoundly affects the distribution of political power. The Net is like an overlay covering the territories of individual states and it alters or diffuses the demarcation of where the state’s power ends.

The patterns and explanations that political geographers explore are tied into the human politics of an ever increasingly complex and ever changing world system. Geopolitical entities are inherently open; and therefore, open to change. (Cohen; 1994, pg.25) George Demko and William Wood have stated that geography can be seen as both an art and science that moves towards obtaining an understanding and giving out predictions on the spatial aspects of shifts in power.(Demko & Wood; 1994, Intro.) Since the end of what is

known as the 'Cold War', the discipline of geopolitics has come under some fundamental changes. A number of authors have stated in so many words, that the state's hold on its territory are breaking down. (Dalby and Ó Tuathail; 1998, Bretherton; 1996) There seems to be a move from a fixed form of geopolitics, in the perspectives of the Realist and Liberal paradigms, to a more open ended view that allows a greater chance of seeing change in International politics. Some of the elements that have contributed to this unstableness are globalization and the consequences of information technologies. Today, a critical geopolitics is developing that wishes to replace the Cold War geopolitics where states were seen as monolithic entities held up in a physical territory. According to Dalby and Ó Tuathail geopolitics is 'situated reasoning'. (Dalby and Ó Tuathail; 1998, pg. 6) As the authors state "Geopolitics is already about more boundaries than those on a map". (Dalby and Ó Tuathail; 1998, pg. 4) It is the examination of conceptual boundary drawing practices that enable one to examine the current case of the Internet and its relationship with the state and its territoriality. One of the elements of the Internet is its ability to connect one to far away places, across borders. As Demko and Wood state, international relations are inherently geographic, that is, much of the behavior of actors in the international arena is tied to spatial relations. (Demko & Wood; 1994, pg. 4)

Why would the Internet be of interest to geographers and especially to political geographers? Ó Tuathail has stated that geopolitics can be seen as the indicator of representations of space and the spatial practices underlying politics. (1998A, pg. 17) What I believe is that the Internet by its very nature creates its own space out of its social action and challenges state authority.

Today, there seems to be a total speed-up in our daily lives. Acceleration in production techniques, turn over time, just-in-time delivery systems, fast foods, 'instant' this

and 'instant' that, jetting on the Concorde, computerized trading; the list is extensive. Fashions change. Products change. Information moves at the speed of light. Volatility, ephemerality - 'all that is solid melts into air'.

Computers and their networks help depress time and space in that they can draw on information from around the world in fractions of seconds and it is through the computer that we log on to the Net and enter its landscape. More than a simulacrum of reality, an extrapolation of reality, the Internet creates a 'virtual reality'. A reality where the conceptual spatialization of being on the Internet creates an identity that differs and in some case opposes the singular identity the state has applied to its citizens. The Internet I believe becomes a counter-narrative (Bhabha; 1994), to the state's hold on its territory. It is through the de-stabilizing effects of the Internet that terms such as territoriality begin to change for the state. Territoriality becomes interpreted more as a sphere of influences than as the total control of a physical territory.

Often in this paper I have described the Net as an environment or a landscape. Landscapes have been described as a perceptible visible aspect of space.(Folch-Serra; 1991) Each individual decodes their own meaning of a landscape through symbolic meaning.(Folch-Serra; 1991) Landscapes are also seen as theatre or text which can be read, and as a carrier and repository of symbolic meaning.(Cosgrove and Daniels; 1988, pg. 8) According to Cosgrove and Daniels, humans seek meaning through metaphors and without these metaphors understanding would remain unarticulated.(Ibid.) What I am trying to convey here is that the Net invokes an imagery of a space through the metaphors we use to describe it. These metaphors are derived from the widely held stories we have heard concerning the Net. The Net to some extent becomes a geograph without reference to a geographical location; a virtual geograph, a paradox. And yet, I have the idea that the Net is more like a

place than not.

The Internet might also be considered an International regime. However, I have rejected this label even though it was my original conception of the Net. International regimes are described by Krasner (1983) as “principles, norms, rules and decision-making procedures around which actor expectations converge in a given issue-area”. (pg. 1) Perhaps the Net is too young, chaotic and diverse to have any universal set of norms or decision procedures. There is no official body to proclaim a set of rules or procedures and, to many on the Net, this is exactly what they don’t want, a set of rules. And yet, as the different states struggle with this new phenomenon on their own, there becomes a belief that an international body is just what the Net needs. Also, as international bodies like the International Telecommunications Union (ITU) become more involved with the Internet, there is an indication that the governing of the Net may move towards this outcome. But for now, the Net is awash in a sea of anarchy.

As I have stated in the above introduction of this paper there are a number of problems with data reliability especially empirically or statistically derived data. Searching on the Net is also problematic. The Net is a messy conglomeration of facts, opinions and falsehoods. One of the main tools to initiate a search on the Net besides receiving a direct address, is by using search engines. There are a number of search engines on the Net that all work from their own created databases of Websites, News groups and e-mail addresses. None of these databases are the same and I have not been able to find any independent reviews of these databases, their methods of gathering their information or what is being excluded. It is not that these search engines are not trying to be accurate, but the automated techniques that most use do have their flaws and no independent checks are being done. Also, most are run by corporations; example, Alta Vista is run by the Digital corporation;

Infoseek is its own commercial business, and most search engines slant their initial home pages to the 'consumer' because they are trying to sell a service. As a personal observation many of the addresses that one gets back from a search tend to contain information about businesses rather than sites that are dedicated to giving information. The other big problem with gathering information off the Web is the sheer volume of information. Even if you define your search parameters very accurately and precisely, you are bound to get hundreds and sometimes thousands of hits, just filtering out the nonessential ones is a very time consuming process.

This data may not be accurate in its exact numbers; however, the different sources and examples that I have given do measure a change that I believe, indicates a direction. This direction I propose, forms patterns or trends that are significant enough to stimulate debate and action by authorities. I am trying to paint a picture of an environment/landscape that is both relevant and accurate by trying to show trends that are more than just coincident or curios but directions that describe the building of tensions that will have to be dealt with in order to see stability achieved on the Net for both the State and the individuals that frequent the Net.

Control of the Internet is the dependent variable while those factors that alter this control become the independent variables. These independent variables, such as governance, the nature of space, the role of technology and the concepts of sovereignty and territoriality are in themselves aggregates of other independent variables. It is how these aggregates are formed and played out in a political arena that will determine their effect on the controlling of the Internet. Because of the openness of this subject matter the effective weight of any of my selected variables becomes suspect to its actual causal significance because over time conditions change and the relative weight of its effectiveness also changes.

My approach is to examine the historical trends and the present conditions to map out the Internet as a political landscape at the scale of society. This is an associative analytic approach which like all approaches has some significant methodological difficulties. David Bennett in his article 'Explanation in medical geography: evidence and epistemology' (1991), points out that in associative analysis there are pitfalls arising from transferring findings between different scales. Bennett states that these difficulties are philosophical in nature, "centered on argument and evidence in moving from correlational to causal explanations". (Bennett; 1991, pg. 341) My criteria for presenting evidence as correlational is that these facts are acted upon as if they are causal by government authorities and individuals that use the Net. Thus the significance of the evidence presented is only found in the reaction to these facts. Many of the examples that I have used to present my case are from the public media, newspaper articles and information gathered off of the Internet¹⁸, anecdotal evidence. I have tried to give a balance between the different sources to show that these 'factoids' are not out of context but do represent actual conditions. But a caveat must be given. Anyone receiving information from second or third hand sources needs to be aware of bias and fabrication. But still, I defend the use of newspaper articles and Web sites because to me they are still the best sources of public information and reaction. Because of the 'insulating' properties of the Internet, collecting information becomes difficult because Web sites and individual comments are set up to promote a 'point-of-view' and are not necessarily balanced with opposing views. Critical analysis of the Net is still in its infancy. The day-to-day action of the Net are best reflected, to me, in these public comments both in the newspapers and on the Net. What I am trying to establish is a 'necessary connection'

¹⁸ All my principal sources are cited in the text and listed in my bibliography; however, in the foot notes at the bottom of the pages are secondary sources and explanations of some of the Websites that I have visited.

between what I see as correlational facts, those facts taken from the public forums mentioned above, and the results of political actions. To me, these correlational events best portray the Net's 'myth' and the State and public's reaction to this phenomenon. I have tried to give numerous examples both 'pro and con' to show an accurate picture of present day conditions referring to the Net. But, the Net is not a static phenomenon. It changes daily. I have visited all the Internet sites cited in this paper. But, sites change locations, sometimes rapidly. All the sites referenced in this paper were active at the time of writing. And yet, as I am writing this paper the newsletter Cyber-Rights is making the move from its original home at the University of Leeds to its own site.¹⁹

The Internet was not created in a vacuum and some of its influences upon society are tied up in the technology itself. This is not to give a technological deterministic spin on things but just to point out that the technology does have an influence. This evolution is influenced and influences the responses of the protagonists on all sides of this multifaceted vehicle. Threads that are both in the nature of territoriality and of Cyberspace will influence, and to some extent direct the Net in its continuing history.

1.3 Introduction conclusion

What the above has tried to show is the Internet is more than just a communications vehicle. I have tried to give an accurate picture of the 'landscape' in which the Net is located. This landscape is the space called cyberspace. The Net is a phenomenon that is changing humans concept of who we are: what drives this phenomena and what are its significant elements that make the Net an influence in humankind's existence? I've tried to show the use and existence of the Net is growing and, it will have an influence on our

¹⁹ Cyber-Rights & Cyber-Liberties is now www.cyber-rights.org

perception of the influence of the state.. As a technology, the Net allows humans to become more knowledgeable of the world around us. But, like all technologies that alter our environment both physically and socially, the technology is not inert. We are changed and our perception of change has been altered by the existence of the Net. But how has this supposed change been brought about and how has it influenced society; what sort of 'spin' has it put on humankind's direction into the future and our association with others? The state may be a passing stage in the evolution of humans; but today, it is of great significance and it can be suggested that the state is the 'only game in town'. However, the state embodied by government is a process; it is not static but dynamic and continually in the process of change. It is the purpose of this thesis to suggest the possible directions of this change in regards to the influence that the Internet will bring. I see a shift occurring in a state's ability to control its own territory. This influence is the Net. What exactly will happen in the future is always risky to predict, especially when we are at present in 1999 in the midst of these changes; however, the purpose of this thesis is to describe the conflict between the state and the Internet to highlight those elements that I believe will guide the future relationship between these two entities. Territory is the space of the state: it's territoriality is its control over this space. I propose that the Internet creates a space. It is the overlapping of these spaces that I see as the kernel of the conflict. The production of space, how we see it and how we use it, will set the broad directions in this wrestle for control of the Internet.

Finally, I view this paper not so much as a thesis but as an extended essay. To me, a thesis has a completeness associated with it while an essay is more open-ended. Presenting a 'snapshot' of the Internet is not possible because it is constantly changing and any static view becomes stale before it is finished. Accurately picturing the Internet is like nailing jello to a

wall. What I have tried to do in this 'essay' is to present a 'moving target' but yet at the same time, show the direction in which this target is moving. I believe that this approach will give the reader a better understanding of the dynamics of the Internet and its association with more stable entities.

2. Space

As Humans, we live and act in a spatial environment.(Werner, Saade & Lüer; 1998, pg. 107) “Both the perception of our own body, and the perception of extrapersonal entities include spatial relations as one of their key elements. We usually perceive ourselves as part of some environment, often at a specific location, position and orientation.”(Ibid.) The above quote by Werner *et al.* is a psychological investigation of spatial behavior that rests upon how humans perceive space. It is our perceptions and our mental representations of space that determine our actions within the prescribed space. Even the differences in scale are not necessarily related to physical size but to how we acquire the information on that space.(Werner, Saade & Lüer; 1998, pg. 111) Thus it is our mental perceptions of a given space that determine our actions in that space.

The raw material of the production of space is not, as in the case of particular objects, a particular material; it is rather nature itself, nature transformed into a product, rudely manipulated, now threatened and most paradoxically -- localized. (Lefebvre; 1991, pg. 123)

If the hypothesis of this thesis is to suggest that the Internet’s spatial component is a critical element that influences human activity then it is imperative that the concept of space be examined to show how this might be possible. In everyday speech we use the idea of space in quite indiscriminate and imprecise ways but none-the-less, we see this ‘space’ as being a container , there is an inside and an outside. Terms like economic space, political space or work space all describe an area where the descriptive adjective functions as some activity. The borders that distinguish what is inside and what is outside may be fuzzy and designated as a zone rather than a precise line; but still, the space is seen as different and set apart. Space is constructed by defining what is inside and what is outside.

Before we can look at the Internet as a space we must look at some of the conditions that different spaces provide. In 'Television as Gathering Place', Paul C. Adams argues that television is a place without a static location, place as a centre of meaning and social context...(Adams; 1992, pg. 117) He is not trying to argue that television is a place or a space in the conventional sense. He is trying to examine the similarities between human-made places and television to show that "[t]hrough television lacks a definable location, it serves various social and symbolic functions previously served by places: sensory communion, social congregation, the attribution of value to persons and objects".(Adams; 1992, pg. 130) Adams, however, gives other possibilities for space by defining place in various ways. Place is defined in terms of a centre of meaning as in, I was at a very bad place in my life; a social context as in, the government is in the worst place it could be as far as voter confidence is concerned; and a physical place as in, I parked my car in a parking place.(Adams; 1992, pg. 117) It could be said that a computer network can also be considered a 'gathering place'. Yet, this view to me is looking at the Internet from outside of it; from within, to me, the Internet embodies a space.

It is important to stress the distinction between these two notions space and place, because they are often used as more or less synonymous with one another. Place is often conceptualized by means of the idea of locale, which refers to the physical settings of social activity as situated geographically. "In pre-modern societies, space and place largely coincide....The advent of modernity increasingly tears space away from place by fostering relations between absent others, locationally distant from any given situation of face-to-face interaction."(Giddens; 1990, pg 18)

Yi-Fu Tuan has described places as 'centers of felt value'.(1977, pg. 4) These centres are part of a spatial description but as the author points out, these centres do not have to be

points fixed in physical space.(Ibid.) These points are focal points. They identify and localize. “What begins as undifferentiated space becomes place as we get to know it better and endow it with value.”(Tuan;1977, pg. 6) Space may be seen “as that which allows movement”.(Ibid.) The pause in that movement allows a location to become a place.(Ibid.)

The term space has many different meanings that present a number of outstanding problems. Space, in isolation is an empty abstraction. Space, as a physical concept is an empty container that we can only define in terms of its relationship to material objects. This definition is intricately tied to the ideas of location and distance, and geographically to its position on the globe. Space as a container is empty space used to categorize human senses.(Lefebvre; 1991, pg 2)

In the history of the concept, space has moved back and forth out of the realm of philosophers to a Cartesian logic and the realm of absolute logic.(Ibid.) Space, through the ideas of Kant according to Lefebvre, was distanced from the empirical sphere; thus it became transcendental and essentially ungraspable.(Lefebvre; 1991, pg 2) Kant saw space as essentially a tool of knowledge; a means to classify phenomena.(Ibid.) Kant regarded geography and history as cosmologies. “Geography and history together fill up the entire area of our perception: geography of space and history of time”.(quoted in Johnston; 1991, pg. 53) Mathematicians also appropriated space and time to see ‘real’ space by, paradoxically, inventing spaces . (Lefebvre; 1991, pg. 2) “The proliferation of mathematical theories (topologies) thus aggravated the old ‘problem of knowledge’: how were transitions to be made from mathematical spaces (i.e. from the mental capacities of the human species, from logic) to nature in the first place, to practice in the second and thence to the theory of social life - which also presumably must unfold in space?”(Lefebvre; 1991, pg. 3) Space becomes a ‘mental thing’. What we see here is that ‘mental space’ has no limits and thus its

definition can connote a whole range of ideas; and therefore, has little meaning. What occurs then is a gap between what we identify as 'mental space' and 'real space'. In everyday terms, space has the attributes of shape, volume, pattern and distance.(Harvey; 1990, pg. 203) Space has been defined both as a relative quality, and as an absolute quality.(Harvey; 1969, pg. 195) However, according to David Harvey, the concept of absolute space, a Kantian-Newtonian concept, has to the most part been rejected by both physicists and social scientists. Physical time-space cannot be understood, therefore, independently of the qualities of material processes. "It is, however, by no means necessary to subordinate all objective conceptions of time and space to this particular physical conception, since it, also, is a construct that rests upon a particular version of the constitution of matter and the origin of the universe....the conclusion we should draw is simply that neither time nor space can be assigned objective meanings independently of material processes".(Harvey; 1990, pg. 203) "Space is no longer an 'accident of matter' but a direct result of material production", explains Neil Smith(1990; pg. 78); as he charts the historical evolution of geographical space from becoming not just an "objective structure but a social experience imbued with interwoven layers of social meaning".(Smith; 1990, pg. 76) Social space is defined socially by its relationship to material practices of social reproduction and to the degree that these material practices differ geographically and historically. And as a corollary, Harvey states that space cannot be understood outside the realm of social action.(Harvey; 1990, pg. 225) "Harvey's argument pivots on two principles: on the one hand, that conceptions of space and time are relative to social formations; and, on the other hand, that these commonly accepted conceptions must change to accommodate new material practices of social production and reproduction."(Kirsch; 1994, pgs. 530-531)

Henri Lefebvre in his work 'The Production of Space', has tried to build a unity

between the different concepts of space: to not separate the spaces but show the interrelatedness of all spaces. Lefebvre attempts to build a consensus between the 'ideal' spaces (physical, mental and social) and 'real' space, the space of social practice - each space underpinning and presupposing the other. According to Kirsch, Lefebvre integrates the abstract and the conceived spaces of contemporary capitalism with the perceived and lived realms of everyday life.(Kirsch; 1994, pgs. 530-531) Moreover, the role of space, in an operational or instrumental definition, becomes a link between knowledge and action. But as Lefebvre points out, this move towards a unitary view of space does not rule out conflicts or polemics.(Lefebvre; 1990, pg. 13) What has been deemed 'pure' is only so because it has been purged of dialectical moments.(Ibid.)

Yet, as historical and social constructs, conceptions of space and time cannot be treated as some uniform background noise, as abstract ontological conditions to be acknowledged and then ignored. Kant may have treated the spatio-temporal postulates of Newtonian mechanics as a guarantee against subjective skepticism, but the bankruptcy of the great Newtonian insurance company in the late nineteenth century has been crucial to claims and counterclaims about the character and achievements of modernity ever since. (Walker; 1993 pg. 131)

Harvey does not totally reject the objective-subjective distinction of space, but rather, recognizes the multiplicity of space's objective qualities defined through its material relationships. It is the subjective view of space which concerns me. The concept of space as seen above, still relies heavily on the link between space and physical location, and therefore, makes it difficult to use the term space when critically examining the Internet. However, Henri Lefebvre's examination of the concept of space allows for the constructs of space without direct connection with location. Henri Lefebvre's argument is that "the reproduction of social relations of production occurs not only in the factory or even in a society as a whole, but in space as a whole".(Smith; 1990, pg. 90) Social space is a space of social construction and can be associated with a system of places.

The writings of Jameson and Soja see space also as an aspect of social relations. Space is neither passive nor an abstract arena where things happen. For Jameson the current times create space as being homogenous and fragmented at the same time, a 'schizo-space'. Jameson also sees the spatiality of space as "cognitive mapping". Space in Jameson's argument, is a template from which the secrets of reality are played out. (Keith & Pile; 1993, pg. 4) "It is the logic of capital itself which produces an uneven development of space." (Keith & Pile; 1993, pg. 3) For Jameson, the individual is to be mapped by the spatial specificity of their subject positions in order to uncover the hidden human geography of power, but Soja's schema suggests that even this dynamic understanding of the situation is too solid; space is not an innocent backdrop to position, it is itself filled with politics and ideology. (Keith & Pile; 1993, pg. 4)

"Simulation is no longer that of a territory, a referential being or a substance. It is the generation by models of a real without origins or reality: hyperreal. (Baudrillard; 1983a: pg. 2)

In his description from a 'modern' to a post-modern society, Baudrillard shows that the life of signs and simulations take on a life of their own and help to shape a new social order that is built on models, codes and signs. Under these conditions the boundaries between 'the real' and the everyday become blurred and furthermore, the simulations can take on a 'reality' of their own and thus break their connection with the original. Thus as space is regarded as an object, it is seen as something interactive and dialectical. The nature of changing space can be found from both within itself and outside.

In the geography of global financial markets, Susan Roberts (1994) describes how fictitious capital, the capital of speculation or credit money, follows and is accumulated in fictitious spaces. These spaces are the islands and micro-states that have found a niche in the circuits of fictitious capital. (Roberts; 1994, pg. 92) "These places have set themselves up

as 'offshore' financial centres; as places where the circuits of fictitious capital meet the circuits of 'furtive money'²⁰ in a murky concoction of risk and opportunity." (Ibid.) What 'offshore' means is that these markets exist outside the jurisdiction of originating national economies. (Roberts; 1994, pg. 93) These offshore markets are in competition with one another, and because of deregulation, with 'onshore' markets. Thus, neither the onshore or offshore centres are discrete entities because banks operate in both markets and the offshore market as a whole are mirror images of the on shore market. As onshore markets become more and more deregulated, the distinction between the two entities becomes fuzzier. (Roberts; 1994, pg. 93) These offshore locations have to balance themselves between secrecy and regulation because they must attract 'hot money' on the one hand and not aggravate their powerful neighbours. "For example, the Caribbean centres are very aware of the presence and power of the USA. As part of the US 'War on Drugs', efforts have been made by US authorities to curtail financial activities of narcotics traffickers who do their money 'laundering' in the waters of the Caribbean Basin." (Roberts; 1994, pg. 97)

With each offshore centre competing with one another, money flows from one centre to another to take advantage of the different financial climates offered. Thus, every centre is vulnerable to the changing winds of deregulation and competition. What helps facilitate this transient nature is the use of today's global communication infrastructure. Money, as information, can now circulate around the globe in a blink of an eye. What these centres must do according to Roberts, is create an image as part of their competitive strategy. (Roberts; 1994, pg. 107) Not only must these sites be deregulated but they must also be seen as low cost and convenient. These sites must present themselves as legitimate but advantageous to the onshore sites in order to attract customers. Though money may be

²⁰ "Furtive money is 'hot' money that seeks to avoid regulatory attention and/or taxes." (Roberts; 1994, pg. 92)

'fly-by-night', the centres must not seem to be.

Roberts states that as fictitious capital helps to resolve temporarily, financial crises in the global financial markets; it creates contradictory spaces. "Offshore financial centres are at once on the margins and at the centre of global capitalism's displacement of crises." (Roberts; 1994, pg. 111) What Roberts is pointing out to me, is that each space is tied to other spaces and our actions are also tied to the spaces that are believed to have been created.

Marc Augé (1995), has put forward the concept of non places which produce the negative quality of place. These places do not have to be recognized as a place in the sense of its position to other spaces, it is just that inhabitants recognize themselves in it when the occasion arises. (Augé; 1995, pg. 45) Space in Augé's terms becomes a discourse written in spatial terms that expresses the group's identity. (Ibid.)

I have to a large extent bought Henri Lefebvre's argument that "the reproduction of social relations of production occurs not only in the factory or even in a society as a whole,...but in space as a whole". (Smith; 1990, pg. 90) I have started my education with the view that space is defined as a work²¹ which is subtly different from a product²². A product is a result of a definite goal. (Lefebvre; 1974) To me now, the space of the Internet (Cyberspace) is both a 'work' and a 'product'. In other words, each space produced becomes unique.

Henri Lefebvre's examination of the concept of space allows for the construction of space without direct connection with location. Lefebvre's 'La Production de l'espace', focuses on the often loaded term, space, (l'espace) and tries to not necessarily separate the

²¹ Work has something irreplaceable and unique about it. (Lefebvre; 1990, pg. 70)

²² A product can be reproduced exactly and is in fact the result of repetitive acts and gestures. (Lefebvre; 1990, pg. 70)

different meanings of space but to mold them into a unified theoretical framework.

(Lefebvre;1991, pg. 10)

Lefebvre refers not only to the empirical disposition of things in the landscape as space, but also of social order. In this movement to spatialize, abstract structures such as culture become concrete as do attitudes and habitual practices. His metaphoric l'espace might be better understood as the spatialization of practices and arrangements in space.(Shields; 1988) This term 'l'espace', also captures the processual nature of spatialization that Lefebvre insists upon. That is, it is not just an achieved order in a built environment, or an ideology but an order which is itself is always undergoing change from within, through the actions and innovations of social agents.

Each mode of production has a distinct relationship to space and produces its own unique type of space. (Lefebvre;1991, pg. 40) Lefebvre, in order to better understand the concept of social space divides it up into three distinct but connected moments which will be discussed in greater details later in this paper. Lefebvre's Representational Space, I believe, sets the stage to call the Internet a space. Also, between the three levels, Lefebvre notes an increasing primacy of the visual in modern times, and a loss of a sense of temporality. (Lefebvre;1991, pgs. 114-115)

2.1. The Social Production of Space - Spatial Practice

A history of space would explain the development and hence the temporal conditions, of those realities which some geographers call 'networks' and which are subordinated to the frameworks of politics (Lefebvre; 1991, pg. 116-117)

For Lefebvre, spatial practice exists in a projection onto a spatial field of all aspects of social practice.(Lefebvre; 1991, pg. 8) When we speak of a university, a room or a shopping mall, we are describing more than a physical space but also a social space. A space

that corresponds to a specific use and hence a spatial practice. The mall, room or university is not necessarily a description of a container but of a social action; and, their specific name conjures up meaning of how we use this space. Thus our social/spatial practices move to a great degree in defining our social spaces. Social practices produce social spaces. Lefebvre states that social space is a social product/work. A product that also serves as a “tool of thought and action, a means of control and domination”.(Lefebvre;1991, pg. 26) However, as Lefebvre points out, “it [product] escapes in part from those who would make use of it”.(Ibid.) Thus, direct and constant control of this product is but a fleeting moment. One of the implications of a social product is that every mode of production produces space. These spaces cannot be understood as just a collection of people and/or things in a defined container but as a social practice that forges its own appropriated space.(Lefebvre;1991, pg. 31) Social space contains both things and relations. This space contains a diversity of objects, both natural and social and it also includes the connectivity or paths that link these elements together.(Lefebvre;1991, pg. 77) Also as noted by Lefebvre, “[S]ocial spaces interpenetrate one another and/or superimpose themselves upon one another”.(Lefebvre;1991, pg. 86) For Lefebvre, social spaces contain specific representations of the interaction between the social relations of production and reproduction. What the above idea suggest is that social space is the outcome of a set of actions or forces; and moreover, these past actions permit new actions and both actions suggest and prohibit other actions. But Lefebvre warns that the growth of these actions do not give rise to “any direct causal fashion to a particular space or a particular time”. (Lefebvre;1991, pg. 77)

The author breaks up the idea of social space into three inter-related conceptions or moments: “Spatial practice, which embraces production and reproduction, and the

particular locations and spatial sets characteristic of each social formation; Representations of space, which are tied to the relations of production and to the 'order' which those relations impose, and hence to knowledge, to signs, to codes and to 'frontal' relations; Representational spaces, embodying complex symbolisms, sometimes coded, sometimes not, linked to the clandestine or underground side of social life." (Lefebvre; 1991, pg. 33)

Representational spaces being the "space as directly lived, through its associated images and symbols, and hence the space of 'inhabitants' and 'users' ..." (Lefebvre; 1991, pg. 39) To Lefebvre, everyday life also figures into representational spaces (Lefebvre; 1991, pg. 116); however, no single entity is ultimately responsible for the production of this space. (Lefebvre; 1991, pg. 115) Put simply these three aspects of social space can be stated as the perceived, conceived and lived elements of social space.

When we speak of Cyberspace, we are speaking of that space that is perceived through spatial activities associated with computers and digital communications – Spatial practice.. For both Harvey and Lefebvre the new computer mediated communication technologies help to facilitate the ongoing globalizations of space, but for Lefebvre, according to Kirsch, "the accumulation of technology and techniques in society has shaped space at local scale and facilitated the process through which space is not only homogenized (and global) but always fragmented as well". (Kirsch; 1995, pg. 532) We 'log in' to our computers, entering into a space by our action of turning on the computer and typing on the keyboard, sending e-mail or browsing the World Wide Web. The representations of this space are coded in the language we use to describe our actions while in Cyberspace; visiting a Web site, activating a 'hot-link', entering into a 'Chat' room; also the hardware and software (firm, wet etc.), and e-mail, we see as the artifacts of this space. Our representational space is the Net, the global digital infrastructure. It is this space that we occupy and interact in.

Rob Shields has described Brighton Beach in southern England in terms of its perceived activities. "The 'Beach' becomes a metaphor for a wider circle of connected discourses on pleasure and pleasurable activities." (Shields; 1990, pg. 41) This site of the carnivalesque is created by a series of constructs (Place myths, cultural constructs) that are linked together to form a spatialization that is relatively different from other places and their space myths. (Shields; 1990, pg. 40) "This 'constellation' forms an important part of a 'regime of space' which influences human choices and perceptions and provides a groundwork of appropriately territorialized sites and 'stages' for different modes of social interaction." (Ibid.) The Internet is also a constellation of forms that invokes a metaphor of space. Cyberspace becomes a place of anarchy and freedom, formed from the myths and everyday activities that are unique from other places 'off-line'.

William Gibson coined the term 'Cyberspace' in his science fiction novel 'Neuromancer' to describe the feeling of being in his world wide computer network, 'jacked in'. (Gibson; 1984) He described it as: "Cyberspace is a consensual hallucination that these people have created. It's like, with this equipment, you can agree to share the same hallucinations. In effect, they're creating a world. It's not really a place, it's not really space. It's notional space." (Gibson; 1984, pg. 53) In an interview for Time magazine, William Gibson states that watching kids rapped up in video games at a Vancouver arcade was the spark for his novel, Neuromancer.

"They develop a belief that there's some kind of *actual space* behind the screen...Some place that you can't see but you know is there." (Time Magazine; 1998)

Lefebvre's three elements do not just make up an abstract model but are tied into the concrete. "If it cannot grasp the concrete (as distinct from the 'immediate') then its import is severely limited." (Lefebvre; 1991, pg. 40) Representations of space are abstract; however, according to the author, they play a part in social and political practice and, "established

relations between objects, and people in represented space are subordinate to a logic which will sooner or later break them up because of their lack of consistency".(Lefebvre; 1991, pg. 41) Representational spaces, the 'lived' spaces are not straight-jacketed by any rules of consistency. This space, flavoured with imagery and symbolic elements, has its own sources of consistency and/or cohesiveness in history: in the history of a people and the individuals themselves that are part of this group. Space for Lefebvre, is not a thing but a set of relations between objects and products. Social space therefore, becomes a product of social arrangements, social relations. And thus, changes in the modes of production will see changes in the production of space. "The form of social space is encounter, assembly, simultaneity."(Lefebvre; 1991, pg. 101) This space, however, assembles on a focus, a point. This centrality is dialectic (centre/periphery) and it is tied up with the relationships between form and content.(Ibid.) Social space is a site of resistance. A resistance with abstract space, a space that "functions 'abstractly', as a set of things/signs and their formal relationships".(Lefebvre; 1991, pg. 49) This abstract space is "[f]ormal and quantitative, it erases distinctions".(Ibid.)

For Cyberspace the representations of space are the Web sites, computers, 'Chats' and viruses; those objects that we perceive to be on the Net. The representational space, the space that is 'lived' is the Net itself. This is the space where we 'log on'. This the space we explore. It is alive, it may have an effective kernel or centre in computers, Web sites, or News groups, but it is the Internet, the representational space of Cyberspace. Representational space "embraces the loci of passion, of action and of lived situations".(Lefebvre; 1991, pg. 42) If social space is a social product, the variables of time and history are assumed. Not a history of specific events or a chronological sequence, but more of a discourse where times, histories and situations run to and fro from many different

directions. Social space is dynamic and it is different from moment to moment; thus any conceptions of distance, shape and borders are constantly in flux. Thus a condition of spatial scales is produced. Lefebvre argues that these spatial scales operate both as boundaries and as hierarchies of social relations (Lefebvre; 1991, pg. 351); which cannot exist in isolation from other scales. (Lefebvre; 1991, pg. 86) Moreover, as Lefebvre explains, the production of space itself becomes a worldwide scaffolding of overlapping socio-spatial networks. (Lefebvre; 1991, pg. 88) In the example of the city as a social space, we see each city as a product of its own particular space and at each moment the space changes. Elements of these social spaces are constantly being disposed and composed. And with the variable of humans added, the aggregate of relationships involving authority and power comes forth and are constantly shifting. For Lefebvre, space is a social morphology. "It is to lived experience what form itself is to the living organism and just as intimately bound up with function and structure." (Lefebvre; 1991, pg. 94) Gibson called Cyberspace notional space.

This space can also be seen as a utopian space in opposition to a polemological space where "the strong always win and words always deceive". (de Certeau; 1984, pg. 16) Utopian space is a space of resistance. Our actions in this space are our resistance; "a way of using imposed systems constitutes the resistance to the historical law of a state of affairs and its dogmatic legitimization". (de Certeau; 1984, pg. 18)

We login to this space; we surf this space; we meet and talk in this space. Many of the places (sites) that we visit are described in geographical terms. We envision the site of our actions as locations where one can have an on-line conversation in real time. America On-line (ISP) has the 'village pub' and 'town halls' where users can drop in to talk.

These places are tied to the bits and bytes in computers as files and programs. When

you visit a 'Web site' you make a connection, and information is brought back to you.

However, you can activate a 'hot link' and visit sites on the other side of the globe. These 'links' are the threads that tie or integrate the specific sites into the World Wide Web.

Because a 'Web site' can change, the space changes too. Visually there can be a change, but because of its address which corresponds to an actual physical point, a computer on the globe, a kind of relation is established with the physical world. Cyberspace has a tie to the physical world and is subject to material content. However, spatial terms are used without precision so that they can provide some semblance of order in this chaotic environment.

Scott Kirsch makes the argument (from Lefebvre) that the production of space can be seen as an increasingly technical process noting that, "whereas technology is thoroughly a social construction, society is a technological construction as well". (Kirsch; 1995, pg. 533) To me, the Internet with its tie to technology is also tied to the spatial practices of its users; and therefore, to the social life that both the technology and the spatial practices produce.

3. Globalization and Technology

Political globalization: “refers to a growing tendency for issues to be perceived as global in scope, and hence requiring global solutions; and to the development of international organizations and global institutions which attempt to address such issues.” (Bretherton; 1996, pg. 8)

The Internet circumscribes the globe. It is not truly global but it continues to grow in that direction. Implicit in this growth is the concept of globalization. This concept is more involved than a geographical extension. It invokes a meaning of global interconnectiveness and a corresponding lessening of the significance of state structures, particularly territorial boundaries. News reports from the UN, through the offices of the International Telecommunications Union (ITU), report that the new world wide toll free phone number 800 will also include the 888 prefix because of the world wide increase in usage.²³ Other headlines speak of a ‘borderless world’ as businesses get involved in free trade zones.²⁴ Globalization as a concept is quite problematic. The concept implies something new beyond the term international. (Bretherton; 1996, pg. 2) Though the term is by no means self evident or uncontested, it does suggest an intensification of worldwide connectedness.

Charlotte Bretherton sees globalization in four aspects; the enabling role of technological change; the development of global economics; political globalization and the globalization of ideas. (Bretherton; 1996, pg. 2)

Instrumental in this move for greater connectedness is the role of technology. The advancements in technology have helped in facilitating global communications. The

²³ Surtee, Laurence; ‘UN body approves global toll-free numbers’Globe and Mail . 06/07/96, B7

²⁴ IP, Greg; ‘The Borderless World’, Globe and Mail , 06/07/96, D1

construction and use of satellites, computers and microelectronics and other communication infrastructures have led us to see a time/space compression. (Harvey; 1990) Vincent Mosco in his study 'Will Computer Communication End Geography?', has noted that there is a wide belief that developments in communications have lessened the impact of geography for industry and government.(1995) His conclusions note that while the influence of physical geography has diminished as a factor for decision makers, computer aided communications has opened up "new and expanded spatial terrains on which organizations can operate".(Mosco; 1995, pg. 1) Mosco points out that for much of human history, transportation/communication was slow "and the cost of attenuating geography prohibitively high". (Ibid.) Transportation and communications were effectively one, in that information was tied to the speed of transportation. However, with the advent of electronic communications the link between transportation and communication was somewhat dismantled which had a significant effect on the influence of physical geography. (Mosco; 1995, pgs. 5-7) But as Mosco states a new integration evolved between transportation and communications which has influenced both the volume and speed of these new transport-communication systems.(Mosco; 1995, pgs. 6-8) "Since by the 1990s communication has trivialized, if not entirely flattened, most graphs of time against distance, geographers have turned to more interesting dimensions of the measure, such as *cost-space convergence*,²⁵ that is, the cost of moving a message over a given distance." (Mosco; 1995 pg. 9)

The geography of communications begins with concepts of movement. The term telecommunications is usually associated with the electronic transmission of voice, data or graphical images over a distance. (Kellerman; 1993, pg. 4) This transmission can include both two way transmission or one way. Traditionally, telecommunications made reference

²⁵ Author's italics.

to the telephone or P.O.T.S. (plain old telephone service), as it is often called in the literature. At present, P.O.T.S. has integrated itself with a variety of other media so that the term includes a number of technological changes in the telephone industry plus a number of other electronic technologies that transport information. Kellerman reports that with the integration of the telephone and computer technology, a series of other terms have been coined which try to express a wider scope. The French preferred telematics (Telematiques)... “the technical and economic phenomena arising at the intersection of the progressively merging computing and telecommunications industries”. (Kellerman; 1993, pg. 4) Other terms such as communications and intercommunications have also been used each with slightly different meanings. Information technology or IT was defined as embracing telecommunications, (telephone, switches, exchanges, cables, satellites and broadcasting), on the one hand, and computers on the other. (Kellerman; 1993, pg. 4)

Some geographers see telecommunications as having two distinct aspects; one of space-adjustment and the other of time-space convergence. (Kellerman; 1993, pg. 15) The first concept relates to the impact of distance, and how technology can reduce this impact: the second, measures rates of time change between places. It may be shown quantitatively how time-space convergence has occurred through direct-dialing (in time), and through falling call-prices (in space). (Kellerman, pg. 15 *also see* Mosco) Falling prices means that you're more likely to call. Thus a secondary effect occurs increasing the volume of traffic. (Mosco; 1995, pg. 10) The effect of the mixing of monetary and temporal costs can overcome the friction of distance and thus give the potential for the dispersion of economic activities; however, this dispersion tends to favour existing centres of communications control. (Mosco; 1995, ft. #14, pg.10)

Since the end of the Second World War, information technologies have made a

series of significant steps in increasing both the volume and speed of how we communicate, especially in the Industrial states. This change is part of an increase in communications technology that also sets the stage for a shift in certain other directions

Contrary to popular predictions of their decentralizing impact, digital communications contribute to new and more complex forms of corporate integration, reinforcing center-periphery problems on a global scale. (Gillespie and Robins; 1989, pg. 7)

This contradiction of centripetal and centrifugal forces associated with telecommunications is effective at the urban-rural, regional and world levels. (Kellerman; 1993, pg. 15) Whereas cheaply-priced, direct-dialing communication systems, information producing centres emerge in the world cores, but mere information consumption areas are located in the world peripheries. (Ibid.)

Communication through these technologies has made for instantaneous transport of information and capital world-wide. And, to a greater degree than in the past, information has become a commodity and a source of power²⁶. However as an aside, the use of this new technology has been used in both conflicts and co-operation among peoples. None-the-less, these new communication technologies are inherently transnational. (Bretherton; 1996, pg. 5) What has also been facilitated, is the links between individuals and groups outside the state; as Bretherton comments, this connectivity presents a possible dilemma and challenge to state sovereignty. (Ibid.) Moreover, as far as planet development is concerned, the implementation of these new technologies has been very uneven. A 'gap' has been extenuated between Rich and Poor. This 'gap' is present: locally; within urban centres, between urban and rural areas; nationally, between regions, and internationally, between industrialized nations and the less developed nations.

²⁶ Information becomes a source of power in that it allows one to act in a timely fashion.

It is within this expanding communication industry that the roots of the Internet were formed. Its beginning started in the 1960s at the height of the 'Cold War' when the threat of a nuclear war was on many minds. But out of a solution to combat the possible devastation of communication links, and everything else, an anarchic principle was conceived that would become the basis for the Internet. For the industrialized nations late in the 20th century, telecommunications is seen as the central nervous system crucial to both growth and welfare. When speaking of the present or speculating about the future, a number of scholars see an inevitable march forward in the advancement of telecommunications and the interconnectedness of the technology and the economy. (Coddington Jr.; 1991, Kellerman; 1993).

The idea that the continual growth in technology and the economy is not only inevitable but also desirable begs the question, desirable for whom? Gillespie and Robins, drawing heavily from Harold Innis's works, ask the question to what extent do the new communications technologies challenge or reinforce existing patterns of power and the associated spatial hierarchies. (Gillespie & Robins; 1989, pg. 11) Moreover; they state, we need to ascertain in whose interests they [new technologies] are developed and whose interests they subsequently best serve.(Ibid.)

Harold Innis's work on communication and its development in society has been fading in and out of popularity since the publishing of his two works in the 1950s, 'Empire and Communications', and 'The Bias of Communications'. Innis saw a series of stages develop in a cycle of technological change as it relates to society and public communications. He was examining what role the media of communications played in the establishment and maintenance of political systems. (Innis; 1991) The technological change from one medium to another developed on the fringes, in the hinterland, where people were free to develop

and establish the new medium in a technological autonomy from the central core. However, the new medium over time, will become dominated by a powerful elite group sanctioned by the state invested with either monopoly or oligopoly powers. (McLaughlin; 1996, Pg. 8) This elite group, therefore, profits from this control of knowledge and the language of discourse. But there is a dialectic at work here between the core and periphery as the rigidity of the monopolies fail to keep pace with change. Once again, out in the technologically independent hinterland the cycle repeats itself. (Ibid.)

Innis died before the advent of the Internet, or for that matter, before Television really established itself as a cultural influence in society, but his stages do suggest the role of communications in the establishing and maintenance of political systems. (Magner; 1997, pg. 338-339) There is a ring to Innis's work that seems to sound true when it comes to the Internet. Many of the actions made by the telecommunications industry and governments, and to some extent the history of the Internet, seem to be in tune with Innis's cycles. However, I believe, at this time, the Internet and its development may break or warp these past cycles. Because, we are living in the midst of the present technological change, it may be a while before we see the beauty of Innis's thoughts. In his book the 'Bias of Communications', Innis warns that with the mechanical communications comes the mechanization of knowledge itself (Innis; 1991); and the growing monopolization of knowledge invokes the ancient dialect of power and intelligence. (Whitaker; 1992) The response to this must be political. (Ibid.) And, as we'll see, this is an instrumental response to the Web which tries to catch up with social adoption.

To M.S. Snow, telecommunications and its link to information technologies is seen as the revolutionary elements for future social and economic developments. (1988)

However, Gillespie and Robins see the new advanced communications networks being introduced into an existing economic and social context that displays stark geographical inequalities; between, for example, rich and poor nations, central and peripheral regions, cities and rural areas. (Gillespie and Robins; 1989, pg. 7 *see also* Mosco pgs. 27 – 30)

The idea of continual growth reflects a modernist view and the view promotes the telecommunications industry as more and more connections are being made. The ultimate goal being global connectivity. John W. Burton in his book 'World Society' (1972) sees world communications as a series of cobwebs superimposed upon one another, covering the whole globe, some with stronger strands than others, representing more numerous transactions, some concentrated in small areas, and some thinly stretched over extensive areas. (O'Meara; 1984, pg. 258) In Burton's conceptualization of a world society, a vast array of interlocking transaction and communications system connects individuals at many different levels of interaction. (O'Meara; 1984, pg. 259) This spider web image, to me, is the concept of globalization for the telecommunications industry. However, in these terms the concept becomes somewhat technologically deterministic and has definite first world economic bias. Majorie Ferguson challenges the term globalization and sees that it comes up wanting and laden with biases of a cultural and ideological nature.(Ferguson; 1992) She notes that the term is not value free and it suggests a unidirectional process.(Ferguson; 1992, pg. 73)

...there is a significant aspect of globalization that goes relatively unremarked: its rhetoric is as much concerned about what should be and what is. Globalization conflates the normative and descriptive, and consequently carries ideological as well as temporal, spatial, historical and geopolitical implications. Thus, if powerful nation states and corporate interests promote globalization as a self-fulfilling prophecy for political or profit ends, it is incumbent on us to examine not only what is being hawked by whom, but who stands to lose or gain materially, politically, culturally or militarily.(Ferguson; 1992, pg. 73)

Tom Darby, a Carleton University professor, who specializes in the

examination of technology in today's world, sees globalization as about "Western technology, or, more comprehensively, the West's technological consciousness, transforming the world in conformity with its own image of salvation". (Sibley; 1997) Darby sees technology as a way of thinking, a technological consciousness. "We are technology and technology is us." (Sibley; 1997) Underlying these thoughts is the fact that technology is not neutral and, a symbiotic relationship develops between humans and machines. Technology is about efficiency that is ever moving towards universality and homogeneity. (Sibley; 1997) This new technology is not free or equally distributed. Information has been commodified and moving information carries a cost. (Kellerman; 1993, pg. 11-12) These conditions may work in favour of large corporations, especially in the international arena. (Kellerman; 1993, pg. 12)

The computer as a tool has greatly enhanced humankind's ability to do work. But in this reliance on machines to extend the ability of humans, we've come to rely on machines to do some of the thinking for us.

The military in Canada and the United States have quietly and slowly made preparations to fight in a 'cyberwar'. (Hum; 1997) This so called information warfare is about developing systems to protect their own information while attacking similar assets of the opposing forces. (Hum; 1997) The nature of this warfare has yet to be completely defined but questions about what the nature of war will be in a 'digitized battlefield' are on the minds of military strategists. At present, 'hack and counter-hack' are the prevailing strategies used in this battle ground. (Hum; 1997) The training has been seen as a problem because many of the skills in preparing for the above scenarios are found in the hacker community, a community that has not been easily infiltrated by the military. (Hum; 1997) The vulnerabilities include all those infrastructures that depend on computer networks like

communications, banking systems, electrical power grids and transportation and delivery networks.(Hum; 1997) Military agencies, especially in the US, already have information warfare centres.(Hum; 1997) There is an irony here in that the Net was envisioned as a way of surviving war. Also the vision of who is the 'enemy' comes into question. The antagonists are not necessarily other states but groups of individuals some that exist within the states' territories.

The use of simulation in preparing for war has come into its own today, as James Der Derian points out in his article 'All But War is Simulation'(1998). The history of the use of computers and other technologies shows that the entertainment industry has always been at the forefront of this movement.(Der Derian; 1998) War and entertainment become intertwined.

In 1931, the Navy [US] purchased the first aircraft simulator from its designer, Edward Link. By 1932 the military still had only one Link Trainer; the amusement parks had bought close to 50. Now the developmental lag between the real thing and its simulation has just about disappeared.(Der Derian; 1998, 268)

In the case of simulation, Der Derian notes that the military's use of it does not prepare one for the unforeseeable. What is seen here is that the realities and accidents of lived life can not be replicated with simulation yet the use of these technologies moves to replace reality itself.(Der Derian; 1998, 273) Moreover; Stephen Graham points out that in today's computing environment (and that includes the Net), information and communication technologies are increasingly a blend of surveillance with simulation.(Graham; 1998, pgs. 483-484) Surveillance is not about direct vision, its about graphic simulation of the real world. And, this simulation of the real world is used to support new spatial practices(Ibid.), the beginnings of a virtual world and distancing from the real. To me, what this 'maneuver' represents is the change that computers have brought about in their proliferation around the world.

The computer itself may be influencing the direction of events that governments and societies in general are ill prepared for. Manuel De Landa in his book 'War in the Age of Intelligent Machines', hypothesizes that humans are on the brink of losing control of these Machines. (1991) He mentions that the ability to create 'killer robots' for military purposes is at present almost at hand but, our control of these systems may in the long run cause our downfall. As humans we may have created a dilemma, a dichotomy between power and intelligence.²⁷ "Artificial intelligence is not at present sufficiently sophisticated to create true 'Killer robots', when synthetic intelligence does make its appearance on the planet, they will already be a predatory role awaiting it." (DeLanda; 1991, pg. 1) What DeLanda is alluding to is that robots (computers) may emphasize humans bad points but they still may not give us control of these computer devices. And, they (robot intelligence) are more likely to follow their own directions as opposed to an anthropomorphic line. (DeLanda; 1991, pg. 2)

3.1 Globalization and the Third World

Joerge Dyrkton (1996), in his article "Cool Runnings: The Coming of Cybereality in Jamaica" points out that the 'local' people have neither the means nor the ability to be able to access the Internet, and even those that do have some affiliation with the local university and do have access, find that the facilities are most inadequate.

As a globalizing strategy for the Third World, the imperative to go virtual, to get on the Net, may in fact contribute to the colonization rather than the emancipation of locals. Discussions about bringing the Internet to the Third World seldom acknowledge the extent to which global underdevelopment issues are inseparable from the operation of the Internet itself. (Interrogate the Internet; 1996, pg. 126)

The Internet has touched the less developed countries of the world. However, because of the poor infrastructure in the third world, telephone systems are often unreliable. (Slackhouse; 1996) Basic telephone service has severely limited the expansion of

²⁷ A concept that Harold Innis warned about in the 1950s.

the Internet into these underdeveloped countries; however, third world groups have begun to activate on-line appearances mainly in sprouting non-governmental organizations such as environmental and women's groups.(Slackhouse; 1996) Doctors in 23 African nations have used the Net to get information on medical issues that was not available to them in their own countries.²⁸ Governmental reaction to this growth has in a number of cases, been negative. Incidents like Indian hackers breaking into the Indonesian military's Internet home page and splashing the page with 'Free East Timor' slogans has emphasized what governments see as a threat.(Slackhouse; 1996) Authorities in China have ordered all Internet users to report themselves to the police; Zambian authorities have put a halt to the electronic edition of the Lusaka Post, an opposition run paper that posted leaked government files on the Net; and in Vietnam, the government has blocked access to the Net for its citizens until the government feels confident that they can control political debates.(Slackhouse; 1996) A web site celebrating the Birthday of Saddam Hussein of Iraq is for the most part unattainable to Iraqi citizens whose government has barred them from the Net. The site was set up in London England.²⁹ Yet with telephony equipment getting cheaper and the benefit of third world universities getting on line, populations in these under developed countries are beginning to get access. It has been estimated that there are some 27,000 host machines in Africa that have access to the Net and some 16,000 machines in Central and South America.(Slackhouse; 1996)

Web TV, part of the convergence of broadcasters with telecommunications, is set to give users the choice of connecting to the cable TV companies' infrastructure and receiving both the Web and e-mail over their television. These non-wintel devices are simple, cheap

²⁸ News services; 'The Internet', Globe and Mail, 09/01/97, A20

²⁹ The Daily Telegraph ; 'Iraqis miss web salute to Saddam', Ottawa Citizen, 03/05/97, A11

and quick. With the spread of the availability of these devices; more and more individuals will become connected to the Net.(Metcalf; 1996, pg. 40) What this could mean to those countries that lack a proper telephony infrastructure is that they might be able to skip the use of the telephone infrastructure and use a satellite infrastructure to replace the cable infrastructure used in Web TV.

Telecommunications is seen as an intricate part of the information economy according to Kellerman.(1993; pg. 9-13) He describes the growth of the quaternary sector of the industrial nations economy as the only continuously growing sector. This sector of the economy is seen as representing the information activities which includes production, transaction and consumption of information goods and services including finances.(Kellerman; 1993, pg. 10). As knowledge and information become important in the late 20th century the movement of this information becomes a vital component. If it is true that we've entered the information age, those that do not have this technology will be left behind. Telecommunications will effect production both at the local, national and international level. A number of the writers that have lately examined this area (Snow; 1988, Kellerman; 1993), see telecommunications mainly in the light of economics - liberal economics. Its cultural and social aspects have, for the most part, been limited to discussion of the plight of the less developed countries (LDCs). The geography of telecommunications tends to reinforce this plight because of its concentration on the economics of the industrial world.

3.2 Globalization and Theoretical Perspectives

The traditional analytical perspectives for investigating globalization have been the two paradigms, realism and liberal pluralism. To me, each paradigm on the whole is myopic in its handling of globalization; however, both offer some insights into the nature and

influence of the Internet.

Soaked in 19th century colonialism, the realist perspective sees the sovereign state as the central and only significant player in the international forum. The State itself is out to maximize its interests in the anarchistic power politics of the International arena. Anarchy is a state of affairs where no single body governs the whole issue area. Very few examples exist where conditions create this state of affairs, the international arena is one example, and I propose that, the Internet is another example.

Richard K. Ashley sees the anarchy of the international plane for the two perspectives, (Realism and Liberalism) as, a lateral image and a vertical image.(Ashley; 1988, 246) He puts the state into the lateral image with its effective claim to violence and its fixedness to territory. This lateral view sees the world divided up into territorial spaces. The territoriality of the state will become a constraint “because non state actors with greater mobility can exploit resources, markets and coalition-building opportunities available on a global scale, effectively redirecting the movement of political resources in ways that might either support or undermine the local conditions of stable rule within territorial bounds.”(Ibid.). The state must be ready to defend itself; the realist assumption being that the interests of the state put the individual state in conflict with other states. As states move in this rational manner, they “potentially produce a collectively irrational outcome”(Gill and Law; 1988, pg.26), the zero-sum game. A game “where any redistribution of a relatively fixed amount of power resources in the favour of one state will necessarily be at the expense of others”.(Ibid.) With an almost Darwinian flavor, the Nation state's prime function is to survive, with security foremost on its agenda. In this view, technology is inert. It is just a resource that can be mobilized to help with the security of the nation-state. The State strives for self-sufficiency. With the uneven distribution of resources and, a state's ability to utilize

these resources, the possibility for complete self sufficiency is largely impossible; and so, a dimension of bilateral or multilateral interdependence occurs. The dimension of interdependence rests on the relative availability and costliness of the alternatives that various actors face.(Gill and Law; 1988, pgs. 27-28) This form of interdependence is unstable and liable to fall apart when not to a state's advantage. The realist perspective sees politics determining economic policy, not the market place. In the international forum the central "concern to the state is the ability to control the movement of goods, technology and capital and to channel such economic power resources for rational purposes" .(Gill and Law; 1988, pg. 30)

The role of the individual is almost non-existent. Human nature is seen as relatively fixed and egotistical. The theory assumes that the state aggregates and reflects the sum of the interests of the members of civil society.(Gill and Law; 1988, pg. 25) A realist perspective has little consideration for non-state actors and sees its dealings in the international forum done principally through government bureaucracy and its diplomatic corps. This would leave the Net as only an international communications tool to be regulated through government to government negotiations.

Finally, true order in the International forum only comes under the power, a single power, imposing itself on all others. This could be a world government or one global power keeping other states in line. The second method where order is imposed is more tenuous, less stable than order imposed by the 'Leviathan'.(Gill and Law; 1988, pg. 26) A global power which has the ability to discipline others and keep the peace can dominate the International scene. A hegemon can dominate, but its power is not absolute, and other big fish can swim in this same pond. In the anarchy of the International forum, aggregates of states can school together to form power blocks in opposition to the hegemon or become

one themselves. The realist view sees power struggles and world political events from the present only, a static view. This view is ahistorical, unable to see how historical developments have come together to form the present situation. However, the realists use the concept of territory as an anchor or home base for the state. Its territoriality becomes the manifestation of the state's sovereignty, its right to rule a territory.

A liberal perspective and its association with the economic structure begins to set the stage for a dramatic change in world commerce and it has a definite influence on the actions of the telecommunications industry. Championed by many in the Western world, especially the United States, a wave of economic liberalism termed 'free market conservatism' by Gill and Law (pg. 41), pushed for the elimination of state intervention in the economy. This liberalism is an important force in the present push for deregulation in an ever growing portion of the world's telecommunications. Technology and technological change are seen as neutral. These variables are seen as having no effect on culture or politics. The basic unit of analysis is the individual and the motivating force in the economy is competitive interactions between these individuals. Individuals maximize their satisfaction on the 'playing field' of the market place, considered a 'social institution' (Gill and Law; 1988, pg. 42). Competition, from its limits of monopoly to monopsony, determines the balance of power in the market place. Though the individual may be the basic unit, much of the explanation of the market structure is done in terms of the industrial player, the 'firm'. Liberal economics believes that with more firms competing in the market place, power is more evenly distributed. The market structure can also be seen in degrees of interdependence and dependence, with the greater degree of interdependence associated with a large number of firms in competition. It should be noted that some neo-realists have used these classical liberal economic premises within the framework of market equilibrium to describe the International distribution of

power.(Gill and Law; 1988, pg. 43) Kenneth Waltz's work is cited by Gill and Law, to show how the neo-realist's stable international political equilibrium is linked to the concentration of material power. "As International power becomes more equally distributed across ever-larger number of states, the likelihood of conflict will tend to grow, unless leaders are willing and able to collude. Collusion becomes less and less likely as the number of states increases."(Gill and Law; 1988, pg. 43) The State is not totally absent in the liberal economic view. State intervention can be seen to be justified to correct imperfections; "as long as the State has the knowledge to do this and if administrative costs are not too high."(Ibid.)

In the International realm, variables like security, monetary stability and an open international economy where the ability to move goods, services and capital is relatively free; are considered public goods in that, they are jointly supplied and are characterized by an inability to exclude beneficiaries on a selective basis. Those that benefit from these goods but don't contribute to their costs are labeled free riders. (Gill and Law; 1988, pgs. 44-45) The liberal attitude sees a positive sum gain in the general economic relations through the market, and an increase global welfare, although not necessarily equally distributed. The positive sum interaction is believed to generate a climate for international economic co-operation amongst states. Conflict is seen at two levels; as friction between economic co-operators or as a fundamental difference between ideology and or world order. It is the hegemon that is seen as the main supplier of the public goods, and while the hegemon is willing and able to supply these public goods, a stability is created; however, as the power of the hegemon goes down so does its ability to supply public goods. The free rider problem is now seen in a more serious light, especially by those that see the need for these public goods. It is possible that as the power to supply public goods by the hegemon decreases other states' powers increases and, if to their benefit, they will contribute to the cost of

supplying the public goods.

From the Realist point of view, the State is the prime actor in the international arena, for most of the development of the Internet, the State was present but more in a supportive role rather than in a leadership role. However, the idea that International relations happens in an anarchistic space is one of the beliefs of many of the Internet users in the Net's early history. It was often said that national laws were little more than local ordinances for users of the Internet.(Wallach; 1994) Control of activities and what could or could not be done on the Net was divided between local sysops³⁰ or dictated by committees that in an almost ad hoc fashion governed their specific network.

For the economic liberals, the individual is one of the prime actors on the International scene, however, this paradigm has a heavy bias towards economics, which for active users of the Internet this was seen as taboo in the recent past; however, as the Internet grew, businesses became ever more present on the Net especially with references to 'Web' sites. 'Freedom' was the rallying cry of this first cohort of Internet users. A theme that was firmly imbedded in the underground culture of the 'hacker' and to some extent the ordinary user of the Net. Today, 1999, this is all changing.

One of the assumptions that seems to be pervasive in much of the literature is that sovereign states are the principal actors and a level of institutionalism has been implemented. This assumption would suggest that like the telephone, the Internet is more or less just a common carrier painted over a condition of anarchy, for a concept of hierarchical authority structure seems to be lacking on the Net. This deficiency would suggest order is not possible in an overall sense.

A second approach that in 'first blush' would seem to give an explanation of the

³⁰ system administrators and operators within specific institutions

political maneuverings on the Net, is looking at the Internet as some kind of virtual culture or virtual nation with self-government(Ragde; 1995). The Internet may have many or all of the attributes of a culture, but in the cacophony of interests that populate the Net, each group will have only a subset of these attributes. Because of the fracturization of the Net, the cohesion between different groups is not there to brand them all with the label of culture. To me the analogy of going to Disneyland may explain my understanding of the problematic of culture. As tourists we can all meet in the Disneyland park and do many of the same spatial actions and be affected by the goings on in the park; however, because we may be tourists from many different parts of the world, our social activities or how we wish to enjoy the park may be quite different from others. Yet, all the visitors in the Park may be seen separate from those outside the park.

Both the Realist and the Liberal points of view do cover some aspects of the influence the Net has brought to world order. However, the problem of the Internet affecting (or challenging) the state seem in many aspects to be a clash between these two paradigms. "Despite the obvious differences, the variants of 'idealism' share many of the limitations of realism or their mirror images. They have common sources in what are increasingly inadequate conceptions of territorially delimited sovereignty".(Agnew & Corbridge;1995, pg. 139) For both paradigms, space is a backdrop and technology is seen as inert. Neither seem to focus on the space that the Net occupies or on the activities on the Net as being a source of contention which is the underlying theme of this thesis.

Through its inception and growth as an international communications vehicle, the activities on the Net help to create spatiality, a social space. A space that helps in the formation of a collective of collectives which creates its own epistemology, which warps and adjusts the control a state government has over its people. The state must seem to be in

control of its territory if it does not wish to see its control decay, and it is in this light that a conflict occurs between the government and the users of the Net.

The Internet was established and is maintained by a technological elite; but, it can be seen as a collection of thousands of tiny pocketed worlds. The users of the Net are not tied down to any particular sphere of endeavour and can instantly switch allegiance instantly . Thus, identity with the state or other groups can become a matter of convenience, not something that can be counted on. For many governments around the world, telecommunications are considered a government-controlled monopoly. Governments for the most part, set the rules and police this industry. But, does this mean that governments control the Internet and do they have the support of the 'people'?

4. History and move towards Community

The history of the Net begins in the Cold War era of the 1960s. The (US) conservative think tank the RAND corporation and the US military wanted a plan on how to communicate after a nuclear attack. (Sterling; 1993) No matter how well protected, communication networks were vulnerable, any conceivable network would be made inoperable by such an attack. Plus, any central authority or hub in the network would be a prime target. Paul Baran of the RAND corporation came up with the idea to create a network with no central authority and to be constructed to operate in an atmosphere of uncertainty. The network would be designed from the beginning to operate while in tatters. (Sterling; 1993)

The principles were simple. The network itself would be assumed to be unreliable at all times. It would be designed from the beginning to transcend its own unreliability. All the nodes in the network would be equal in status to all other nodes, each node with its own authority to originate, pass and receive messages. (Sterling; 1993)

Messages themselves were broken down into packets of information. Each packet was individually addressed and could find its own way to its destination even if the route was very circuitous. This delivery system was haphazardous and inefficient as compared to other communication systems like the telephone; however, this system was very rugged. (Sterling; 1993) If a node was destroyed, packets would be lateralled wildly across the field by whatever nodes happened to survive. (Sterling; 1993) The ideas for this packet-switching network were made public in 1964 and a number of institutions were mulling over the ideas (RAND, MIT and UCLA) but, it was not until 1968 when the National Physical Laboratory

in Great Britain set up the first network to test out some of the packet-switching principles did the idea of a network take shape. (Sterling; 1993) In the US, the Pentagon's Advanced Research Projects Agency (ARPA) decided to set up a network of super-computers and by the fall of 1969 the first node was established at UCLA. (Sterling; 1993) Four months later, 3 other nodes were added to this network and the network was called ARPANET. This network allowed scientists and researchers to now access different computers remotely and at a time when computer time was very precious. By 1971, 15 nodes had been added to the network; by 1972 some 37 nodes had been established. (Sterling; 1993) The network was set up for scientists and others to access and run programs on remote machines; however, as began to be noticed, after the second year of its inception this dedicated, high-speed, federally funded network was changing into an electronic postal service. (Sterling; 1993)

The main traffic on ARPANET was not long-distance computing. Instead, it was news and personal messages. People had their own personal user accounts on the ARPANET computers, and their own personal addresses for electronic mail. Not only were they using ARPANET for person-to-person communication, but they were very enthusiastic about this particular service - far more enthusiastic than they were about long-distance computation. (Sterling; 1993)

ARPAs original protocol for addressing and packet-switching, NCP (network Control Protocol), was superseded by the more advanced protocol TCP/IP (Transmission Control Protocol / Internet Protocol). The TCP part of the acronym handled the changing of messages into packets at the source machine and reassembling the packets into the original message at the destination; the IP handled the addressing of the packets to their destination. The TCP/IP software was made public and could function on many different types of machines and software platforms as long as these machines could understand the

linga franca, TCP/IP. Not only could the TCP/IP software accommodate many different hardware platforms, the protocol could also be use across multiple networks. By 1977 other networks were also using the new addressing system in their connection to the ARPANET. (Sterling; 1993) The ARPANET was kept under tight control by the US military until the military component of the network distanced itself from ARPANET and created its own network MILNET. At the same time other networks were also connecting into this vastly growing galaxy of linked machines. (Sterling; 1993)

In 1981, the Because Its There Network or BITNET was started. With a leased telephone line between the computing centres of the City University of New York (CUNY) and Yale University , the New York / New Haven link became the first exchange to take place between two universities.(Educom; 1986, vol. 2 #2) Ira H. Fuchs, then a CUNY vice-chancellor and Greydon Freeman, then director of the Yale Computing Centre saw a wide range of possibilities for this fledgling network in helping with collaborative projects between scholars. (Educom; 1986, vol. 2 #2) Fuchs and Freeman contacted other academic computer centres that had major IBM installations within the region to become members of this new network. The plan was to share resources; each institution was to pay for its own communications link to the network and each site was to provide facilities for at least one new member to connect. This system of co-operation among academic institutions was not expected to succeed.(Educom; 1986, vol. 2 #2)

Using software developed by IBM, communication protocols were developed so that centres that did not have IBM mainframes could also connect to this network. By 1982, BITNET became transcontinental with a connection to the University of California at Berkeley. Other Californian institutions shared the line with Berkeley through a expense sharing arrangement and linked into the network.(Sterling; 1993) The network became

world-wide with connections made between EARN (the European Academic Research network), in Canada (Netnorth), Japan, Mexico, Chile and Singapore. Later other countries like Korea, Australia, New Zealand Argentina and Brazil joined. "Although political and funding considerations have forced their administrative segregation, BITNET, EARN and Netnorth form one topologically-interconnected network." (Educom; 1986, Vol 2 #2)

In its early years, BITNET was pretty much run on the buddy system, each university helping each other out. By 1984, through support from IBM and EDUCOM a centralized source of information and services was established at CUNY. In 1986 some two hundred institutions had joined BITNET. BITNET was now governed by a Board of Trustees elected from the membership. At the same time other networks were forming, Janet, Canner UUnet and others. (Educom; 1986, Vol 2 #2)

Mailing or retrieving information within one's own network was relatively simple. network connections and mail routing worked on a store and forward basis. The network was considered a chain. A University computer contacted the next University's computer in its link, made sure it was up and running, then forwarded its messages to that site. Message addresses destined for another site were forwarded to the next link in the chain. And, unless a link went down, properly addressed mail made it to its destination. The problem with nodes being down was a constant source of discouragement as sites went down for equipment failure and in some cases for holidays and vacation time. The Christmas holiday period was a particularly difficult time to send a message because of the many sites closing down for the holidays. As the number of connections to different networks grew, the biggest problem became communicating between networks.

By the late 1980s a number of universities had connection to more than one network. These sites were called gateways. Messages whose final destination was a site that

was on a different network than the senders, had to first be addressed to contact a gateway into the other network. Then, the message had to be addressed again for the destination. The new address was imbedded in the old and the gateway would strip off the old address and forward the message with the new address on the new network, sometimes the message had to go through several networks to get to its final destination.

The beauty of the Internet system (TCP/IP) is its method of addressing. Addresses are broken down (reading right to left) into domain, subdomains, host machine, accounts. An example would be; dbertram@ccs.carleton.ca . With this new routing method, it was not necessary to know which network your addressee was on, a message is continually forwarded until it hits a site that knows of the domain of the receiver, then the message is forwarded to his/her subdomain, etc. The domain names were spilt up into seven different categories, most of the domains outside of the US were denoted by a two letter geographical code, such as, ca stood for Canada. The bulk of the US based computers had a three letter code: EDU, for educational institutions; MIL, for the US military sites; GOV for US government sites; COM for commercial sites and ORG, for nonprofit organizations. Those sites that act as gateways to other networks have the domain designation of Net. During the 1970s and 1980s, individual sites and whole networks began to adopt the new Internet addressing protocols.

Since the software called TCP/IP was public-domain, and the basic technology was decentralized and rather anarchic by its very nature, it was difficult to stop people from barging in and linking up somewhere-or-other. In point of fact, nobody wanted to stop them from joining this branching complex of networks, which came to be known as the Internet.(Sterling; 1993)

The costs for establishing these connections were relatively small because each node

was independent and had to do its own financing and its own technical arrangements.(Sterling; 1993) For the computer networks, governments did help out, with paying for the infrastructure and being on some advisory boards, but for the most part the networks were left to manage on their own.(Sterling; 1993) As the interconnection of machines and networks grew the value of this interconnectiveness also grew. For the universities, these networks gave a sense of prestige to the institutions and the networks were seen as tools that could help augment academic research and as an attraction for high profile academics in certain fields. It soon became apparent that a network connection was becoming a necessity.

The Internet's pace of growth in the early 1990s is spectacular, almost ferocious. It spread faster than cellular phones, faster than fax machines. In 1992, the Internet was growing at a rate of twenty percent a month. (Sterling; 1993) One of the big moves that made this growing network more available to ordinary users was the introduction of the World Wide Web, Web for short. The World-Wide Web (WWW) was invented by physicists for CERN, the European Particle Physics Laboratory in Switzerland .(Krol; 1992, pg. 227) Considered one of the best tools for exploring the Internet, the Web has had a tremendous influence on how the Internet is used today. For many users of the Net, the Web is the Internet. The purpose of the Web is an attempt to organize information on the Net.(Krol; 1992, pg. 229) It is made up of 'home pages', graphical displays of information presented in Hypertext³¹. These home pages are considered 'sites' which are situated on computers. From any home page, links can be made to other sources of information, files and other home pages - no matter where this information is located on the Net. Therefore, one's

³¹ "Hypertext is a method of presenting information where selected words in the text can be "expanded" at any time to provide other information about the word. That is, these words are *links* to other documents which may be text, files, pictures, anything."(Krol;1992, pg. 228)

'home page' can be linked to other global points to suggest some idea that the author of the web site is trying to make. If we can consider this 'site' a place then these links extend this space. By activating these links, the information stored elsewhere is transferred to the activation site. These links are like telephone numbers which when 'dialed' ('clicked', activated), contact the foreign site and request the information which is then sent back. Its inventor Tim Berners-Lee, improved on other Internet document-retrieval tools by allowing seamless 'hypertext' links within documents.(Krol; 1992, pgs. 229-230) In the document, the hyperlink, or 'hot-link' appears as a highlighted word or phrase. A user merely needs to "click" on the highlight text and is connected to more information. Hypertext and the Web transformed the Internet from a tool for academics and computer buffs into a vast and growing reservoir of information that anyone could use. In 1993, the National Centre for Supercomputing Applications (NCSA) at the University of Illinois began distributing Mosaic, the first Web browser for free on the Internet. It allowed creators and users of the Net to add multimedia components to compliment their Web sites. Where Web users had been previously limited to plain text, they could now get text in a range of colours, fonts, plus pictures, video clips and sounds. A commercial version of the web browser, Netscape, followed in early 1994.

From my own observations, web sites with their use of colours, sounds and pictures and the idiosyncrasies of the different users produces a space of gaiety and the bizarre. Each web site becomes its own particular location on the Net. These sites are important as representational spaces, in Lefebvre's terms, in identifying the Net. They also give a feeling that they are outside the 'norm', spaces of the 'other'. To me this invokes Mikhail Bakhtin's carnival. The spirit of laughter and irreverence at carnival time for Bakhtin signifies the figurative eradication of authority and authoritative culture and the assertion of popular

renewal.

Carnival is not a spectacle seen by the people; they live it, and everyone participates because its very idea embraces all the people. While carnival lasts, there is no other life outside it. During carnival time life is subject only to its laws, that is, the laws of its own freedom. It has a universal spirit; it is a special condition of the entire world, of the world's revival and renewal, in which all take part. Such is the essence of carnival.... ..(Bakhtin; 1984, pg. 7)

For Bakhtin, carnival was a time and a place where one "entered the utopian realm of community, freedom, equality and abundance".(Bakhtin; 1984, pg. 9)

The number of "host" machines with direct connection to the Net using TCP/IP has been doubling every year since 1988.(Sterling; 1993) The Internet moved out of its original base in military and research institutions, into elementary and high schools, as well as into public libraries and the commercial sector. Why do people want to be "on the Internet?" One of the main reasons is simple, freedom. The Internet is a rare example of a true, modern, functional anarchy. There is no "Internet Inc." (Sterling; 1993)

There is a small body of Internet experts known as the Internet Society. The society is more like the council of elders in a church than a government. It is a voluntary membership organization whose purpose is to promote global information exchange through Internet technology. The society debates and sanctions the communication standards used throughout the network and it oversees a registry of domain names so that no two computers end up having the same Internet address. The Society has no power of enforcement but is recognized by the Internet community as a useful "traffic cop". People who run the networks within the Internet can express their opinions through various forums and working groups within the society. (Krol; 1992). The society was founded in January 1992 and chose Vinton Cerf as its first president. (Sterling; 1993) Institutions, corporations and ISP providers wishing to set up shop on the Web, simply registered their Internet

domain name and attach themselves to the 'Matrix'.³²

As Globe and Mail reporter Beppi Crosariol states, "the World Wide Web may get the glory, but electronic mail is the quiet workhorse of the digital age". (1997) It has been estimated that over a 100 million people worldwide receive electronic mail (e-mail) up from approximately 40 million three years ago.(Crosariol; 1997) E-mail has been seen as reducing social barriers, inspiring written communications and transforming social etiquette.(Crosariol; 1997, Wellman et al; 1996) E-mail is one of the most important vehicles that keeps social contact going on the Internet. E-mail is quick and less burdensome than regular mail; less costly than phones in that there are no long distance charges. The growth of e-mail has not gone unnoticed by both the phone companies and the postal services. In the U.S., phone companies have asked for rate increases for those calls that connect to the Internet via telephone lines.(Crosariol; 1997) It should be noted that most connections via the phone lines are local calls. "Canada Post, too, has been seeking to preserve access to non-traditional delivery markets in the wake of a slowdown in letter mail.(Crosariol; 1996) As a personal observation, many individuals have expressed the idea that they have found e-mail less intrusive than the telephone. "You read it when you have time and delete those messages that are not important", has been a common response. People have reported that e-mail has set up a buffer that allows them to have greater control over their work. (Crosariol; 1996) According to Crosariol, some commentators of the Net have predicted that e-mail may be the more profound aspect of the Internet.(Crosariol; 1996) However, those norms that have governed what is acceptable in letter writing no longer seem to apply.

³² future.sri.com : this site is now managed by SRI International, a business group that provides 'one stop shopping' for corporations. wanting to set themselves up on the Internet (Jan. 1999)

As Carleton University Business professor Linda Duxbury explains in Crosariol's article, "no one knows what to do, no one knows what's acceptable and not acceptable". (Ibid.) E-mail perils: quickness, going to the wrong person, saying things you don't want receivers to hear. Some have seen the increase in e-mail associated with the breaking down of good manners on the Net. (Baker; 1996)

As the Internet grew it became obvious that this medium was more than just a conduit for communications. The Net became a gathering place for people to communicate with others and in parts of this network what has been called virtual communities developed.

The Internet is not the first form of communications to dramatically change how individuals communicate. However, the Internet and the advent of digital communications has dramatically altered the control that governments have placed on communications.

The Postal service has for along time been fully regulated by the State. For the most part because of the physical nature of mail, letters and parcels are easy to control at border points. Today the Postal service in many countries are now in direct competition with a myriad of new electronic suppliers of electronic communications and electronically enhanced couriers.

I believe it is the economic connection that has been the incentive for government to get involved in the Internet. Money talks. But, because of the international nature of the Net the need for control would have to be through some sort of international body that does insure state acceptance and consultation.

4.1. *Communities on the Net*

In trying to establish the Internet as a social gathering place, I've gathered the elements that I believe point to the existence of communities on the Net.

Today the term community is a loosely defined object. Its original meaning had a definite geographical base to it. (Mitchell; 1968, pg. 32) It was denoted as a collectivity of persons who occupied a specific area. These persons were usually engaged in economic and political activities and were seen as constituting a self-governing social entity. (Ibid.) Also, these individuals experienced some common values and feelings of belonging together. (Mitchell; 1968, pg. 32)

At present, the term is not restricted by a geographical imperative. Though the term may be considered less all-inclusive, and slightly more specific in connotation, it can be regarded as denoting a community of interests. (Ibid.) Community is a vague, general term used to group individuals in a collective, denoting a linkage in common interests; however, it is my belief that feelings of common value still are present, as-well-as, feelings of being a self-governing social entity.

The term 'virtual community', in my opinion, actually adds an implied reference to the spatial. The term virtual implies that the activity referenced has a connection to the physical world; and therefore, in a location that has aspects of space. Also, it is connected to the local and neighbourhood. Thus, a virtual community must exist in a 'virtual space'. Wellman *et al.*, in their article "Computer Networks as social", state that because computer networks link people as well as machines, they create social networks which according to the authors, generate the necessary elements for the establishment of virtual communities. (1996; pg. 214) Though the Internet has loosened its geographical bonds, it has been reported that, "the geographical notion of community is taking hold in Cyberspace. Locally oriented on-

line content and neighbourhood Web pages are sprouting up all over.” (Tobias; 1997)

Stephen Barlkiw, managing director of AOL Canada (America On Line) states, “I think what we’ve learned is that geography is irrelevant as far as interests are concerned”. (Ibid.)

Barlkiw also believes that the Internet is turning in on itself and these new sites are just a play on the Internet’s original theme of connecting people and information.(Tobias; 1997)

Howard Rheingold (1994) in his book, ‘The Virtual Community’ paints a picture of a virtual world where people come together in a self-policing, mutually helping communities. The WELL³³, the base for Rheingold’s communities, is a world separate from one’s physical world but the joys and sadness associated with every day life can be found, according to Rheingold, in the social actions of its members.(Ibid.)

The WELL felt like an authentic community to me from the start because it was grounded in my everyday physical world. WELLites who don’t live within driving distance of the San Francisco Bay area are constrained in their ability to participate in the local networks of face-to-face acquaintances. By now, I’ve attended real-life WELL marriages, WELL births, and even a WELL funeral. (The phrase “in real life” pops up so often in virtual communities that regulars abbreviate it to IRL.) I can’t count the parties and outings where the invisible personae who first acted out their parts in the debates and melodramas on my computer screen later manifested in front of me in the physical world in the form of real people, with faces, bodies, and voices. (Rheingold; 1995, Introduction)³⁴

Jennifer Light in an editorial in ‘Society and Space’ (1996), warns that the Internet is not straight-jacketed by our concepts of how things should develop. “Like the planners of the Mall in the 1950s, the Internet was to be a projection of the American dream, but the difficulty is when one tries projecting an historical cultural fantasy onto a new space. The results are often not what has been foreseen. Past visions of the future rarely anticipate the complexity of the new space”.(Light; 1996, pg. 127)

³³ “The WELL’s conversations take place on keyboards around the world, but the first computer and modem rack were located in Sausalito, California, just north of San Francisco.” This quote is from the WELL website, www.well.com. The persons that have developed this web site see themselves as a collection of electronic villages on the Internet.

³⁴ Rheingold’s book ‘virtual community’ is on the Web at www.well.com/user/hlr/vcbook/index.html and this is where the

4.1.1. *The Cultural Underground*

The influence of the electronic media has in the past and today produced changes in our society. Tony Schwartz in his book on the influence of the radio and TV has noted that:

The environment surrounding in which we live is structured by electronic media. Radio and television are around all of us all the time, and the same media that surround us, surround everyone in our society. This orientation to electronic sources of information has produced changes in the design of stores, altered purchasing behavior, and transformed the learning process as it relates to advertising. (Schwartz; 1973, pg. 56)

At present the Internet is not so influential, but I would predict that similar results to Radio and TV are in store for individuals and societies that use the Net. Schwartz goes on to say that our shared experiences within this media (radio and TV) help produce a common knowledge and that this shared consciousness puts us in sync with others that share this environment with us. (Schwartz; 1973, pg. 148 -149) However, Schwartz also points out, again while looking at Radio and Television, that some of the developments within the above industry have a fracturing effect. "The development of cable networks and the widespread use of various cassette systems may blow our tribal culture apart, creating a new set of *special interest*³⁵ mass audiences." (Schwartz; 1973, pg. 149) In the process that Schwartz is describing, he notes that in the earlier years of the media's development "[T]he hardware manufacturers of the new systems are utilizing the previous communications systems' software producers".(Schwartz; 1973, pgs. 149-150) In the case of radio and television the past was print, for the Internet it is radio and TV. Scott Kirsch makes the argument that the "effects of technological change on social life feed back to the spatial practices through which technology (and social space) is produced".(Kirsch; 1995, pg. 542) He goes on to say that space is a medium that bridges the gap between material practices and

above quote was 'lifted'.

³⁵ Italized by authour

material representations along with producing the connections between lived social relations and history.(Ibid.) What Kirsch is stating and the argument that I wish to put forth, is that the production of space can more and more be seen as an increasingly technical process.(Kirsch; 1995, pg. 533) Technology does not determine or create social space; however, technology's use can be seen as an element that helps cement a community to social space. Kirsch states, "whereas technology is thoroughly a social construction, society is a technological construction as well".(Ibid.)To me, it is the social use of the technology that is tied into the uniqueness of a space.

In her book 'Life on the Screen' (1995), Sherry Turkle puts forth the argument that a first world aesthetic has developed in its relationship with the computer. To the author, an attitude of seeing the computer as a tool of calculation has shifted towards a culture of simulation.(Turkle; 1995, pg. 19) This shift according to Turkle, has left society with an acceptance of 'opaque technology'. We no longer need to fully understand what's inside the 'box'. "We have learned to take things at interface value." (Turkle; 1995, pg. 23) Computer users become increasingly more able to accept simulations of reality for the real.(Ibid.)

In the early years, the Internet was almost exclusively located on the campuses of research institutions, colleges and universities across the globe. The 'net' was a tool of the scientific/intellectual elites in the 'ivory tower'. However, out on the streets, so to speak, another development was taking place.

In the early 1970's the personal computer (PC) was developed. This move brought the power of computing out of the air conditioned, glassed off rooms of the universities and institutions and into the hands of teenagers. These machines were a far cry from the millions of dollar mainframes, but with a small PC, a modem and a telephone hook up a new type of communications was born.

Computer hobbyists in Chicago, who created the first BBS (Bulletin Board System) on a microcomputer, used the system to swap hardware and software, post club meetings, and exchange technical tips.(Sterling; 1993) BBSs have outgrown this 'techie' underground label. And yet in the early 1990s, Michael Banks, a computer magazine journalist, questions whether modem communication and BBSs are seen as 'legitimate' in the public's conscience.(Banks;1992, pg. 739) Because of the underground nature of BBSs, the exact number is unknown; however, in a 1992 New York Times article, Jack Rickard, a computer magazine editor, was quoted as saying that there were 3,500 public access BBSs in the U.S. five years ago and today there are an estimated 60,000.(Berck; 1992, pg. F12) Rickard states that the BBS industry is worth approximately \$500 million and growing. Private BBSs are reported in at 120,000 and according to the NY Times article, some 10 million people regularly use publicly available BBSs. Private BBSs are those boards that restrict who can log on and their phone numbers are not public knowledge.

There is a feeling in the BBS world of a sense of Simmel's 'the adventurer', where things are outside the everyday and there is a mood of being master on ones own fate, a sense of the present and a love of the unpredictable.(Simmel; 1971) Also there is a thread of anarchy running through this world. The political disestablishment is littered with the vestiges of classical anarchist ideas unreconstructed or more often transformed into vaguely new leftist or generally countercultural terms and institutions.(Osofsky, 1979: 57)

Stephen Osofsky in his book 'Peter Kropotkin' describes the anarchist philosophy as the following:

It is a theory that holds that all forms of government are both wrong and unnecessary, wrong in the sense that they offend against the natural autonomy of man and unnecessary in that they are not needed because man's natural autonomy flows out of his natural goodness.(Osofsky; 1979, pg. 58)

This theory assumes that humans are capable of self-control and self-regulation; also,

society is seen as a voluntary forming of human relations arising out of the needs of the people.(Osofsky; 1979, pgs. 58-59) Peter Kropotkin considered by many to have presented the most complete view of the anarchist theory(Osofsky; 1979, Chapter 1). Through mutual aid and a destruction of hierarchies, Kropotkin establishes an anarchist morality which replaces the State, Law and Authority.

Anarchism is the representative of the creative, constructive power of the people who aim at freeing themselves from the power-seeking minority. Anarchism aims at creating a society in which relationships are regulated not by authorities, whether the latter are self-proclaimed or elected, but rather by mutual agreements between members and by social customs and habits not petrified and enslaved by law superstition, or authorities, but continually developed and readjusted in accordance with the ever-growing requirements of a free life.(Osofsky; 1979, Chapter 1) "This process abolishes government of man by man and replicates the continuous evolution of nature."(Kropotkin in Osofsky; 1979, pg. 102)

Kropotkin's sentiments can be seen as a thread in the workings of the Internet; however, in the world of the BBS a more individualist anarchism prevails. "This school is distinguished by its view of the ego or individual as the center of sensitivity and consciousness. The individual must be accorded priority, and the social dichotomy is framed in terms of the individual versus the state, which oppresses the individual."(Osofsky; 1979, pgs. 74-75)

Phone 'phreaks', hackers and crackers are some of the labels that are used to describe those individuals that break the law with the aid of a computer.

Phreaks break into telephone long distance trunk lines to make long distance calls. The infamous phreak, 'Captain Crunch', broke into long distance trunk lines with an altered whistle from a cereal box. Computer hackers were the early computer pioneers fanatically

dedicated to inventing and exploring computing. These individuals were part of the 1960's generation and were prone towards being anti-establishment and disrespectful of property rights. Bureaucratic barriers to information on computers were their targets, especially if these barriers got in the way of learning something useful. Military institutions and universities were often targets. (Stoll; 1989)

Two hackers, Steve Wozniak and Steven Jobs, have been attributed to having set the micro computer industry off to the races, by hacking together the first commercially successful personal computer, the Apple. These 60's hackers quickly rose to positions of authority in the computer world and though reportedly their early anti-establishment sentiments remain, they generally settled down to the construction of the information/communication environment that now permeates Western society. However, the next generation and later have not quite joined the establishment. And at the same time, there seems to be a pathology of computer Junkies who may be replacing real-life experience with 'cyber-life' that which occurs on the 'other side of the glass'.

These new individuals have been labeled cyberpunks; who are also inventive and curious, but unlike the 60's hackers, the hippie idealism and new left influence is gone and is replaced by the nihilism and alienation of the punk movement. Particularly destructive criminal acts has been called 'cracking'. Some claim that early hackers were explicitly anarchistic and that acts of willful destruction against 'the system' have a place in the hacker ethos; therefore, the term cracker is unnecessary and insulting. (Mondo 2000; 1992: pg. 54)

The hackers and crackers have always been connected with BBSs from their inception. The stereotype of these individuals helps to paint the myth of the BBS user in the public eye. William Gibson has extrapolated on the above themes to create his world of the 'Neuromancer'.

Night City was like a deranged experiment in social Darwinism, designed by a bored researcher who kept one thumb permanently on the fast-forward button. Stop hustling and you sank without a trace, but move a little too swiftly and you'd break the fragile surface tension of the black market: (Gibson; 1984, pg. 23)

From the early days of the BBSs and the migration of its users to the Net, there has been an atmosphere of an open system devoid of authority. The above lists and describes some of the individuals on the Net and their activities. These individuals are seen to be loners acting out their egos; but it is not all one way individuals attacking or having contempt for authority. This is an open system and attacks and behavior that would be condemned in state-society continue on the Net. As Dan Gillmour⁶ a frequent commentator and reporter of the Net, reports in his article, 'Openness of Internet double-edged', Government sanctioned hacking is also occurring. (1999) "All over the globe, governments are desperately trying to limit their own citizens' access to materials deemed inappropriate or dangerous." (Gilmour; 1999) According to Gilmour, the attack on a Dublin, Ireland ISP that temporarily shutdown its site because of a cyber-attack was masterminded by the Indonesian government. (Gilmour; 1999) At this Irish site, materials were published supporting the independence of East Timor, (a former Portuguese colony). What the Irish had done was create a 'virtual nation' by having a top-level domain name attached to the East Timor website. (Gilmour; 1999) The establishment of the '.tp' domain name created a semi-official presence for the site. The Internet has played a role in publicizing the plight of East Timor and its occupation by the Indonesian government. Recently in 1999, talks have been going on between East Timor representatives and the Indonesian government to grant independence to the former Portuguese colony. In this same article, Gilmour states that according to some accounts, the Spanish government was also involved in a electronic letter

bomb campaign against a San Francisco Web site that published material for Basque separatists.(Gilmour; 1999)

Identity on the Net is a contentious issue, it's a two-way street. For the most part although this is changing rapidly, you can't see or hear people on the Net. Communication is done by the exchange of text and graphics and the identification of users is often hidden to some extent. In fact, in Internet situated role playing games, identity is almost always hidden, its part of the game. MUDs³⁷ are places where one is expected to do this. In these electronic role playing games you can choose multiple identities. This tactic of hiding or disguising one's identity is a common theme on the Internet. Use of such devices as re-mailers are often used to send e-mail to recipients without the receiver knowing who sent the message. This phenomenon is part of the idea that the Net is an environment of free speech. But the name of the game on the Net is information and the more you have the more powerful you are. There are a number of devices and ways to collect information. But because of the 'swamp' of information on the Net, the automated gatherers are often seen as the best way to gather information across the entire Net. Search engines are software devices that do searches of their own database for answers to your queries. Mobots and agents are also software but these devices go out onto the Net and look for material through the parameters that you have specified. However, it is the use of tools like 'cookies' that continues to help give the Internet an atmosphere that all things 'out there' can not be trusted.

Cookies are text files saved in your browser's directory or in RAM while your

³⁶ Dan Gillmour writes for the San Jose Mercury News on Internet and computer technology issues

³⁷ Muds are multi-user dungeons from the board game Dungeons and Dragons, a utopian fantasy where individuals can log on and share their fantasies with other users.

browser is working.³⁸ Cookies gather information about users. These cookies are picked up when you visit certain web sites. They are used to gather information about the user while the user is visiting a web site and, if the user returns to that web site the information previously collected can be passed on to the web site. Many commercial web sites use these devices so that repeat customers or potential customers can be identified. These devices can store your preferences for certain information or if a site requires a password, these devices can remember your password. Commercial organizations can use this information to build databases of potential customers for distributing advertisements or selling to other commercial organizations. Cookies can also store e-mail addresses and can be used to spread computer viruses. Or, they can be used to search a users hard drive for such things as social insurance or credit card numbers. Cookies have a great potential for abuse, both by users, corporations and governments.³⁹ These cookies can carry unique ID codes and thus can be used to trace individuals while they are on the Net. The inventor of the 'melissa' virus was caught in just this way.⁴⁰ Clicking on an advertisement on a website can send a cookie to the users machine next time the user visits that site or any other site that have cookie collectors. "... [O]nce your identity becomes known to a single company listed in your cookies files, any of the others might know who you are every time you visit their sites."⁴¹ Software is now available to clean out a user's hard drive and keep those cookies that the user deems important or useful.

The Web and the Internet as defined as a space, is also seen as a space of resistance to state authority. A series of revolutionary groups have used this media to put out their

³⁸ found at www.cookiecentral.com , a site dedicated to the use of cookies on the Internet

³⁹ comments from cookie central

⁴⁰ CBC National News 05/04/99

⁴¹ found at cookie central, www.cookiecentral.com

message. Mexico's Zapatistas were one of the first groups to use the Net as a vehicle to broadcast their message and ask for help from the rest of the world. Even right wing groups in Columbia have used the Net to broadcast their political positions.⁴²

The Southern Poverty Law Centre in Montgomery Alabama which tracks hate groups in the US has stated that because the Net is cheap and an efficient means of communications, hate groups have flocked to the Net.⁴³

The nastiness of the Net is the one element, in my opinion, that is most often mentioned when talk comes around to restricting the activities on the Net. There are no statistics on how much pornography, hate mail and hate literature are currently on the Net. But, these are the elements that make some of the best news-media headlines: and, these are the elements cited when control is mention. The above paragraphs in this section are minor in their quantity on the Net, but they help to keep alive the idea that the Internet is a space with a dark side and an adventurous side. But for most users these negative elements are rarely seen, for the most part the Net is a jumble of information that must be navigated and explored.

4.1.2 'Above ground'

Marriages and funerals have all been put on the Web.(Rheingold; 1994) Many of the activities that people participate in off the Net can be found on the Net. But the potential for international attention has created other forms of 'every day' information.

Webcams which are cameras that take pictures and transfer those pictures live onto the Web have been popping up with regular frequency. The web sites with these devices often show 'regular' people living their lives in their own living rooms, bedrooms and office

⁴² Samer Muscati 'Rebels found lurking on the Net', Globe and Mail , 14/01/99, C6; however, it has been common knowledge that 'fringe' groups are using the Net to disseminate their messages.

spaces.(Talbot; 1998)

Jaypoc HomeCAM - They say Home is where the heart is. I say home is where the color cam is :) Take a look into my mornings, evenings, and nights. This cam is live almost, in my bedroom. I try to keep it dialed up all the time so take a look. ⁴³

The people who have set up these sites are seen as more than exhibitionists, for many it's a way of packaging their lives and seeking a kind of community.(Talbot; 1998) Though a few of these sites are 'adult only', most depict common every day scenes of work areas, city streets and backyard gardens. To me in exploring a number of these sites, people are using the Web to connect themselves and others to their lives. It is a way of reaching out to the 'believed' community that is 'out there'.

Anyone with access to a computer and modem can be a publisher on the Net with world wide distribution. Webzines are on-line magazines that often are unofficial celebrity fan clubs or takeoffs of 'official magazines'. Copyright seems to be ignored on the Web. A common practice in designing Web pages is to 'lift' materials like graphics from other sites.

Over 150 scientific journals have been put on line, however, the New England Journal of Medicine will not publish articles that have appeared in whole or in part on the Net first. The reason for some journals going on-line is the cost of producing a paper edition and, its distribution is too slow.

Putting discussions on the Net gives individuals a world wide audience. Thus, one finds that discussion groups abound. They range from the serious to the frivolous. Examine any list of on-line news groups on Usenet and you will see over 3000.

Web sites also range from the serious to the frivolous. The University of Waterloo website offers hotlinks to many research and writing tools like the Network Acronym

⁴³ Associated Press; 'Internet boon to hate groups, report says', Globe and Mail, 04/03/98, A4

⁴⁴ found at www.jaypoc.com/livecam

Server in Ireland, Roget's Thesaurus⁴⁵ and, the Webster dictionary.⁴⁶ Also offered on the Web are sites that are not serious such as 'Worst of the Web'⁴⁷.

Education opportunities also exist on the Web with different universities now offering degree credit courses over the Net. In a commentary in the *Globe and Mail* newspaper, Thomas Klassen notes some of the advantages and disadvantages that the use of the Web is having on his profession as University lecturer. (Klassen; 1998) He points out that by posting his lectures on the Web he has more time in class to devote to 'discussion, debate and analysis' rather than spreading basic information. (Klassen; 1998) However, he warns that the technology used in giving this advantage also has the potential to make university courses into 'courseware'. Klassen warns that this new medium may result in faculty members being 'robbed of their knowledge, skills and control over their working lives'. (Klassen; 1998) Furthermore, Klassen sees the Web reinforcing social-class distinctions as wealthy students can access material from home while poorer students must compete for limited computer facilities on Campus. (Klassen; 1998)

4.2 Making Money on the WEB

Money makes the world go round, but you'd never know that by looking at the growth of the Internet. In its current state, the Internet is a social phenomenon, a cooperative community designed to help researchers work together and give ordinary citizens direct access to the raw materials of knowledge. Best of all, its essentially free. That is about to change. (Bott; 1994, pg. 130)

From a business point of view, the Web is still an enigma, exactly how one makes money is not well known and is suspect by many who frequent the Web. Author John

⁴⁵ tuna.uchicago.edu/forms_unrest/ROGET.html

⁴⁶ c.gp.cs.cmu.edu:5103/prog/webster

⁴⁷ turnpike.net/metro/mirsky/Worstinstruct.html, Turnpike is an ISP but mirsky's 'worst of', has disappeared as of January 1999

Dvorak, in a PC Magazine article, laments that as a writer the possibilities of making money off of the Web seem remote if the Internet and the Web continue on their current course. "People have come to expect something for nothing on the Web, and publishers of on-line content have turned to advertising rather than imposing user fees." (Dvorak; 1996, pg. 85) A comment that is heard on the Net repeatedly is that the Internet lost its charm when big business discovered it. Web sites have a problem making money. In the case of Slate magazine produced by Microsoft and edited by Michael Kinsley the strategy was to make the site free and give the publication away then start charging subscribers. No takers. Kinsley, ran up white flag. (Kapica; 07/02/97) The Wall Street Journal, used similar tactics but readership dropped from 655,000 to 50,000 ; considered by the 'Journal' as a best success. (Ibid.) Wired magazine which tracks the high-tech industry and 'computer culture', originally asked its readers to register, but soon abandoned this. News media finds only back issues sell. Breaking News, even though the web can deliver it faster, just won't sell. This suggests that once users get something for free they are unwilling to pay for it. Adverts on Web pages are not attracting customers, only 3 - 13% click on ads that go to advertiser's web sites. (Kapica; 07/02/97) Some say the Net is too young and full of recycled material. There is a vision of the Internet as little more than a medium for sensation-seeking tourists. (Kapica; 07/02/97)

Yet businesses are flocking to the Net. The Economist reported in 1995 that businesses were the fastest growing entity on the Net that year. Businesses both big and small are using the Net and the use of advertising seems to be everywhere on many Web pages. But big business does have an advantage; in that, designing and maintaining Web pages costs time and money in order to continually attract customers. Some companies have positioned themselves via the Web, in unique positions that give themselves the maximum

exposure. The big software companies that have control of the Web browsers have designed their software so that you visit their home pages first before you continue on your Web journey. Both MicroSoft's explorer and Netscape's Navigator (browsers) have setup their software so that they become a users 'portal' to the Internet. Search engine sites are also vying to become the portals for Internet access with the offering of other services such as e-mail accounts and other free services. When you do searches on the Web, you start at their sites. Because most people accept this, these companies have an almost captive audience to their pages and these pages are full of advertisements, contests and attractive graphics. Even the big ISPs have got into the act of selling advertisements on their home pages. With the advancements in secure transferring of information on the Net, using a credit card to buy goods on the Net is one of the happenings that has started to make Internet commerce grow. Amazon.com a large on-line book ordering house has been doing unexpectedly well these last few years as customers find it convenient to order books and now other goods on-line.(Bayers; 1999) Other companies such as AMWAY have also got into the act.(Hamilton; 1999) The spectre of the nastiness of the Net has businesses that use the Net complaining that more control of the Net is needed. These sentiments have furthered businesses and governments to suggest that an 'Internet 2', or commonly called the 'super highway' should be set up where security, especially privacy, can be built in from the start. However, business does not necessarily want government-interference and different governments can't agree on how commerce on the Net should be policed.(Hill and Baxter; 1998) But, it is unclear that the users of the Net would be attracted to this new network. If users are attracted to the Net for its supposed freedom would they move to a computer network which seems to be controlled by either 'Big government or Big business'? For now the Internet is the only 'public' system available.

Electronic commerce, (e-commerce), on the Net is a billion dollar business. It has been reported that \$2.6 billion was done in 1996 and it is expected to grow to over \$200 billion by the year 2002.(Anderson; 1998) With this expected growth comes the inevitability of taxes. At present on-line commerce is not being taxed and in the US a moratorium on taxing for three years is now negotiating its way through the House of Representatives after passing the Senate.(Anderson; 1998). In March of 1995 at a G7 countries Summit meeting, Heads of State were urged, by the Canadian delegation, to tax electronic currency trades. The reason for this was said to be to finance human-rights work.⁴⁸ What was proposed was the Tobin tax, first introduced by Nobel winner US economist James Tobin in 1978 to tax the growing currency trading at the time. The concept was never put into legislation but, Inge Kaul, then director of the Office of Development Studies for the United Nations Development Program suggests that even a tax of .05 % on transactions would yield 150-Billion yearly. (Picard; 1995)

The Net has become an electronic market place where goods are bought and sold, stocks are traded and information is exchanged and money is being made. Business can envision an international code of conduct for e-commerce but they don't want government action.(Hill and Baxter; 1998) Business wants a deregulated system with the corporate world setting the rules and providing the enforcement.(Ibid.)

⁴⁸ Canadian Press , 'World News', Globe and Mail; 28/03/95, A6 -

5. Governance of the Net

Open any newspaper or listen to any news report and chances are there will be a story about the Internet. Many of these reports highlight the negative side of the Net. Pornography, threats, break-ins, viruses and crackers seem to dominate Internet story headlines⁴⁹. "Internet Porn results in arrest" reads the headline concerning the arrest of an Ottawa scientist who worked on classified projects for the Department of National Defense.(Feschuk and Hess; 1996) "The Net cops who crack down on 'spamming'⁵⁰" reads another headline about the policing actions of self appointed guardians of the medium. (Kapica; 29/12/95) In 1995, the notorious computer criminal, Kevin D. Mitnich was finally convicted of a number of computer related crimes. These crimes ranged from "breaking into a California motor vehicles database, lifting 20,000 credit card account numbers from an on-line service, gaining control of New York and California telephone switching hubs via modem, eavesdropping on phone calls, mutating basic home telephones into quarter - basic pay phones, and slashing data he filched from other networks in files of the California - based Well on line service."⁵¹ Reactions to these conditions have come in the form of new software to prevent children from accessing sites which their parents have deemed inappropriate; cries by some that more policing of the Net is needed; demands by others to stop all forms of censorship on the Net; and others to lament on the anarchy of the 'space' the Net occupies. A number of the legal cases that are brought before the courts have been

⁴⁹ A majority of these stories seem to be about Pornography and the Net and it is interesting to note that a number of these stories end up in the Business Section of the Newspapers, especially the Globe and Mail.

⁵⁰ Spamming gets its name from the luncheon meat, Spam a spiced pork mixture. On the Net, spamming means to flood news groups and/or e-mail with the 'junk' messages. The Coalition Against Unsolicited Commercial Email is the main group that looks at spamming and other email problems. Their at www.cauce.org,

⁵¹ Byte magazine; News Briefs, Sept. 1995, pg. 151

challenged by civil libertarian groups. These groups such as the Electronic Frontier see the Internet as a free speech zone. Governments for their part, have taken a good look at some of its legislation to see if it can cover the jurisdiction of the Internet. One reaction is new legislation used to police the Internet within the state's given territory. But these reactions are continually thwarted by the fracturing and networking capabilities of the Internet.

As stated before, each state's reaction to the Internet is unique because of the different histories of telecommunications in that state. The Internet, the Net, is a worldwide happening or so it is portrayed and; at present, this network seems to be headless without any direct control. But the optimal word here is 'direct control'.

5.1 International Governance

Governments have been involved with the Net since it's very beginning. Governments also control and regulate the telephone and communication lines within their own boundaries which has a direct effect on costs and conducts of Internet Service Providers (ISP). However, a geopolitical response to the Net is lacking due to the different nations and governments being isolated from each other in their actions towards the Net. This goes contrary to the Net itself, an international communications phenomenon.

In 1995 the Costa Rican government declared that private companies that were seeking access to the Net would be denied because the government considered access to the Internet as part of the State's monopoly on telecommunications.(McPhaul; 1995) But yet, governments do not control the Net. The legal statutes of many countries have not taken the Internet into account. Many aspects of our legal institutions are still dealing with 'ancient paper laws' and have not accepted the reality and conditions that the Net presents. Ethan Katsh, author of 'Law in a Digital World', states:

The process of change that will occur as spatial constraints affecting the structure, organization, and practice of law are relaxed is not something that can be easily measured or monitored. It requires us to look at law not simply as a set of rules or as a group of persons who provide a service, but as an institution that has, over time, adjusted to traditional spatial constraints in a variety of ways. It requires us to look at the reasons that lawyers or legal institutions are adopting some technology but at what actually happens to the individual and the institution when the technology is used. One should focus attention, in other words, not simply on whether the needs of the purchasers or users have been met, since that may only reveal changes in the "bottom line" and whether or not the technology will continue to be used, but whether the purchaser's behavior changes, whether new relationships are formed, whether there is access to and use of new and different kinds of information, and whether patterns of interaction occur. (Katch; 1995, pg. 56)

Katsh continually emphasizes the importance of spatial transformation as a result of the digitizing of information and its means for distribution. (Katch; 1995, pg. 56)

In the International arena, the Net has been called a place of anarchy⁵². But yet, the United Nations has jurisdiction internationally in the area of the actual physical lines and satellite link-ups, through the auspices of the International Telecommunications Union (ITU); and therefore too, has a indirect say in how the Net is to be controlled. The ITU is responsible for development of international regulations and treaties governing all land based and space (and air space) base uses of the radio frequency spectrum and it helps develop standards to facilitate the interconnection of telecommunication system on world-wide. The ITU also helps in the development of telecommunications in the 'third world'. Recently committees associated with the ITU hosted a meeting in Geneva to discuss the naming convention used in Internet addressing. (Giussani; 1997.)

The establishing of the 'naming' conventions for Top Level Domains (TLD), is one of the important methods for controlling growth and traffic on the Net. This control I

⁵² The Net has been called a place of anarchy because it has no governing body that looks after the whole Net. As Sterling has mentioned in the chapter on the history of the Net, there is no Internet Inc.; that is, there is no specific group that hierarchically controls the Net. The Net is just a series of connections between different networks with each network looking after itself.

believe invokes what Foucault termed the 'disciplinary matrices of power'.(Best and Kellner; 1991, pg. 47) These 'naming' conventions do help in the orderly control of the Net but they also can be used for the imposition of regulations and surveillance measures. These rules help to enforce a conformity and punish resistance. In the past, 'naming' was done in the US by the National Science Foundation; but, it was later moved to a private company Network Solutions Inc.(NSI).(Best and Kellner; 1991, pg. 47) It is from this private organization that lists of top names are distributed to the different networks on the Net, thus enabling these networks to properly distribute information to its intended locations. The NSI is the main administrative body that registers TLDs; however, it takes its directions from the 'official' body that does registration, the IOSC and the Internet Assigned Numbers Authority. Other countries do have a version of the NSI but these organizations are only recognized in their home country.

The Internet Society (ISOC), is the international organization whose mandate is to co-ordinate and co-operate with the standardization of related inter-networking technologies both in the realm of setting standards and promoting education of these activities world-wide.⁵³ "From commerce to education to social issues, our goal is to enhance the availability and utility of the Internet on the widest possible scale."⁵⁴ The Society which is 'housed' in Reston Virginia is governed by its Board of Trustees elected by its membership from around the world. The fact that the society is located in Virginia, however, suggests the possibility that the society could come under the influence of the United States' sovereignty. The members of this society come from the individuals, companies, government agencies, and foundations that have helped to create the Internet and its technologies as well as new

⁵³ Found at the official web site of the ISOC, www.isoc.org

⁵⁴ ISOC, www.isoc.org

entrepreneurial organizations. This society is also home to the IAB and the IETF.

The IAB (Internet Architecture Board) is responsible for the technical evolution of the Net. The Board provides an oversight for the architecture and procedures used by the Internet. The IAB also provides guidance on Internet Standards and serves as an appeal board for complaints of improper execution of these standards. The IETF (Internet Engineering Task Force) is a component of the IAB and is responsible for developing Internet standards for review by the IAB. All these 'boards' are chartered by the ISOC including IANA.

The principal authority that looks after the address numbering system for the Internet is the IANA (Internet Assigned Numbers Authority). In the past the assigning of Internet numbers (addressing) was done by the Defense Advanced Research Projects Agency (DARPA) associated with the US military.⁵⁵ IANA is now supported by the US National Science Foundation, which also sets guidelines for the Numbers Authority.⁵⁶ At present (1999), IANA is moving towards becoming a not-for-profit organization with an international Board of Directors.(IANA, see foot note 55) Its new stated goal is to "preserve the central coordinating functions of the global Internet for the public good".⁵⁷ At present the facilities for IANA are located at the University of Southern California and the proposed 'new entity' will be incorporated in the US.(IANA, www.iana.org) "The United States government is expected to oversee operations for a period of time until pricing and management is secure."(IANA, www.iana.org) All the above organizations are technological societies and have very little legal clout; however, they do have control of the naming conventions for Internet addressing.

⁵⁵ Found at the official web site of IANA, www.iana.org

⁵⁶ IANA, www.iana.org

Who should control the Net? Governments obviously wish to control or regulate computer communications within their own realm of influence and their territory. However, it should be noted that a number of governments and individual government institutions actively participate on the Net along with a great many national and multinational businesses. The problems begin when these computer communications cross several jurisdictions.

5.2 US Governance

The birth place of the Internet is the United States of America and it is also here where the main technical societies reside and a majority of the Net users dwell. The U.S. government has tried to put into place a number of laws and restrictions to try and control / protect its citizens from what this state sees as harmful on the Net. The government also can tax ISPs. The Federal Communications Commission (FCC) voted on May 7, 1997 to substantially alter the rates that ISPs pay for modem lines into their facilities. As one ISP provider stated, "lets call it what it is a Modem line tax".(Junnarker; 1997) However, this FCC decision did help to appropriate 2.25 billion dollars for helping schools and libraries in the U.S. connect to the Internet.(Ibid.)

Pornography on the Net has been used as a reason for not allowing citizens in certain countries access to the Net. It has also been used to initiate new regulations to control content on the Net. The United States Communications Decency Act in 1996, (CDA) tried to control and thwart the ability of Service Providers from allowing pornography on their sites which was seen as open to children by the fact that the information was on the Net. The CDA criminalized "the transmission of any comment, request, suggestion, proposal,

⁵⁷ IANA, www.iana.org

image or other communication which is obscene, lewd, lascivious, filthy or indecent”, according to one of the bill’s initiator Vermont Democrat Senator Patrick Leahy. (Fraser; 1997) The Act was also sponsored by Indiana Republican Senator Dan Coats.(Ibid.)

The reason for the act was to protect young surfers from coming in contact with pornography and other lascivious material.(Fraser; 1997) And yet, no comments were made concerning other dangerous material on the Net, like information on the construction of weapons. It is not that such information can not be found off of the Net; but, that the Net helps to cut down the amount of research needed to collect this information. According to Senator Leahy, it would be the government that would decide what was considered lascivious material.(Fraser; 1997) The question became how far can the government go in regulating such activities on the Net like E-mail, Usenet groups and Web sites.

The US Supreme Court struck down two of the 1996 CDA’s main provisions on June 26, 1997 stating that “ the interest in encouraging freedom of expression in a democratic society out weighs any theoretical but unproven benefit of censorship”.⁵⁸ “In order to deny minors access to potentially harmful speech the CDA effectively suppresses a large amount of speech that adults have a constitutional right to receive and to address to one another.”(Stevens; 30/06/97 pg A17, see foot note 58) Senator Coats reaction to the Courts decision was stated that the ruling was “telling parents to abandon any hope of a decent public culture”.(Fraser; 1997) The law had been challenged by more that 20 groups including the American Civil Liberties Union, the American Library Association, America On-Line and the American Society of Newspaper Editors.⁵⁹

The defeat of the U.S. CDA by parameters set out in the US’s Constitutional first

⁵⁸ Majority decision by Justice John Paul Stevens, Globe & Mail 30/06/97, A17.

amendment helps to support the idea that freedom to access any information is a 'right' on the Net.

Pornography and hate literature is available on the Net. But the amount and the availability reported in the Press seem to be over stated. Time magazine reported a survey by Carnegie Mellon computer student Marty Rimm who claimed that 80% of the pornographic material on line is hard-core porn.(Kapica;. 29/12/95) There is massive evidence to the contrary.(Ibid.)

What the defeat of the CDA and other general complaints about material has produced on the Net is software to filter out "indecent" material and a rating system for web sites⁶⁰, and the spawning of self appointed 'police' who on occasion have letter bombed many of the well known offensive sites. (Kapica;. 21/12/97) However, these approaches are problematical; self appointing is self serving. Though the motives of those that appoint themselves as 'police' may be egotistical, the fact that it is being done suggests that the anarchical nature of the Net is alive and well; and yet, the self discipline of Kropotkin's anarchy is not necessarily present. Restrictions "won't stop anyone from surfing to a Web site from the unsupervised comfort of home...[and] trying to apply U.S. criminal laws to an international system such as the Internet is impossible." (Kapica;. 21/12/97) There is a feeling on the Net that it can police itself. Historically, regulations have tended to respond to new technologies after they have been put in place and often reacting repressively when the new technology threatens the status quo.(Human Rights Watch; 1992) One of the strategies that law enforcement agencies have used to try and regulate the Internet is to try and consider Internet providers as responsible for the content that its users provide.(Ibid.) In

⁵⁹Associated Press; 'US Internet censorship law struck down ', Globe and Mail , 27/06/97, A12

⁶⁰ www.rasc.org

1991, CompuServe, an ISP, was cleared of a libel suit because they did not try to edit the content of their electronic forums; however, Prodigy, another ISP, lost its case where it was found that they did censor their forums.(Morin; 1995, pg. 34) The C.D.A. part of the US Senate's 1995 Telecommunications Bill, did make ISPs responsible for content that passed through their networks.(Ibid.) What this would mean is that ISPs would have to monitor 100s of megabytes of traffic every day.(Morin; 1995, pg. 34) Moreover, according to the Human Rights Watch, there are a myriad of laws that have a potential impact for the Internet.(Human Rights Watch; 1992) As mentioned previously, the C.D.A. was ruled unconstitutional. Reaction to the Defeat of the C.D.A. left many unanswered questions. Such concepts as; what is 'indecent', what should be the status of encryption.

In the U.S. such laws as "the Privacy Protection Act, Freedom of Information Act, Wiretap Act, Paperwork Reduction act, sunshine laws, obscenity laws and laws regulating copyright, trademark, interstate commerce and product liability" have yet to consider the Net.(Human Rights Watch; 1992). Many of these laws have not been 'tested' on Internet transactions. However, for most criminal activities the US government can be seen to be policing the Net. US officials tracked down and charged an Argentinean student who was hacking into US Naval computers in 1996. This incident was the first time court approved wiretapping was used.⁶¹

5.3 Canadian Governance

In Canada, the Canadian Radio-television and Telecommunications Commission (CRTC) is the regulatory commission that has jurisdiction over all telecommunications in the

⁶¹ Associated Press; 'First Internet Wiretap Leads to a Suspect',New York Times ,31/03/96, A20. The charges laid were not for extraditable offenses under the American-Argentine treaties.

country. Starting in 1995, the commission has been looking into the convergence of the different information technologies in Canada.(Surtees; 1995) This inquiry is considered the first time both telecommunications and broadcasting have been examined since the establishment of the commission.(Ibid.) From the opening round of talks there has been a widespread interest in the hearings, with the CRTC receiving 950 submissions and inviting some 84 groups to appear before the inquiry.(Surtees; 1995) Though the hearings are centered on the competition between the telephone companies and the cable companies, Keith Spicer, then-Chair of the commission(1995) is reported to have said that the main issue of the hearings is to see what kind of playing field is needed.(Surtees; 1995) The commission had a series of important issues to consider that could dramatically alter the telecommunications landscape in Canada, this includes the Internet. What is on the table are the rules for commercial competition and access on the Internet, Canadian content rules and, definitions of who is and who is not a broadcaster. Though much of the talks are concerned with setting the rules for the convergence between the telcos and the Cable companies, access and competition safeguards were also on the agenda. Numerous groups at the hearing were putting forth the idea that the Net must be universally accessible.(Surtees; 1995) At present the government is calling for voluntary policing of each ISP's site by the ISP themselves.

In Canada, Federal Justice Minister, Allan Rock has welcomed as 'common sense' a decision by iStar, Canada's largest Internet provider, to block access to child pornography sites. A task force sponsored by Industry Canada has recommended that the Government try to control hate propaganda and obscenity on the Internet.⁶² The whole area of pornography and digital reproduction is a complex issue and may never be finalized in the

⁶² Canadian Press, 'Pornography cutoff; 'common sense', Globe and Mail, 13/07/96, A4

courts. A man in Hamilton, Ontario was indicted for possession of pornography after he took his computer in to be repaired and the technician reported finding pornography to the police. Currently this is a very gray area in Canadian law. Did the technician have a right to examine material on the man's hard drive, does material stored on a computer constitute possession? A number of Web 'browsers'⁶³ store 'front pages' of sites that you've visited to speed up connectivity to frequently visited sites. The argument that possession of pornography from the Internet saved on a computer's hard drive constitutes a crime has been challenged by several computer experts.⁶⁴ "The question is, when do you physically possess it?", questions Geffry Shallit, a computer science professor. (Globe and Mail, 13/07/96 'Pornography cutoff; 'common sense' - Staff Ibid.) The openness of the Internet adds to the feeling that some control by the state has been lost.

It should be noted that until the advent of the Internet, telephones and telegraph companies along with TV cable companies were considered 'common carriers'⁶⁵ in other words, they were not responsible for the content or messages that were carried over their lines. Broadcasting companies, Radio and Television, were seen as broadcasters and were responsible for their content. Today with the integrating of many different technologies, the Internet combines both aspects of the 'common carriers' and broadcasting. Those that run electronic bulletin boards or provide Internet services can see themselves as publishers, librarians and broadcasters all this being done over the common carrier of telephone lines. Part of the concept of common carriers is that it is providing transmission facilities for use by others while broadcasters are not in a position to offer its facilities to other

⁶³ Web Browsers are software that are used to 'surf' the Net.

⁶⁴ Canadian Press, 'News brief', Globe and Mail, 26/05/97, A4

⁶⁵ In Canada by law those companies that are deemed 'common carriers' are required to carry messages of any user without unjust discrimination, at a fair and equitable rate without interfering with the contents of the messages. (Telecommunications and Canada, Minister of Supply and Services Canada 1979, pgs 17-18)

parties.(Telecommunications and Canada; 1979, pg. 18-20) Also, there is to be a distinct separation between content and carriage; however, as the different industries try to expand their services and push into areas once considered the domain of traditional services the lines between carrier and broadcaster become blurred.

In Canada as of 1999, many of our laws have not considered digital media or the Internet. The Copyright Act in Canada was amended in 1997; however, nothing was passed that directly concerned itself with copyright issues on the Net.⁶⁶ Industry Canada published a study called 'The Cyberspace is not a No Law Land'.(Racicot et al.; 1996)⁶⁷ This report looks at how Canadian Law can be applied to govern content on the Internet in various areas such as copyright, privacy and hate and child pornography literature. This study concludes that overall, existing Canadian laws are adequate to deal with the Internet. This can be seen in the number of recent arrests relating to pornography on the Internet. The report's authors found no glaring problems that mandate massive legal intervention. However; if, upon additional study some statutes need to be changed, they should be minimal and technologically neutral.(Racicot et al.; 1996)

The study also finds that the most difficult cases are not those that directly infringe the law (be it privacy, intellectual property, Criminal Code, etc.) but those that do so indirectly. In these instances, assigning liability is dependent upon the jurisdiction and the statute involved (participation provisions of the Criminal Code, the right to authorization under the Copyright Act or various liabilities under civil or criminal law).(Racicot et al.; 1996) In general, the more knowledge or control one has over the content, the more likely one is held liable. This does not mean, however, the less you know, the better off you are, as

⁶⁶ For more details on Canada's Copyright Law please see http://www.pch.gc.ca/culture/cult_ind/copyle_e.htm

⁶⁷ found at Industry Canada's web site strategis.ic.gc.ca

this is a socially, if not legally an irresponsible attitude. The authors believe that it makes good business sense to be good corporate citizens. This approach can be seen in the Canadian Association of Internet Providers' (CAIP) voluntary Code of Conduct.(Racicot et al.; 1996) "Overall, Canada should seek to maintain a balance between the rights of all stakeholders while preserving basic Canadian values such as freedom of speech, privacy and the prohibition of illegal and offensive materials." (Peters; 1997)

In the chapter on illegal and offensive content on the Internet, Catherine Peters suggests that there seems to be no way to effectively block offensive material on the Net. She suggests a number of possible solutions but concludes that they would be either technically difficult to implement or logistically impossible to manage. One possible solution would be to have multiple firewalls⁶⁸. But, Peters realizes that this method of blocking offensive material would be a major technical challenge.(1997) The cost of such an infrastructure would become prohibitive given the exponential growth in Internet traffic.

A firewall cannot block information that is not routed through it. An Internet provider can easily connect to the outside world by connecting to an American, European or Asian network with no government involvement. Another possible method of control would be by giving preference to Canadian Internet sites in search engines and other network navigation tools.(Peters; 1997) But, telling which sites are Canadian and which are not can be a difficult problem when some of the naming conventions don't always suggest where the site is located.(Peters; 1997) A final method discussed by Peters would be "to license Internet content providers to enforce some arbitrary rules to promote production of Canadian content. This is the model used in broadcast endeavors. The Internet, however, is not a broadcasting medium."(Peters; 1997) Trying to legislate culture has always been a

⁶⁸ A firewall is a 'front-end' computer that screens traffic both into a site and out of a site.

contentious issue in Canada; an example would be the North American Free Trade Agreement. There are millions users on the Net, all have the potential to be a content producer through a home page. Control of this many users is not feasible.

In May of 1999 after a 10 month review of the Net, the CRTC stated that they would not try to regulate content on the Net.(Tuck; 1999) The Commission believes that the criminal code and self-regulation were sufficient to control 'offensive and illegal content'.(Ibid.) Chairwoman, Françoise Bertrand gave the opinion that regulations constructed to control content on the Net would cripple Canada's Internet industries.(Tuck; 1999) According to the newspaper report on the CRTC findings, "Canada produces about 5 per cent of worldwide Internet content; about 5 per cent of all on-line material is produced in French".(Tuck; 1999) It was also noted in the newspaper article that the vast majority of the submissions to the CRTC were in favour of the CRTC's 'hands-off' approach.(Tuck; 1999) There were a few objectors, both in the area of those that fear the Net is too open and those in the Broadcast Industry that fear the openness of the Net will cut into their businesses.(Tuck; 1999) In a lead Globe and Mail editorial⁶⁹ the next day, the editorial writers praised the CRTC's decision; in the 'Letters to the Editor' of this edition, one commentator felt the CRTC had abdicated its responsibility to Canada while another reiterated with tongue-in-cheek a common sentiment heard at the hearings of the CRTC: "Regarding the CRTC decision not to regulate the Internet: According to my informants, they also decided not to regulate weather and teenage hormones".⁷⁰ In other words, many felt that regulating the Interent was an impossible task.

⁶⁹ 'Net gains for the CRTC', (Editorial), Globe and Mail , 19/05/99, A14

⁷⁰ comments by Jerry McNabb, Letters to the Editor, Globe & Mail, 18/05/99, A14

5.4 Internet Governs itself

On the Net itself, there is an informal set of rules that are supposed to guide users. 'Netiquette'. Net etiquette, sets out some of the basic behavior that users should adhere to. But these 'rules' are not enforced and compliance is self-regulating. However, site managers or system operators (sysops) can censor material into their site by filtering out any material from specific sites. At Ottawa's National Capital freenet, former head, David Sutherland comments that technically this freenet does not censor news groups(Bobak; 1995); however, this freenet gets its Internet feed from Carleton University where a number of the objectionable news groups have been filtered out. When these news groups were censored at Carleton, many users did complain about the arbitrariness of the blocking. Each site sets its own policies. Some Canadian ISPs have developed a code of conduct for their members. The Canadian Association of Internet Providers has developed a seven point code of conduct for its members. which represent some 10 percent of ISPs in Canada.(Rowan; 1996) However as stated in Rowan's article, this code has "no legal standing, and given the international nature of the Internet, is virtually unenforceable".(Ibid.) Many of the commercial Internet Service Providers don't see censorship has part of their job.⁷¹ There has always been a 'sense of freedom' on the Internet.

The Net has also spawned a group of individuals that have taken it upon themselves to 'police' the Internet. These people and groups are called 'Net Cops'. A number of Usenet groups and Web sites are dedicated to stopping 'spamming', pornography and other material that these individuals deem inappropriate on the Net.⁷² These groups and individuals are vigilantes and are not necessarily sponsored by any official groups or

⁷¹ From personal contact with a number of Internet Service Providers (sysops)

⁷² Newsgroups dedicated to 'anti-spamming' can be found at news.admin.net-abuse.misc, news.admin.net-abuse.announce;

organizations.

Brian Loader in his book 'Governance of Cyberspace'(1997), sees the two approaches to governance of the Net to be the 'Cyber-libertarians vs. the nation-state'. He does point out that the modernist forms of governance based upon territory, hierarchical managerial control are not adequate to govern the Internet. However, the authors that he has gathered for this edition do put forward a case that the Internet can be governed by states. Loader rejects the idea that the Net is a virtual reality because its content is directly related to the real world and he states numerous examples where public funding has played a direct role in setting up the Net. All the authors that Loader has gathered for this edition point out that though they believe that the Net can be governed by the state, some very fundamental changes must be brought about before this can happen. Klaus Lenk(1997), sees policing as the key. He believes that states must surpass their inherited concepts of space and territorial sovereignty and disentangle the different functions of space in order to police the Net.(Lenk; 1997, pg. 129) Lenk points out that letting foreign police into a state has been an anathema of the modernist state which will have to be overcome in order to police the Net.⁷³(Lenk; 1997, pgs. 129-130) The author notes that states are losing their 'Orwellian privilege of information detection'.(Ibid.) As he notes from the experience of the Gulf War, CNN often surpasses the secret service.(Lenk; 1997) Lenk believes that rational and purposeful design of information infrastructure is the way to go but he warns that as technical safeguards are built into these infrastructures parallel infrastructures may emerge where no safeguards are present. In the end the author believes that calming fears and upholding trust in our inherited mechanisms of governance may be all that can be done in

also, A Website, www.cauce.org

⁷³ This non interference would seem to have been shattered by NATO's involvement in Kosovo and Serbia

light of the modernist state.(Lenk; 1997, pg. 131, 132)

6. State Sovereignty

The state is consolidating on a world scale. It weighs down on society (on all societies) in full force; it plans and organizes society 'rationally', with the help of knowledge and technology, imposing analogous, if not homologous, measures irrespective of political ideology, historical background, or class origins of those in power...In this same space there are, however, other forces on the boil, because the rationality of the state, of its techniques, plans and programs, provokes opposition. (Lefebvre 1984; pg. 23)

Sovereignty is the 'moral' force that gives a State its legitimacy in ruling a territory. It is the final and absolute power within its domain. Through the ages the grounding of this 'moral' force can be attached to a deity, king, oligarchy and to 'the people'. The focus is always shifting. The right to rule, to have control of a territory, to control the actions of individuals within the demarcation of that territory has been legitimized under the auspices of sovereignty. However, as stated by F.H. Hinsley "[m]en do not wield or submit to sovereignty. They wield or submit to authority or power." (Hinsley; 1966, pg. 1) Sovereignty is not a fact but an assumption about political power, a justification for political control. (Ibid.) The term is the idea that there exists a "final and absolute authority in the political community." (Hinsley; 1966, pg. 1) And, no other authority exists within that community. (Ibid.) The concept of sovereignty is more than just an idea of philosophers. As Hinsley points out, it is a particular method by which political organization is achieved and its origins and its history are tied to the origins and history of the state. (Hinsley; 1966, 2-3) Its power, or even its proliferation within any community has never been complete and it is not uncommon for the community to limit its power under certain circumstances. However, as a symbol, sovereignty is the central instrument of rule. It becomes the framework for the administration of regulations between societal segments. (Hinsley; 1966, pg. 7) The conditions and manifestations of this concept are often seen as the foundations

of social order.(Hinsley; 1966, pg. 8) The concept of sovereignty is not an exclusive and originating theory of the state. Stateless societies can also claim sovereignty whether embodied in a 'king' or deity. However, historically as societies grow and become 'heterogeneous amalgamations of different peoples' the establishment of the state becomes the overarching force for holding different groups into a single political society.(Hinsley; 1966, pg. 13) Because of this diversity, state authority must rely on a 'structure of command'.(Ibid.) In its attempt to rule, the state relies more on the threat of physical force than on psychological or moral coercion to maintain power. However, the state does need support from within. Therefore, what also becomes necessary for state rule is the identification of the claims of the state to be seen as the needs of the community. As Hinsley states, the ruling of a society has "depended not only on the ambition and the power of rulers but also on the changes in the character of the community itself".(Hinsley; 1966, pg. 19) However, "The first emergence of the forms and institutions of the state seems often to have been the outcome of the power of men and their wish to rule, aided by accident and circumstances but owing little to the needs or the collaboration of the community".(Hinsley; 1966, pg. 19) There seems to be a balance between the community and the government, the legislative and administrative ruling body of the state. The strength of 'sovereignty' within a state is closely tied to the quality of the state's rule. And yet, the process and interaction between the state and the community is one of constant change. There becomes arbitrariness to this 'right to rule'. However, the 'community' or society is in reality a 'collection of communities' and in different aspects of the community, society, government and state must remain necessarily distinct.(Hinsley; 1966, pg. 21)

Sovereignty as an historical concept has never been static. Its definition and the relationship between power and rule is in constant flux; however, power and rule have a

special tie to the state which again has connections with its territory. With sovereignty has come a gradual centralization of the state, the basic elements that have helped in this centralization has been technical and economic sophistication which has in turn helped drive a quality of political and social existence. According to Hinsley what the above movement has created is “ a closer association between the community and the State”.(Hinsley; 1966, pg. 214)

One of the threats that states see from the Internet is how it seems to support international terrorism. As one official replied in support of more state intervention on the Net: “ they slip in and out of countries, exchange information on deadly weapons and plans over the Internet and launder money on the global banking system”.⁷⁴

In discussing the anarchy problematic, Ashley notes that Modern theorists have had to establish a foundational principle of sovereignty. And therefore, they ‘find’ the sovereign state.(Ashley; 1988, pg. 230, 231) Yet, this foundation seems to be ambiguous, and never settled.(Ashley; 1988, pg. 231) An arbitrary and shaky ground must be tolerated to validate this model of the sovereign state; and therefore, the state is excepted as an unproblematic rational presence.(Ibid.) Ashley labels this as a monological reading. “It proceeds from its surface representations in search of the ‘deep’ sovereign presence that structures its representations and supplies the conditions of their significance in modern culture.”(Ashley; 1988, pg. 235)

6.1. Simulating Sovereignty

In the international arena, sovereignty, as seen today, is an essential element in both international law and membership in the international community of states.(Hinsley; 1966,

⁷⁴ Staff, ‘world lacks counter terrorism plan’, Globe and Mail; 29/07/96, A1

pg. 215) But the concept has never been stable, yet it is this principle that is used to justify the rule of the state. Hinsley states; "It is a principle which maintains no more than that there must be a supreme authority within the political community if the community is to exist at all." (Hinsley; 1966, pg. 219) According to Cynthia Weber, sovereignty serves as the essential modifier of the state; with the realist tradition seeing individual states as their point of departure, and idealism taking a community of sovereign states as their point of departure. (Weber; 1995, pg. 1) These two paradigms have tended to dominate the scholarship of international relations; and yet, both seem to miss the historicity of sovereignty. The concept has not been invoked in the same manner for all times and places. And, a state's ability to 'do' constantly changes. Mosco observes that computer communication is leading to a rethinking of sovereignty. He cites Vernon and Spar to point to the fact that we are in a time of tension, "because governments are not yet prepared to give up control over their traditional domain". (Mosco; 1995, pg. 33) Vernon and Spar (1989), in their book 'Beyond globalism', note that in the late 1980s "practically all countries were conscious of the decline in their ability to control their boundaries". (Vernon and Spar; pg. 209) Though the authors are mainly concerned with US reaction to shifts in the global economy, they do capture some of the elements to these changing times:

This spectacular decline in the cost of moving goods, people, and -- especially -- information across national borders has left governments with little room for unilateral action and little choice but to find changed forms of mutual accommodation. (Vernon and Spar; pg. 3 also cited in Mosco; pg. 33)

The community mentioned above, can be either domestic or a norm of a community of States. The State acts in the name of a community. Weber says the concept is 'strategic', not stable. Weber is pointing out that the concept, and how it is used, is not so much a "location of the foundational entity of international relations theory", but more a location of political struggle. (Weber; 1995, pg. 3) What Weber has done in examining state

sovereignty is question its historical foundations and she has provided an analysis of the representation of the sovereign state by examining the logic of simulation which she suggests more truthfully considers the implications of the term. She has re-focused her investigation concerning the meaning of sovereignty from a logic of representation, “(in which referents [signifieds] and indicators [signifiers] are clearly demarcated)” to a logic of simulation , “(in which there are no ultimate foundations but instead a chain of interchangeable signifiers)”.(Weber; 1995, pgs. *xi –xii*) . What this does is move the concept of sovereignty away from being anchored by representational relationships to being set adrift by our own assumptions about what the concept means. And thus the invoking of state sovereignty becomes a strategic tool to justify intervention.

The idea of sovereignty is not a fact but a concept, but within this idea, authorities seek a legitimatization for their actions. Humans have not always been seen to be under its influence. Hinsley states, “the concept has been formulated when conditions have been emphasizing the interdependence between the political society and the more precise phenomenon of its government”.(Hinsley; 1966 pg. 2) Society and scholarship have grounded the source of this authority in deities, rulers and the people; however, the playing field or space where these activities are being played out is more or less seen as a passive component. The state as a symbol, represents a change from a multicentric location of power to a more centralized location of power. The framework of political activity moves steadily away from direct participation and homogeneity; political activity becomes more symbolic and distanced from the ‘every day’. The need for social order becomes the reason for being, for the state. Laws and regulations are invoked to give order and direction where chaos reigns. According to Hinsley, it is the organized authority of the state that best amalgamates different groups into a ‘single entity’.(Hinsley; 1966, pg. 13) And, again

according to Hinsley, a structure of command is steadily applied to a community. Thus 'authority' becomes more abstract and theoretical, and perhaps more arbitrary towards the population it rules. Weber argues that the examination of the concept of sovereignty is a struggle to fix the meaning of sovereignty and to show how this concept 'writes' the state – defines it (Weber; 1995, pg. 3) "This is not a one time occurrence." (Ibid.) Using the poststructural techniques of Micheal Foucault's three modalities of the power to punish, she traces "the shifting locations of sovereignty as constructed by intervention justifications". (Weber; 1995, pg. 31) What Weber suggests is that today both statehood and sovereignty are defined from a specific historical empirical referent, the post Second World War Western industrial nation-state and that this definition is universalized throughout history. What she concludes from her analysis of the Reagan-Bush Administration discourses is that sovereignty is simulated in order to justify political intervention and that the concepts of both sovereignty and intervention use one another to define themselves.

It is important here to examine how Weber comes to this point of simulating sovereignty. She asks the question, "what happens when it is no longer possible to represent sovereign foundations?" What she wishes to examine is the process by which the logic of representation fails and is replaced by a logic of simulation. (Weber; 1995, pg. 31) When Weber was looking at the 'shifting locations of sovereignty', she used techniques from Foucault's notions of power but as she notes "Foucault's theory of power depends upon some real object, signified, or referent which makes meaning possible. The referent may well be recognized as a discursive effect; nevertheless, a representational system of meaning would break down if there were no referent." (Weber; 1995, pg. 36) Jean Baudrillard also looks at symbolic order, but unlike Foucault, he does describe a category that falls into a post-representational logic. Weber uses Baudrillard's concept of simulation to describe the

conditions when the object, signified or referent is not based on reality. Thus when sovereignty is simulated, a “symbolic exchange takes place within a system not of representation but of simulation, a theory of the object must contain a theory not of transcendental signified or ultimate referent but of a simulacrum”.(Weber; 1995, pg. 37)

What I believe happens here if we accept Weber’s argument, is that in justifying intervention in the name of the state where no referent can be attached to a real foundation, sovereignty is detached from its foundational principles because the referents have no real value. Intervention is just power and the conditions here are not a copy of the real but a simulacrum that has an existence of its own. The corollary to the above is that control can be seen as arbitrary. Thus in the case where sovereignty is simulated a territoriality must also be simulated. I would argue that it is our position, our distance from the control of state power, that can influence our actions not whether we feel the state is justified or not in its actions. And therefore; the legitimacy of the nation-state interventions may seem to be in question. What I believe Walker and Weber are alluding to is that the present terms of reference for legitimate action outside the state’s territory must be manufactured to fit into the idealist/realist paradigm’s concept of sovereignty.

The realist belief that the nation-state is “one people who have sensibly decided to obey one government” (Colchester; 1994) may seem to be wishful thinking. More and more groups of people or communities are challenging the imposition of state boundaries or laws. The collapse of the Soviet hegemony, the chaos in the former Yugoslavia, tensions between the nation-state of Canada and the province of Quebec are but a few examples that point to the fact that the nation-state is far from being homogeneous. The 19th-century tools that help build the nation-state such as flags, anthems and the technologies of the telegraph and railways no longer produce the same legitimacy or loyalty among the peoples that find

themselves under the influence of the nation-state.(Colchester; 1994) Moreover, as technologies today helps in the movement of capital and information across borders; uncontrollably, the nation-state finds that its hold on its territory becomes more tenuous. But when all is said and done, it is this control of territory that defines and legitimizes the nation-state in the arena of international relations.

So far in this chapter of sovereignty, I have discussed the term with the view to establishing its 'legality' of rule. The state in this sense is a 'body' projecting its will on the people within boundaries and defining itself to the outside world within a community of states. In bringing in Weber's sovereignty/intervention arguments, I've tried to describe a view of looking at state sovereignty from the outside looking in. Thus when Weber describes the actions of the United States government in its interventionist role, such as the Reagan government's invasion of Grenada or the Bush government's move into Panama, I see a case of extra territoriality as the state justifies its intervention outside of its territory. Though in both cases the motives for the invasions are complex, the reasons for the actions are grounded in protecting the 'people' whether it is US citizens or the native populations. Within its own defined borders the sovereignty of the state would seem to be unchallenged. However, from the inside looking out, the state is a causality, a manifestation of some power, whether that power is a coercive power or a moral force. There is in a sense a unity of will trying to establish itself. Elements that fracture the move towards building this unity will weaken the 'legality' of rule and threaten the state from within. Internally, we are looking at the state and its relationship with civil society. Here, as R.B.J. Walker points out, "speculations about the state in the context of civil society have tended to take an undifferentiated territorial space as given..."(Walker; 1993, pg. 126) What we are considering here are historical spatial metaphors.(Ibid.) The state is a spatial container. "In fact, the

affirmation of the principle of state sovereignty, a principle that expresses an account of the character and location of political community in explicitly spatial terms, has clearly set the conditions under which accounts of historical possibility within states have been possible at all.” (Walker; 1993, pg. 127) What I conclude when bringing in Weber’s simulating sovereignty is that the metaphor of the state as a spatial container must be adjusted from its strict reference to territory to one that includes a reference to an area of control. I would also argue that this ‘area’ does not necessarily have to have a physical reference but a spatial one.

An examination of the changes that state sovereignty has gone through even to the present day, still show that physical territory is a necessary component of the concept. The relationship between a people and territory is more than an attachment to the land for sustenance and security, though they are important; this relationship also serves as a social function. And yet, a state’s legitimacy is tied to its territory. According to Hugh Kindred, one of the authors of ‘International law; chiefly as Interpreted and Applied in Canada’, the most excepted formula for determining the characteristics of a state are contained in the Montevideo Convention on Rights and Duties of States (1936). (Kindred et al; 1993, pg. 12) Only a small number of states were party to this document, (the United States and 15 Latin American countries). (Ibid.) However according to Kindred, the convention best reflects “the classical conditions under customary international law that a prospective state must satisfy”. (Kindred et al; 1993, pg. 12) The document defines a state under the following criteria: It must have a permanent population; *a defined territory*⁷⁵, though there is no size requirement, or territorial unity requirement and it is said to exist despite border disputes; and the state must have a government that has the capacity to enter into relations with other

⁷⁵ My italics

states - an independence is required.(Kindred et al; 1993, pgs. 13-14) What is established under the above conditions is a territorial principle, a manifestation of state sovereignty. All persons, citizens and aliens; and, all things with its territory fall under the jurisdiction of the state.(Kindred et al; 1993, pg. 431) Crimes committed with this territory are also under the jurisdiction of the state.(Ibid.)

The territory is the physical reality for such concepts as nationalism, culture and a variety of modes of behaviour, (ex., a set of laws, rules, and norms). Territory is just one of several spaces that suggests, to individuals, that different spaces suggest different rules. But it is only, as Peter Taylor points out, that “[t]he territorial state becomes the vehicle for the politics of cultural expression, resulting in the nation state. Sovereignty of the state becomes vested in ‘the people’ who constitutes ‘the nation’ that now legitimate the state”.(Taylor; 1993, pg. 5)

The Internet’s effect is to change the metaphor of the state. I see the state move from a space of representation and an attachment to physical space, to a space of simulation where legitimacy must be produced. This does not mean an end of the state but it does alter how the territoriality of the state will be seen. International personal and professional networks have always existed and have for the most part not been challenged by the state; but, the Internet is more public and its challenge to the state is more blatant.

6.2 Territoriality

Circumscribing geography doesn’t create a political territory, a state. It is control that creates the territory; that defines the space. Territoriality, the control of a territory is defined by Robert Sack as the attempt by an individual or group to affect, influence, or

control people and their activities by delimiting and asserting control over a geographic area.(Sack; 1986, pg. 19) In other words, territoriality is the outcome of states creating rules of conduct for the territory that they have jurisdiction over. This control usually comes in the form of laws enacted and policed by the government, the legislative and administrative arm of the state. This powerful geographic strategy helps to relate society with social space.(Ibid.) Territoriality is manifested in the means that control access to things and relationships within boundaries that have been delimited.(Sack; 1986, pg. 22) If the boundaries are unclear, one's influence and ability to control become unclear. It becomes difficult to use this area to categorize and impose relationships. These boundaries must be communicated, and as pointed out by Sack, these boundaries may be the only symbolic form that combines a statement about direction in space and a statement about possession or exclusion. (Sack; 1986, pg. 21) Violations of a state's territoriality must be sanctioned, behavior within a territory must be controlled by the state if its territoriality is to have meaning. These sanctions can be used to either alter actions inside of the area in question or sanctions can be used to exclude actions and/or relationships from entering the territory by either territorial or non territorial actions. Whether control is top down or bottom up, it produces a hierarchy between the controller and the controlled. Sack, when looking at the change occurring in the Chippewa nation with the coming of the Europeans, makes note of imposition of hierarchical and territorial political jurisdiction. (Sack; 1986, pg. 11) "But more fundamental is the fact that these territories were created and used to support his [European] complex hierarchical society which was based on private property and which used territory to define and organize to own membership."(Sack; 1986, pg. 15) This situation is not binary between the controllers and the controlled, or them and us, but a signifier of status within the territory which changes with our relationship to the controlling power. This control of

the people is seen as justified, on the basis of their position in space not necessarily on the basis of the occupants activities. (Sack; 1986, pg. 11)

Establishing political jurisdiction and delimiting private ownership of land are the most familiar uses of territoriality in the Western World.(Sack ; 1986, pg. 15) I've defined the Net as a place that doesn't necessarily have an actual physical referent. The Internet is situated both within territories and crosses physical territories. For the nation-state it is this connection outside its own realm of influence that makes the Net a worry .

Territoriality is as Sack has stated a means by which social space and society are interrelated.(Ibid.) Territoriality's changing functions help to understand the historical relationships between society, the nation-state and, space and time.(Ibid.) Though the romance of an egalitarian society may exist on the network, the reality is somewhat skewed towards control as different State institutions try to control.

When a territory is delimited and organized as a State, there is a juxtaposition between jurisdiction and territory; the territory becomes infused with a legal function, a function that coincides with the existence of the State within the international system of States.(Knight; 1994 pg. 73) Many groups of people are united, at one level of generalization, simply because the bounding of territory has forced them to belong to integrated (or integrating) systems, the principal political limits of which are represented by the international boundaries of states. (Knight; 1982, pg. 514) Even as states break down, resultant political control still seems to need the 'legitimacy of territory'. At present, control of individuals who use the Net must obviously be done on the basis of their location. This location, I will argue, both unites and categorizes individuals setting up a commonality according to position. As members of a nation-state, we are defined and controlled by our position in this politically defined territorial unit. However, this defined territorial unit is just

one unit in a hierarchy of territorial units. We relate to the many different scales of territoriality on many different levels of abstractions. As a Canadian, a person may be defined also by larger and smaller territorial units, such as municipality, Province, country or the industrial world. What has been created is a series of geographical scales. These scales tend to circumscribe and hierarchize social relations within these fixed and provisionally stable territorial entities.(Brenner; 1998, pg. 478) Thus for the state these territorial configurations become central to establishing control.(Ibid. see also Neil Smith) However, these sites also become sites for socio-political struggles. "For the power to fix geographical scales into stabilized territorial frameworks can serve not only as a tool of disempowerment, exclusion and domination but also as a means to construct empowering, inclusive and ever emancipating counter geographies."(Brenner; 1998, pg. 479) Our personal sense of place, as defined at any of the above levels of abstraction, has a territorial component. (Knight; 1982, pg. 515) The nation-state is a historical construct. (Taylor; 1994, pg. 151) At present, the planet's habitable spaces are all divided up into political territories. Besides the oceans and perhaps Antarctica, we are always in someone's territory , and therefore, under the influence of the owner's territoriality. However, these political territories are not necessarily stable entites. Today territory defines us.(Knight; 1982, pg. 516) Taylor also adds that the state is like a vortex sucking in social relations to mold them through its territoriality.(Taylor; 1994, pg. 152) This idea of molding social relations comes into conflict with the Internet. The state is pulling at this space (Cyberspace) in one direction to solidify its control while the Internet occupying this space along with its international quality, is pulling in the opposite direction. What gives the Internet its appeal is its internationalist nature. Through its series of connections, the 'Net', crosses International borders and therefore, this virtual space if tied to the geography would cover areas well outside of the nation-state. To some

extent, the Net especially in its early years, was not effected to a great degree by laws set out by the state. This condition, prompted one expert to suggest that "national laws were just local ordinances" for users on the Net. (Wallick; 1991) None-the-less, as the network becomes more integrated and more popular the change in relationships between a government's control of its perceived area and social organization has put pressure on this expanding communications vehicle. As Gary Chapman states below, even local authorities are coming face to face with the difficulties of regulating users on the Internet. The quote below comes from an article in the L.A. Times concerning the difficulties and backlash received by the City council of Austin, Texas when they tried (unsuccessfully) to tax Internet commerce by businesses and other users through taxing the use of telephone lines under 'right-of-access' laws.(Chapman; 1997)

What's emerging is a curious and portentous nexus: Just as the publicsector is turning to the information industry for revenues, grass-roots, libertarian and anti-tax sentiment on the Internet is hitting its peak. And just as cities are facing a new range of responsibilities, because of federal "devolution," or the return of public-sector authority to local and state levels, the Internet is decoupling entrepreneurs from local or even state commerce. How this will unfold is anyone's guess, but it is clear that the collision of geographically bound politics with the geographically unbound Internet is going to produce significant friction for some time to come. (Chapman; 1997)

Control of Net can be seen in many different contexts; for Government, the issue can be seen as security; for International bodies, cooperation is at issue; and for individuals, control is based on selfish reasons.

All social institutions exist concretely in some section of space but state and nation are both peculiar having a special relation with a specific place. A state does not just exist in space, it has sovereign power in a particular territory. Similarly, a nation is not an arbitrary spatial given, it has meaning only for a particular place, its homeland. It is this basic community of state and nation as both being constitute through place that has enabled them

to be linked together as nation-state(Taylor; 1993a: 225-28). The domination of political practice in the world by territoriality is a consequence of this territorial link between sovereign territory and national homeland.(Taylor; 1994, pg. 151) But, as David Knight points out, “[i]n terms of human history, both unification and fragmentation of territory have been persistent thrusts, each tendency always being present, but with one or the other being stronger at different times and places”.(Knight; 1982, pg. 516) The corollary to the above is that States are, at present, dependent on territory for their existence. Guéhenno in his work ‘The End of the Nation-State’, explains that as more activity can slip the bonds of geographical dependence the more the State loses control. (1995, pgs. 6-11)

This ‘power’ defined through the institution of the state prescribed over a territory is extremely difficult to pin down. As R.B.J. Walker argues, “state sovereignty expresses a specifically modern articulation of political identity both in space and in time, one that can be neither simply affirmed, nor renounced, nor gazed upon in silent admiration”. (1991, pg. 446) To me, sovereignty is the legitimizing power that the state wields while territoriality is the product of this power - direct control of a territory. Historically, I see territoriality more in the light of concrete actions within the bounds of Cartesian co-ordinates while sovereignty defines the legitimacy of control defines the limits of a state’s power within the prescribed territory. Walker notes that “as a demarcation of political space/time, state sovereignty prescribes three distinct places, each with their own account of temporal possibility in which to think about political space/time”.(Walker; 1991, pg. 452) State sovereignty can be seen from inside the state in a domestic view, or outside of the state seen as the interactions between states in a field of anarchy or of some subsumed definition of both incorporated into an aspect of some form of world view.(Ibid.) This world vision contradicts a vision of state sovereignty, yet it paradoxically relies upon sovereignty to

account for the spatially demarcated array of political identities.(Walker; 1991, pg. 452) I have tried to avoid seeing state sovereignty as an ontological given but more as a strategy for state control.

From reading Walker's concerns seen from inside of the state and the outside, I see a polarization, between the two positions, nothing in between. The ideas of sovereignty and territoriality have been crucial in our definitions of concepts such as authority and community.(Walker; 1993, pgs. 164-165) These definitions are based on physical space. This container puts limits, in a practical sense, on how philosophers and theorists have defined these concepts. If we shift our daily experiences and terms of references outside of this space the anchor that defines both sovereignty and territoriality must also shift. Though governments and territorial borders come and go, there seems to be a permanence to state sovereignty and territoriality; and yet, historically this is not the case. What the Internet does is poke holes in the monopoly of 'legitimate authority' for the state and falsifies any synonymous association with state and society. I don't believe that the Internet negates the state but it does alter any association between the state and society, in that, this association becomes anchored on a relative association that I see is in a state of flux.

6.2.1 Interterritoriality

What is needed is a possible 'out' for the state to deal with those phenomena that step outside the confines of physical space. John Ruggie's paper, 'Territoriality and beyond', opens on the idea that a change is occurring in the institutional, juridical and spatial complexes associated with the European community. He hints that what we may be seeing is the "emergence of the first truly postmodern international political form".(Ruggie; 1993, pg. 140) He suggests that the 'modern' system of states may be "yielding in some instances

to postmodern forms of configuring political space". (Ruggie; 1993, pg. 140) The author also suggests a direction that can be taken in order to examine this change. His direction considers the process of how the 'modern' concept of territoriality emerged out of medieval times. Ruggie places the postmodern condition first in the realm of aesthetics or style: "the nostalgic eclecticism in architectural forms, the prevalence of pastiche and abrupt juxtapositions of imagery in art, the deconstructivist impulse in literature". (Ruggie; 1993, pg. 144) Ruggie also puts the postmodern condition in the realm of political economy. (Ruggie; 1993, pg. 146-147)

Postmodernism characterizes a wide range of diverse philosophical works from the post-structuralists of Europe to the cyberpunks on the Net. It includes "the interplay among global socio-spatial restructuring, the cultural transformation of cities, the formation of personal identities, and the politics of collective action". (M. Smith; 1992, pg. 493)

Postmodernists see "spaces and modes of representation as forms of power unto themselves as opposed to seeing them as mere reflections of power. (Smith; 1992, pg. 495) The actions of everyday life are not the mundane but the significant. These actions are the moments, "made of moments... the dialectical interaction that is the inevitable starting point for the realization of the possible". (Lefebvre; 1968, pg. 12)

I have placed the Internet within the 'postmodern condition'. I believe that this network forms what Frederic Jameson has called the 'postmodern hyperspace, a heteronomy of fragments'. (found in Ruggie; 1993, pg. 146-147)

Another condition of the postmodern phenomenon has been the perception of the compression of time and space. This compression has had, and continues to have, a disruptive effect upon a number of societal institutions, culture and social life. (Harvey; 1990; pg. 284) But , geographical space has not shrunk. As Scott Kirsch states, "the world has not

shrunk through technological innovation, but rather, only through the process of representation".(1995; pgs. 530-531)

Computers and their networks help alter our perception of time and space in that they can draw on information from around the world in fractions of seconds and it is through the computer that we log on to the Net and enter its landscape. More than a simulacrum of reality, an extrapolation of reality, the Internet is part of a 'virtual reality'. The simulation of reality becomes a reality in itself; and thus, 'virtual reality' becomes an object that has its own legitimate attributes.

Ruggie in his construction of interterritoriality shows how the concept changed from the medieval system of rule - structured by a non exclusive form of territoriality, to the 'modern' system of rule - disjoint, fixed and mutually exclusive, as a result of shifts in the 'domains of social life'.

These domains included material environments (ecodemographics, relations of production, relations of force); the matrix of constraints and opportunities within which social actors interacted (the structure of property rights, divergences between private and social rates of return, coalition possibilities among major social actors); and social epistemes (political doctrines, political metaphysics, spatial constructs). Each was undergoing change in accordance with its own endogenous logic. (Ruggie; 1993, pgs. 168 - 169)

In his domain of social epistemes, Ruggie describes a process which he calls the unbundling of territoriality.(Ruggie; 1993, pg. 164-165) This process deals with societal problems that could not be reduced to territorial solutions. What this process created was islands of extraterritoriality.

Various types of functional regimes, common markets, political communities, and the like constitute additional forms whereby territoriality has become unbundled. Thus, in the modern international polity an institutional negation of exclusive territoriality serves as the means of situating and dealing with those dimensions of collective existence that territorial rulers recognize to be irreducibly transterritorial in character. Nonterritorial functional space is the place wherein international society is anchored. (Ruggie; 1993, pg. 165)

The process of moving from the medieval to the modern is seen by Ruggie as a shift in the concept of differentiation⁷⁶. One of the vehicles that alters this view of differentiation is material environments.⁷⁷ These are sites outside of the state's jurisdiction but within their territory. Outside jurisdiction is difficult to extend, it requires international co-operation.

My purpose for giving a description of the issue-area of International communications and a history of the Net is to show, along with the connecting process of social space, how these environments can give a perception of a new reality, manufacturing an adjustment in Internet users' concept of the state's function of territoriality. The point is that the state does and can make adjustments but the space has a territorial anchor. Thus, "[t]he territorialization of political power within 'durable' institutional infrastructures is therefore an essential precondition for the state's ability to regulate 'flows' ".(Brenner; 1998, pg. 469) If the state fails to regulate 'flows' its hold on a territory becomes altered.

6.3 Simulating Territoriality

Cynthia Weber described the simulation of sovereignty in terms of how nations, in her case the United States, justified intervention outside their territory by attaching their reasons for these moves in terms of what they saw as the grounding principles of sovereignty. However, these historically grounding principles were seen to be absent and had to be simulated where no principles existed. Interference was seen as legitimate by the state by writing into the politic that they were standing up for the sovereignty of peoples and or nations that could not defend themselves. Territoriality is a product of sovereignty. Thus in trying to control the activities of the Internet, states must show and put forth the argument that it controls this space and that the state has the legitimate right to do so. Put

⁷⁶ Ruggie uses differentiation in the sense of segmentation which also has a temporal element. (Ruggie pg 149)

in slightly different terms, through Weber's Foucauldian logic of representation analysis, - "The foundations of sovereign authority and the communities which judge them to be legitimate must be produced (symbolically represented) before they can be politically represented". (Weber; 1995, pg. 125) The state contextualizes its actions in terms of protecting its people - its legitimate right. However, in claiming this control the state must extend its territoriality onto a notional 'space', a space that goes beyond the fixity of physical space, crosses other state's territory and is centred on the actions of groups and individuals. To me, this is the point where the logic of representation no longer holds and the logic of simulation takes over. To claim sovereignty over the Internet states must simulate territoriality. But, as I have tried to show so far, this space is grounded in terms of social interaction and claiming sovereignty must be produced.

Social activity creates a landscape that is seen as detached from the space of a state's physical territory. Our link to territory can be seen as part of the ways that humans claim identity. However, this link does not necessarily tie individuals to the legitimizing claims of sovereign states. In today's climate of globalization "[s]overeignty is being compromised as international arrangements supplement, and in places substitute for, state control of economic decisions and regulations." (Dalby; 1998a, pgs. 132-133) Our associations and links to such things as community are now not necessarily tied to a geographical referent; however, the need to identify ourselves to a focal point seems to be a necessity.

In Cyberspace only information moves. But in the physical world, these connections to other points on the globe allow information to be passed through border points without the state having total control of this movement. "Boundaries are fossils of an earlier age according to the *diktats* of the information highway and 'cyberspace'." (Dalby; 1998a, pg.

⁷⁷ Ruggie gives the example of foreign embassies on a state's soil.

133) It is access to information worldwide that becomes a problem for states because the state has little control over the decimation of the information. Citizens of one territory can obtain information from outside the control of the state. The information flow and control is two way. Users of the Net within a territory can gather information from outside and users outside the territory can get information from within. Outside a territory, users are physically in another state controlled territory. The conflicts between the state and users of the Net are a two-fold problem. First off, the state loses control of its citizens if they are gathering or displaying information that the state deems objectionable; and secondly, these actions can be done by Net users outside of the state's influence, in another state's territory. The Net's global connectability challenges a state's ability to control information to and from its citizens. The consequences of this are that the state will have to filter the information that is flowing in and out of its territory if it wishes to control its citizens. It is the legitimate right of the state to protect/control its citizens. If users of the Net wish to gather information unfiltered by the state, they must thwart this control. Here lies the conflict and the challenge to territoriality.

The controversy that hyperlinks have created shows how the state is trying to simulate territoriality over the Net and how users are trying to control this space. I have broken down this simulation into aspects of censorship, privacy and the claiming of 'territory'. These aspects are intertwined but for analysis purposes I have partially separated them. The legitimacy of the State is embodied in its claim to sovereignty. It is from this point that I wish to map out the patterns created by the clash of two powerful spaces, the state and the Net.

6.3.1 *Censorship*

In 1993 an Ontario court put a publication ban on information coming out of the trial of Karla Homolka accused of manslaughter in the deaths of two teenagers. The ban was placed on the trial to insure a fair trial for her former husband Paul Bernardo who had been charged with murder in the killings. News groups on the Net were publishing the information and attempts were made to block the information in Canada. However, Canadian Net users could log on to an anonymous ftp site in Finland and download the Homolka material and distributed it; which, was done. Not only was this an affront to Canadian Law, it was an awakening for Canadian Universities according to author Tim Loughheed.(1998)

....Canadian universities first confronted the reality of just how much - and how little - control they had over the Internet. In fact, the exact date might be given as July 5, 1993.

That was the day Ontario Court of Justice Judge Francis Kovacs imposed a publication ban on the trial of Karla Homolka in the Ontario city of St. Catharines. Holmoka was accused of participating in a series of grisly murders with her husband, Paul Bernardo. The judge defended the ban as a necessary measure to ensure a fair trial by an impartial tribunal.(Loughheed; 1998)

In Canada, the corporate news media complied with the ban and Universities blocked access to the Holmolka discussion groups on Usenet. However, users could redirect their connection to the discussion group or another banned news group by attaching to a server outside the jurisdiction of Canada. One of the news groups sprouted by the trial was started by an individual as a joke.⁷⁸ By creating these news groups, users were 'thumbing their noses' at official authority and the irreverence of this very serious matter helped to evoke an atmosphere of carnival. When Lefebvre described one of his moments of social space, he saw representational space as being an 'underground' a place of resistance. Users

⁷⁸ [alt.fan.karla-homolka](#), This Usenet news group is no longer available as of Jan. 1999.

participating in these events were not acting responsibly. I do not believe that there is any 'right to know' being thwarted by the 'ban'; however, users could 'get around' the ban and so they did.

The Canadian Holmolka sites were mirrored in the United States. E-mail for the discussion groups were now operating in a foreign country and information on the trial could now be re-directed to anonymous servers where the sender's name is stripped off the message and re-directed to the mirrored sites. Thus the banned discussion of the Trial and the case went on unabated.

Short of shutting down Canadian Internet Service Providers, which includes Universities and government machines, users on the Net ignored the court's edict. These actions help to emphasize the control state institutions have over the Internet⁷⁹. The Canadian government could have shut down the Net but not without a tremendous effort and a complete restructuring of how the Net works, even then, control would be limited.

To thwart the court's edict, users on the Net had to see themselves and their actions as outside the realm of the state or at least see that the state could not interfere with their actions. Users, I would contend, believed that within this notional space they were outside of the control of the state and that the state could not curtail their desire to view the information on the trial. Users simulated their own sense of space by defying the court order. This is not a case of the state simulating territoriality but users seeing themselves in their own space. For the Canadian government these actions pointed to the permeable nature of their territoriality in this digital age.

The actions of Ernst Zundel a Holocaust denier, brings up the problem of extra-territoriality for the state, in this case specifically the Canadian state. In the early 1990s

⁷⁹ These actions also suggest that users are quite egotistical and have ignored the rights of others.

in Canada, a site was set up by Ernst Zundel that contained Holocaust-denial material. The site was later moved to California. In an unprecedented move, the Canadian Human Rights Commission started hearings into allegations that Ernst Zundel was promoting hatred on the Internet and that the Canadian government had the authority to charge Zundel even though the alleged site was now in California.(Bueckert; 1996) Maxwell Yalden, Chief Commissioner of the Human Rights Commission at the time, stated that he believed that the commission had a right to shut down the site to protect Canadian citizens even though the site was in a foreign country.(Ibid.) The California site was protected under that country's freedom of information act. The Commissioner stated he believed that Canada's Human Rights Act gives the commission jurisdiction over telephonic communications, and because Internet messages can be transmitted over telephone lines the Commission has a right to pass judgment on the site.(Bueckert; 1996) By these statements, the Commissioner was indirectly proposing that service providers were responsible for the material on their sites and that because the information was flowing over telephone lines the Canadian government had jurisdiction. The Commission's aim was to block the site's signal.(Bueckert; 1996) Yalden stated that the signals are being picked up here, and where it's originating doesn't make any difference.(Bueckert; 1996) Policing of any ban would be a difficult maneuver because it is not the site that is broadcasting the information into Canada, it is users that are going out and seeking this information from the banned site. And theoretically because of the fluidity of the Net, all traffic would have to be screened. In his defense, Zundel stated that he has rights both in Canada and US and that the site was an exchange of ideas on the subject. He cited the evidence that on this Web page links were set up to two Jewish sites and the Simon Weisenthal Centre as counter arguments to the main material on the site.(Bueckert; 1996)

The commission was judging Zundel under a seldom used section of the Humans Rights Act (Section 13(1)) which is intended to be used to prevent hate messages from being transmitted by telephone and answering machines.(Bercovici; 1997) The implications to invoking this section of the Act is that the government is considering the Internet as a “telephonic communication” which can be regulated by Parliament. However, the fact that the Zundel site was not in Canada did not seem to be addressed. Evidence was presented to the hearings that Zundel did have a direct connection to the California site. Zundel’s estranged wife testified that although Ingrid Rimland allegedly owned the Carlesbad California site, Zundel sent money to cover costs and, Rimland didn’t have the technical knowledge to run the site.(Bercovici; 1997)

The commission has not delivered any final judgment on this case as of the writing of this thesis; however, seen from within the Canadian state, a number of important precedents are being explored that could have a profound effect on the Internet. Interviewed for the newspaper article by Bercovici, David Jones, president of Electronic Frontier Canada voiced concerns that the tribunal might find that the Internet does fall under the ‘act’ as telephonic communications regardless of the commission’s judgment on Zundel.(Bercovici; 1997)

What this could mean for Canadians is that the Internet would be less open in the area of free speech even if this speech is seen as objectionable and that the state has the right to block material regardless from where it comes from. For Canadians this could mean that the telephone system could be seen somewhere outside of its present ‘common carrier’ status. For the Canadian state in its role to ‘protect’ its citizens, would not only have to block all access to those sites but it would also have to block any hotlinks that point to the offending sites. Users, however, could bypass any regulations by attaching themselves to

servers outside of the state's territory. The state would then have to declare that the space of the Internet was inside their jurisdiction by the fact that its citizens could possibly connect to the offending sites. This situation which would be very complicated to police given that different states have not got together in any formal way to confront material that they see as objectionable. And, state governments would have to co-operate and compromise on what is seen as objectionable in order to mount any realistic control of the Net. The above two statements are only true in that no formal regulative international body has been created. Unofficially governments especially their police forces, have got together to charge individuals in the case of child pornography.(Appleby; 1999) In Montreal, a 16 year old has been charged with distributing child pornography after a German initiated investigation identified suspects in eight countries.(Ibid.)

In Mannheim, Germany legal authorities were investigating Internet Service Providers because they provide an access to Zundel's site.(Ascarelli; 1996) According to German legal authorities, objectionable material on the Internet must be censored regardless of where the information is located according to German Law.(Ibid.) German authorities were also investigating the case of the banned publication of a tell-all book on the Net about French President, Francois Mitterand's cancer.(Ascarelli; 1996) In the case of Zundel here in Canada, Margo Langford, VP of Istar Internet and board member of the Canadian Association of Internet Providers, says there is no way to block a site.(Bueckert; 1997)

The above case points out the fact that on the Internet slipping the bounds of geography is one method of countervailing the law of individual states and how at present, nation-states are trying to extend their territoriality. There is a parallel here to Susan Robert's fictitious spaces. Sites tend to, as money does, move to locations that have favorable legislative conditions. And because of the mobility of sites, locations that provide 'sites of

convenience' become the homes of much of the 'objectionable' traffic. In some sense, these 'sites of convenience' help to promote the Internet as a 'free-speech' zone. No international body looks after the Net. This lack of a defined front on the part of the state authorities may just be a temporal condition due to the facts relating to the newness of the Net. However, there seems to be an attitude in the actions of the state that pre-net legislation can handle most of the transgressions of the Net. But because of the technology, governments must display a co-operative effort in both their attitudes towards the Net and engage in a highly co-ordinated efforts to police the Net. But what will complicate this situation in the near future, will be the proliferation of satellite communications and the establishment of more 'sites of convenience'.

In their attempts to block information from objectionable sites, both the German and Canadian governments have had to make the claims that information outside their sovereign territory that is deemed objectionable is OK to block because the state has the authority to protect its people. What users actions are indicating to me, is that information on the Net is seen as free and geographical location of this information steps outside of the authority of the state. The Net would have to be seen as an international space if governments wish to see the actions on the Net come under their jurisdiction no matter of its location geographically.

In the past few years there has been a number of incidents concerning the Net and the German government. In a series of moves the German government has blocked and taken to court a number of ISPs that have published objectionable material accessed from their sites. (CyberRights; 1997, Vol. #1) These incidents point to how the German state apparatuses are trying to establish the rule of present laws on the Net within their own borders; however, these actions, to me, are but the beginning of states trying to assert their

authority on the space of the Internet. These moves are part of a global movement to censor the Internet and this spectra of censorship comes up again as the controversy over hotlinks unfolds on the Net

A leader in the German Democratic Socialism Party, Angela Marquardt, was indicted for putting a link on her home page to an offending site, the address of the Dutch anarchist webzine, Radikal⁸⁰. (Reuters; 1997) German prosecutors argued that Marquardt by putting a link to the above magazine (an article), was promoting violent acts. (Ibid.) Access to Radikal from inside Germany was blocked by the German government. And once again, calls went out onto the Net to have Radikal's webzine no. 154 mirrored. Over forty sites picked up the Webzine.⁸¹

Today 2-9-1996, our ISP XS4ALL got a phone call that the German Authorities are planning to force German Internet Providers to shutdown all traffic from and to XS4ALL. This because of the Radikal-pages on the xs4all WWW-server. We are calling for people to mirror this site. Our goal is that in the shortest possible time Germany will cut off all IP-traffic coming from and going to all other countries (We aim to make Germany cut off all IP-traffic in the shortest possible time), so that they will isolate and censor their own "digital highway". Help Germany to isolate itself. Download a copy of this site and make a mirror. (www.xs4all.nl) (Source: tank@xs4all.nl; 07/01/97)

It was not the first time this site was blocked. In 1997, members of the German ICTF (Internet Content Task Force) blocked XS4ALL, the ISP for Radikal, for about a month. The Dutch ISP is also home to some 6,000 other Web sites.⁸²

The people behind these censorship-attempts are the BKA/BAW (Federal Criminal Investigation Department).⁸³ The BKA/BAW told German ISP's: ".....possibly make yourself

⁸⁰ <http://www.xs4all.nl/~radikal> home page of the Dutch anarchist webzine

⁸¹ The mirrored sites are listed at www3.sk.sympatico.ca; however, as of 01/04/99 only about 12 of the sites are active

⁸² Information provided by .(felipe@xs4all.nl, 11/04/97)

⁸³ Information provided by (<http://www.xs4all.nl/~tank/radikal/> 11/04/97).

subject to criminal prosecution for aiding and abetting criminal activities if you continue to allow these pages to be called up via your access points and Network crosspoints".(Ibid. see foot note 82) Radikal is illegal in Germany because so-called terrorists are said to be part of the organization and because the magazine is said to be calling for radical actions against the German government. The German Secret Service wrote a special paragraph in their interim year-rapport 1996, because the existence of this site. (Schneider; 1997)

Censorship on the Internet usually has the opposite effect. Internet users consider it a sport to publish censored materials. Once again, governments are targeting the ISPs as the only effective way of trying to control information on the Web.

In the State's case, the Internet is not seen as a territory but just a communication vehicle; however, when international relations become involved, control by the state is seen as arbitrary and to some degree ineffective. But for governments to have effective control within their own territory, they must extend their territory by claiming in part, Cyberspace.

For the Net user, there is an atmosphere of freedom on the Net. Users see themselves in a different space outside the jurisdiction of the State. In all the reports on the Marquardt case, nothing was indicated that Marquardt was specifically directing her link to 'criminal material'. Marquardt's crime was her linking to the banned publication. Berlin prosecutors accused Marquardt of allegedly directing users to an extremist publication detailing guerrilla tactics with a link from her Web home page. Charging Marquardt is likely to set a precedent on the issue of whether it is illegal for someone to lead users to Internet content that is 'suspect', even when those writings are not included on their own home page.

In 1997, a report called the Joint Enquiry Report (JET) was published on the Net by three British journalists.(Craddock; 1997) The report was compiled by a joint inquiry team of police, journalists and social workers in response to the Broxtowe Case, done for the

county of Nottinghamshire, England. (Cyber-Rights; 1997, Vol. 2) The report details an investigation into a major child abuse scandal involving sexual, physical, and satanic ritual abuse. The report has never been legally released and in fact was banned. (Kornblum; 1997 see also Craddock) The journalists defended their release of the report in a press release saying that "[T]he report is a fascinating insight into the origins of 'satanic abuse' and could have done much to prevent later cases..." (Cyber Rights; 1997, Vol 1.) The journalists asked Cyber-Rights, a civil liberties organization to help them mirror the report on other sites in Britain; however, because the British civil liberties organization would face legal actions if the report was mirrored in Britain, they issued a call on the Net for others outside the country to mirror the report. The journalists face legal penalties, including possible jail time, for violating the ban. (Kornblum; 1997) A British court issued an injunction against the journalists, ordering them to take the report and links to it off their site. They complied. (Ibid.)

The report was mirrored around the world. (Cyber Rights; 1997, Vol 3.) In Canada, Jeremy Freeman, a 21-year-old Canadian student, in Kamloops, British Columbia mirrored the report and was e-mailed by the solicitors for the Nottinghamshire County Council stating that the "provisions of the UK Copyright, Designs and Patents Act 1988 includes storing of work in any medium by electronic means". (Cyber Rights; 1997, Vol 3) Therefore, legal action would be forthcoming if the report was not taken off the site for both the student and the ISP where the report was stored. Freeman removed the report but put a link to a U.S. homepage run by Peter Junger, a professor who teaches computing and the law at Case Western Reserve University. (Kornblum; 1997) Freeman later removed his link to Junger's home page because of fear over the cost of defending himself legally. (Ibid.) Junger was reported to say that he will not remove the report in question because Nottinghamshire

County and British law have no jurisdiction over him.(Kornblum; 1997) The county council also sent letters to sites who mirrored the report in Germany and Australia.(Cyber-Rights; 1997, Vol. 2) Yaman Akdeniz, head of the Cyber-Rights & Cyber-Liberties (UK) stated that;

[T]he new technology is always ahead of the existing laws, and also the Internet's multinational environment makes it difficult to enforce national legislation. Attempts to regulate or restrain speech on the Internet have generally failed in the last few years. The U.S. attempts to regulate indecency on the Internet or the German attempts to limit access to hate speech--the genie is already out of the bottle. (Kornblum; 1997)

Robert Sack has mentioned that for the state, violations of its territoriality must be addressed if the state is to maintain control. What the British authorities are doing is exactly that, sanctioning action that it thinks is inappropriate. However, by trying to apply their jurisdiction outside of their physical territory, they are in effect extending their territoriality (virtually). Thus, the state must manufacture its authority into this space. This does not deny the fact that copyright laws do have international agreements but these agreements so far, have not been extended to cover the Internet. The space of the Internet covers the entire globe; and thus potentially, those users that wish to defy any authority that is bound by geography, have the ability to move offending material outside of the jurisdiction of the state. The state has two basic options to use to defeat the spread of the offending material. One option is to prosecute those within their jurisdiction or confiscate any property that belongs to the 'offending' party that exists within their territory. The second option is to attack users outside of their jurisdiction either by international co-operation between states or to attack users and disregard the territoriality of a given state. Both options become difficult in the landscape of the Internet with its technology for bypassing geographical boundaries. In accepting the Internet as metaphorical space and seeing this space as representational space, I'm trying to suggest that the Internet is not easily governed or

controlled by trying to police it as if it was a geographically bound space or just a communications vehicle. State governments must deal with the Net as a supranational space. International spaces must be seen in an international light.

6.3.2 *Privacy*

One of the tools that was used to evade the Ontario court's ruling in the Holmoka case was the use, as mentioned above, of anonymous servers. One of the servers that was well known on the Net was run by Johan Helsingius in Finland Helsinki⁸⁴. Besides being a facilitator in the Holmoka event, Helsingius has been associated with other legal events where courts have been involved. Police came to Helsingius for identity of a client who sent a message connected with a lawsuit involving the Church of Scientology. Helsingius destroyed his database rather than give up the user's address. (Cyber Rights; 1997, Vol 1) Helsingius's re-mailer has also been accused as been frequently used by the Russian (ex-KGB) criminal elements. (Strassmann and Marlow; 1996)⁸⁵ These are the actions of one individual and are not necessarily the nature of the Net. But, there are hundreds of these anonymous servers around the world and they are easy to use. There is a perceived need on the Net to have mechanisms to protect the identity of users.

Simon Dalby states that in the past, geopolitical analyses was "often premised on the eternal enmity of peoples, and the inevitability of conflict and boundary disputes where interests collided". (Dalby; 1996, pg 75) Today a realignment has occurred with the advent of global communications. (Ibid.) "[T]he globalised economy has made it very clear that important aspects of state control are effectively being 'deterritorialised' by the actions of

⁸⁴ anon.penet.fi the remailer at this site has been under attack for a number of years and was finally shut down in 1998 between Oct. and Dec.

⁸⁵ found at www.cs.berkeley.edu/~raph/remailer-list.html, 23/11/97

transnational corporations and the existence of global financial markets.” (Dalby; 1996, pg 75)⁸⁶ I would also add that the Internet is as part of this ‘deterritorialization’ and that anonymity is seen as one of the tools that help in this process. ‘If you don’t know who we are; you can’t control or attack us.’ Paul A. Strassmann, US Military Academy, West Point; and Senior Advisor, Science Applications International Corporation (SAIC) and William Marlow, Senior Vice President, (SAIC), in a paper written for the Symposium on the Global Information Infrastructure at Harvard University⁸⁷ state that:

The introduction of Anonymous Re-mailers into the Internet has altered the capacity to balance attack and counter-attack, or crime and punishment. The widespread use and easy access to acquiring the capacity to launch anonymous messages and software has so far not received adequate attention from a policy and legal standpoint. This topic is sufficiently technical that it has been largely avoided by experts who have so far concentrated on debating social, legal, political and economic consequences of the Global Information Infrastructure. Yet, unless there is a thorough understanding of the technologies that make the Anonymous Re-mailers sources of a pathological danger, there is little hope that effective preventive measures and safeguards can be put in place. (Strassmann and Marlow; 1996)

Strassmann and Marlow go on to state that re-mailers are part of the threat to the commercial, economic and political viability of the Global Information Infrastructure.(Ibid.) These devices can be used by civil libertarians or extreme right/left radical groups. What the re-mailers and the community of Net that use these devices are doing is challenging the authority of the state by trying to maintain their privacy and re-emphasizing one of the beliefs of the Net communities that the space of cyberspace should be free of state

⁸⁶ Dalby cites O’Tuathail, G. and Luke, T.W.; ‘Present at the (Dis)integration: Deterritorialization and Reterritorialization in the New Wor(l)d Order’, *annals of the American Geographers* 84, 3 (1994) pp.381-98

⁸⁷ Harvard University, Kennedy School of Government (www.ksg.harvard.edu/iip/gateway/) this was a conference put on by the Information Infrastructure Project, Symposium on the Global Information Infrastructure: Information, Policy & International Infrastructure, Cambridge, MA, January 28-30, 1996. Proceedings were put on the Net at the above address.

interference. Re-mailers are for the state, part of what the state sees as the threat of information terrorism. For Strassmann and Marlow, the re-mailer is a particularly virulent form of information warfare. It's uniqueness in the history of warfare and crime and, because states can not step out of their realist perspectives; re-mailers are a threat to state security.

For the last two hundred years the theory of warfare has been guided by "force-exchange" equations in which the outcome was determined by the rate of attrition of each opposing force. In information attacks these equations do not apply because the attacker remains hidden and cannot be retaliated against. (Strassmann and Marlow; 1996)

The state sees these re-mailers as a threat to its ability to control information in and out of its territory, a threat to security. However, defenders of these re-mailers see the attack on re-mailers as an attack on one of the Net's attributes - privacy.

"I consider myself to be a fairly good example of why anonymous remailers are needed on the Net," wrote one defender of anon.penet.fi in the newsgroup alt.privacy.anon-server, one of many in which users have expressed impassioned support. "To be blunt, I am bisexual, a pervert and a witch. I also live in Alabama, where at least two of the three are illegal. In a worst-case scenario, I could lose my job, have my career ruined, face prosecution and possibly even have to deal with violence." (Akst; 1995⁸⁸)

However in the anarchy of the Net, everyone is open to the positive and negative elements of this anonymity . Two U.S. lawyers, Martha and Lawrence Siegel in 1994, sent out electronic advertisements for their Scottsdale, Arizona firm to 6000 computer bulletin boards.(Kanaley; 1995) What their actions were perceived as was a violation of the Net's code of ethics,(Netequette). Users of the bulletin boards reacted to these advertisements by firing back tens of thousands of pieces of electronic junk mail (a process called 'spamming'), most of it anonymous, and so much of it that the computers crashed at the company where

⁸⁸Danial Akst writes for the LA Times where this quote was found but he can also be contacted at akstd@news.latimes.com

the Siegels had their E-mail account.(Kanaley; 1995) Also during this period, somebody also signed the Siegels' names⁸⁹ to an anonymous E-mail threat to assassinate President Clinton. (Kanaley; 1995) Conditions have changed on the Net and the Siegels' actions are now common-place as advertisements can now be see on many Web pages as business have begun to see the Web as a place of business. But anyone can 'spam' a site or another user, and to some extent 'spamming' has become a serious threat to all users of the Net. In their attempt to neutralize this threat a number of societies and news groups have materialized on the Net to combat this activity.

As a space, the Net is where there is a conscious effort to make it a 'free speech zone'. This move can be seen in both in a positive or negative light depending on your point of view; however, the social interaction of the users suggests that tools like the re-mailer are being built because they are perceived to be important and they are being used. Part of the reason that this space has been considered a free speech zone in the past, is because of its uninstitutional and decentralized nature. As the Net becomes more popular and commercially viable pressures will be applied by the state to bring the Net under some sort of control. "Although the Internet looks quite different from traditional communications infrastructures (such as the telephone system, and the mass media of print, radio and television), there is a natural tendency to apply the better understood, more centralized mindset associated with these systems to the Internet's coordination problems." (Gillett and Kapor; 1997, pg.4) Gillett and Kapor point out that this decentralized nature is inherent in the technology.(Ibid.) I believe that both its past and the nature of the technology help to

⁸⁹ It is possible with relatively little difficulty to strip out the name of the sender and replace it with a bogus name. This is done by editing the header of the message. Actually this was easier in the past when mailers on the Unix platform were the main e-mail distributors

keep alive the 'free-speech zone' ethos on the Net. Any control of the Net by the state will have to consider the Net as a whole, a space, to effectively govern it.

6.3.3 Encryption

In January of 1994, U.S. Vice President, Al Gore announced his administration's ideas for the NII (National Information Infrastructure set up to develop the US's information highway). Incorporated in these ideas were many of the concepts that championed open competition, universal access, and deregulated common carriage; however, nothing was said about privacy except to say that the information super highway would have the ability to "help law enforcement agencies thwart criminals and terrorists who might use advanced telecommunications to commit crimes." (Meeks; 1994) In February of that year, the U.S. government re-affirmed its ban on the easy export of powerful encryption technology. (Scott; 1994) However, this same technology is freely available overseas. (Wallich; 1991) According to the Software Publishers Association and the Information Technology Association of America, the ban will slow the pace of security improvements in software in the U.S. and give an unfair advantage to overseas competitors. (Scott; 1994) It was also announced that the clipper chip would become a Federal Data Processing Standard and this standard was backed up with an announcement that the government has already ordered 50,000 of the devices for its telecommunications equipment. (Scott; 1994)

The clipper chip was the latest in powerful encryption technology. The 'chip' scrambles communications except for the intended receiver. The codes can not be broken unless one has the encryption keys; one private and one public. The government would hold the private key to your 'chip' in escrow. "The key would be separated into two pieces, held in escrow, and joined with the appropriate 'legal authority'" (Barlow; 1994)

'White house' officials said that they had spoken to a number of corporate representatives who are in favour of the government developed Clipper chip. However, the president of the leading provider of public key-encryption software, stated that his corporate customers want the key escrow encryption but don't want the Government holding the keys.(Scott; 1994, pg. 14) This proposal was an FBI and National Security Agency initiative that was building up to a fight that had the government on one side and the computer industry and public interest groups on the other. One of the groups opposing the government's plans is the Digital Privacy and Security Working Group which includes such companies as IBM, Apple, Sun, Microsoft, and the Clipper manufacturer - AT&T.

Privacy, the first roadkill of the information highway was the ongoing joke of this contest. John Barlow has seen the fight over the Clipper chip as the "last ditch attempt by the United States, the last great power from the old Industrial Era, to establish control over cyberspace."(Barlow; 1994) The key escrow method proposed by the US government agencies was eventually abandoned with the government hearing criticisms from such organizations as the Organization for Economic Co-operation and Development (OECD), 27 members of the US house of Representatives, the British Labour Party and such influential Internet societies as the Internet Architecture Board (IAB) and the Internet Engineering Steering Group.(Cyber-Rights; Vol #2, 1997)

In Britain the UK Department of Trade and Industry released a 'white paper' on "Licensing of Trusted Third Parties for the Provision of Encryption Services".(Cyber-Rights; Vol #2, 1997) This British proposal is quite similar to the US key escrow system. The criticisms over this 'white paper' stem from the view that "centralizing the ability to violate privacy and authenticity is a poor strategy for an open society".(Cyber-Rights; Vol #2, 1997) In April of 1997, the German government also started calling for the restrictions

on encryption by proposing that the only services that would be permitted to use encryption were those groups and individuals that had a permit which would allow the police to decode and read any transmissions. (Cyber-Rights; Vol #2, 1997) Cyber Rights stated that governments could not be trusted and they cited a long history of the abuse of surveillance and wiretapping in such countries as the Eastern Bloc countries, and a number of Asian and Latin American countries. (Cyber-Rights; Vol #2, 1997) However, if states are going to protect their citizens they will need the tools to do so.

The state's position on cryptography is that basically the respective governments feel that "spies, terrorists, drug dealers and other bad people will use cryptography to hide their illicit activities from the forces of law and order". (Morin; 1995) In the United States, cryptographic software is seen as a weapon under Statute 22, USC 2778, 'Control of Arms Exports and Imports'. (Ibid.) It is the National Security Agency that makes decisions on the export of cryptographic code rather than the department of Commerce which otherwise administers the regulations under the 'Control of Arms' legislation. (Morin; 1995) However, crypto technology is readily available on the Internet as well as being available commercially. "Export restrictions do not constitute any sort of effective barrier." (Morin; 1995, pg. 32) As Morin points out, much of the technology was developed outside of the US and within the US, the controls have the ulterior motive of compromising the freedom of speech for its own citizens. (Morin; 1995) Printed forms do have protection under the US constitution but it seems that electronic forms do not. (Morin; 1995, pg. 32) This issue is becoming much more interesting as commercial traffic and trading in stocks and bonds has begun to grow dramatically over the past year. When you receive the latest version of the browser Netscape with its 128 bit encryption, a warning is given that this software must not be exported outside Canada or the US. If you don't accept this condition, you can't download the

package.

PGP (Pretty good Privacy) encryption software is readily available on the Internet and it allows for a private key held by the individual and a Public key that is published in order to make each user's identity known. The two keys are significantly large prime numbers that when multiplied together produce a distinct key that is used to decrypt a message. The sender encrypts his/her message with the receiver's public key and only the receiver's private key can decrypt the message. From personal observation, this form of encryption is used extensively on the Internet without government intervention.

The use of encryption helps to keep up the image of the Internet as a free-speech zone. Also as Lefebvre points out, this space is a space of resistance and cryptography which is a very effective way to keep the state out of the affairs of users. If the state does not see the Net as separate from its 'standard realm' there will continue to be a running battle for control of the Net with users having the advantage.

6.3.4 Claiming Territory

A number of regions around the world have made attempts to establish themselves on the Net as autonomous 'states'. Hong Kong , Gibraltar and East Timor have been able to secure 'top level domain status'. That is, these regions have obtained addresses where the domain name, usually reserved for a country like Canada being .ca, has come to signify some 'semi- autonomous' stature. The online Catalonia community has made a number of attempts to try an establish their region as a top level domain. In 1997 the online Catalonians held an unofficial referendum to declare independence from France and Spain.(Drudge; 1997) As of the writing of this thesis there is no .ct domain on the Internet, Catalonia is still part of Spain's .es domain name. Attempts to have the name change did go

as far as putting their case forward to the Internet Assigned Numbers Authority.(Drudge; 1997) Gibraltar has received a top level domain, .gi and they have used the site www.frontier.gibnet.gi as a 'witness' to what they are calling harassment from the Spanish government. Three webcams have been setup showing the Gibraltar/Spanish border, which the site believes, shows Spanish violations of laws allowing free movement across the border.⁹⁰ Similar to the Web pages for the independence of East Timor from Indonesia, the Gibraltar website is using the Internet to get support for their claim of independence from Spain by broadcasting their message to the world.

As stated earlier in this essay, IANA and NSI are the official authorities for registering top level names. It is from these authorities, both situated in the United States, that machines get their domain lists. There have been a number of moves to try and usurp these authorities' power, because controlling the 'naming conventions' determines who can talk to you. Without a proper address, a user can't receive information. In July of 1997, Eugene Kashpureff was able to divert traffic to NSI (also called InterNIC) for about 5 days.(DitchBurn; 1998) He was protesting the US domination of the naming convention. Kashpureff and his Canadian partner in this scheme, tried to set up AlterNIC which would establish its own 'naming conventions'.(DitchBurn; 1998) But, because their 'conventions' were not accepted by the rest of the Internet, AlterNIC failed. There is a growing movement around the Internet today, to have more freedom in establishing top level names and to lessen the power that seems to be established in the US. This is why political moves are being made to have the 'naming registry' moved to the UN and most likely to the ITU.(Drudge; 1997, see also Gillett and Kapor)

To sum up on this chapter on simulating territoriality, links make a connection

⁹⁰ 'Gibraltar's Latest Battleground: the Web' (Agence France-Presse) NY Times Mar., 7, 1999, D2

outside of a territory. But this link, is just a virtual connection dormant until activated but it ties the individual to an outside source, outside the control of the state. But who is controlling the activities of those individuals who 'virtually' cross out of the territory.. The state is anchored to its territory and must be seen to control the actions within its territory. The Internet is an international phenomenon. Its strength and its appeal is in its internationalness. As we look at the above examples of the 'link controversy' we see the dilemma and the fight for control between the state and user activities on the Net. These activities can be seen as thwarting the power of the state. But like Weber's description of simulating sovereignty, the state must re-invent its authority in order to show control. Information published on the Net has a fluidity about it and it can easily move to different locations around the globe. This means that information is not tied to a particular location and access to that information can be acquired from anywhere on the Net. This becomes an impossible task to regulate by governments if they confine themselves to their own territory. Some governments have cut off access to the Net for all but a few trusted citizens; however, in the states that are more technically advanced, to severely restrict the Net is 'throwing out the baby with the bath water'. Commercial control of the Net is gathering momentum and the potential for revenue for the state could be significant. But, if as I have proposed that the community that uses the Net feels to some extent, outside of the state's territoriality, in a different space, some equilibrium between the state and the Internet users must be achieved. It is my belief that only through considering the Net a space can peace between the state and the Internet be achieved.

If the Net is a space through its social interaction then control of this space has to be done as if the Internet was a territory and through controlling social interaction. Ruggie, when he spoke of embassies as an inter-territorial solution, was showing that the solution

had to be seen as a space and not just a series of regulations. The Net does act like a space. The metaphors to describe it are spatial in nature, negotiating over the Net has an attachment to world geography; and actions on the Net are unique in the sense that to be done digitally these actions have to be done on the Net. Through its history and its nature the Net has developed its own special landscape and myths, which as we enter the Net help to influence our actions.

7. Conclusion

As I have tried to show, the social actions of users on the Net make it a space. This space is a notional space; a space more than just metaphors; a virtual space that is not a mimic of another space but a space unto itself. As Lefebvre describes social space we can see that it is a fractured space that is constantly changing. To me, this space is also a space of resistance. Born out of anarchy, this space creates a landscape of the carnival. Sights and sounds, a multitude of colours all flourish on the Web. If this space is to become a space of commerce then order will have to come. If it is to be a free-speech zone then anarchy will always be present. Net junkies say leave it alone, the Net will sort itself out. But, if it is to be truly global and egalitarian, a delicate balance between order and chaos will have to be maintained. If it comes to pass that the state does have the means to control the flow of information onto the Net then I believe that this will 'balkanize' the Net and it will become crippled as a global communications system. But, some semblance of order is needed. "On the global scale with the emergence of numerous global institutions it may be more useful to emphasize the importance of the mutual enmeshment of states on the larger scale within larger networks of economic flows, communications networks, trans-boundary criminal schemes, non-governmental organizations." (Dalby, 1998a, pg. 145,) When Weber describes the manufacturing of sovereignty in the invasions of Grenada and Panama by the US, she makes the argument that the US government had to simulate sovereignty to show justification for its actions. On the Internet, the state must show that it is in control of this space in order to manufacture a territoriality. But, if the state is seen to have a loss of control, its authority over the Net will be seen suspect. It has not shown to be in complete

control partially because of the technology and partially by the atmosphere that is presented on the Net. It could be that the state just has to tighten up existing laws; however, to me, these existing laws are inadequate because stepping into the Internet is viewed as stepping outside the state's territoriality. As Dalby states when looking at some of the strategies for control in South Africa; "... as the example of South Africa suggests, territorial strategies of control may be doomed to failure in the long run in a world of flows and geographical change." (Dalby; 1998a, pg. 142) What I don't believe is happening is the decline of the modernist state replaced by a new postmodern world; however, I do believe we are witnessing a re-alignment of power structures and players something that I believe will be of great interest to political geographers.

To bring order to the Net, I believe that the Net must be regarded as an International space that is controlled by an international body where all participants have an equal say in governance. This would be the setting up of an international regime. The establishing of a regime especially an officially sanctioned one, could be extremely difficult considering the opposing forces that I've tried to acknowledge here in this paper. The domination by the Industrial nations most notably the US, would have to be curtailed in order for the less developed nations to participate. These less developed nations may not have the infrastructure to participate today but they must have a voice today in order to protect themselves in the future and participate in what seems to be developing in the area of electronic commerce. The technology is changing and these nations may be able to skip the need for telephony infrastructure and move to a more satellite based one.

The study of the Internet is going to become more and more important as this phenomenon becomes more global and integrated into our everyday life. Geographers have a unique position in examining how this change will take place. To me there will be a

structural change as digital commerce re-aligns where the centres of power and the peripheries are located, not only in an areal positioning but in a power structural sense. This move is of interest to economic geographers but also to political geographers. The old tools of looking at changes in the positioning of the actors in this power structure are inadequate and the theoretical bases behind these tools are changing. By looking at how these changes occur, the spatial configurations between the different actors will give an indication of how this realignment is taking place and in what directions it is moving towards. I believe that new spatial patterns are being created and how they evolve will be of great interest to geographers. This will involve more than just mapping out these patterns but also showing the inter-relatedness of these changes and where the actors are in relation to others. Hopefully this will allow geographers to prescribe solutions to the inequalities that will inevitably occur. Geographers, I believe, will help more precisely define the concept of what is space to include not only the empirical forms but social forms as well. As the Net matures and empirical data becomes more reliable, geographers can begin to look at the Net in much more detail and I see the development of regional geographies on the Internet.

What I have tried to show in this paper is first of all, that the Net is a significant phenomenon in the industrial world and that this phenomenon is growing larger. The technology that is behind this phenomenon also has an effect on how the Net develops. I next have tried to show that space does have a significant structuring effect and that its concept can also be related to the social actions of the users of the Net. When you combine the two elements of the growth of the Internet and the significance of the space that is created, you create an environment with certain characteristics. The environment created does not bode well with our present construct of the state. States are anchored by their physical territory and it is this anchor both in its physical sense and its theoretical sense that

conflicts with the Net. What states must do is change their concepts of territoriality from one of control of a physical territory to one of influence by association. This becomes difficult to implement and states have reacted to this new situation by simulating territoriality over the space that the Net occupies. The conflict created is dynamic and solutions satisfying both the state and users of the Net will not be stable if the state does not adjust how it sees its relationship to its 'people'. This association will have to have a territorial component because individuals still live within the bounds of a territory and they do pay taxes that support the state. However, to allow its people to participate in this new phenomenon, the state will have to see the Internet as an extra-territorial zone with a different set of rules. This zone must also be seen as international and this will require international cooperation.

The technology is going to continue to change. As noted by the computer industry, generations of computers are changing every six months and new software tools are being developed at a rapid rate. It will be very hard for any bureaucratic organization to keep up. But if the Net is seen as a combination and partnership between the state and users of the Net the onus, if we listen to Kropotkin, will be on users to police themselves. What must be developed on the Net is a landscape where civility is the norm.

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