

Reference: O'Donnell, S. (2000). *Small media, big network: Alternative media and social movements on the Internet*. PhD thesis, Dublin City University, Dublin.

**Small media, big network:
Alternative media and social movements on the Internet**

Submitted

by

Susan O'Donnell B.A., M.A.

For the award of Doctor of Philosophy (Ph.D.)

Supervised by Professor Farrel Corcoran

School of Communications
Dublin City University

December 2000

I hereby certify that this material, which I now submit for assessment on the programme of study leading to the award of Doctor of Philosophy is entirely my own work and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text of my work.

Signed:

Date:

Abstract

Small media, big network: Alternative media and social movements on the Internet

by Susan O'Donnell, B.A. (University of Ottawa), M.A. (Cardiff University).

This thesis explores alternative media on the Internet by drawing on a range of theoretical literatures - particularly in the areas of the public sphere, social movements and globalisation. Parallel to this theoretical exploration, a significant body of published research is reviewed on Internet use by social movements and groups in global, national, and local contexts. From this review and analysis, an original conceptual framework for analysing alternative media on the Internet is developed. A range of methodological approaches were designed to empirically develop the research issues. Empirical research on women's organisations and the Internet in Ireland was conducted over a four-year period.

The original work is significant because there have been few previous attempts to systematically devise an operational framework for research on alternative media. The framework contains seven elements. The first three are characteristics of alternative media forms or processes on the Internet - the participants, the production process and the content. The last four elements concern the wider social, political and cultural context of the media activity. The framework categorises the main areas of concern to researchers of alternative media on the Internet. Research questions are intended to develop a full scope of structural, social political and cultural factors involved in the production and use of alternative media forms and processes on the Internet and to resist superficial interpretations.

The empirical research was conducted in two phases and employed a range of methods. In the first phase, the methods included postal and telephone surveys of a wide spectrum of women's organisations in Ireland and a focus group with participants from women's organisations in both Northern Ireland and the Republic of Ireland. The second phase of the research focused on Womenslink, an Internet mailing list linking women's organisations in Northern Ireland and the border counties of the Republic. A central methodological approach was the researcher's participatory involvement with Womenslink and its member organisations during a two-and-a-half year period. Research methods included a content analysis of all the Womenslink messages produced during this period, and in-depth interviews and a feedback session with Womenslink participants. The final chapter in the thesis brings together the various research concerns and makes suggestions for future research on alternative media and social movements on the Internet.

Acknowledgements

I would like to thank my supervisor, Professor Farrel Corcoran, for the supportive way he provided direction and counsel during the past five years. Many thanks to Brian Trench, DCU Senior Lecturer, whose interest in the social uses of the Internet was a stimulus for the research and whose feedback on an earlier draft was very helpful. Brian Trench supervised my work on the DCU research project, The Voluntary Sector in the Information Age, which included some of the empirical research for this thesis. University of Leicester Professor Annabelle Sreberny, the external examiner, offered constructive criticism on an earlier manuscript that helped me to strengthen this final version.

Thanks are due to the hundreds of staff and volunteers of Irish community and voluntary organisations who participated in the VSIA research and the Womenslink research, in particular the staff members of the Womenslink member organisations in Northern Ireland and the border counties of the Republic of Ireland. Patricia Donald of the WRDA (Women's Resource and Development Agency) in Belfast was extremely helpful as a Womenslink co-facilitator and she contributed many observations about the mailing list. Kate Ennals supported this work both through her own related work on the Dublin Inner City Computer Network and also as a friend. Thanks to Aphra Kerr and Gerry McAlister for proofreading chapters.

The secretariat of the DCU School of Communications and Humanities Faculty Office has assisted me at many points along the way, so thanks to Carolyn O'Rourke, Pam Galvin, Emer Roche, Celine Jameson and Goretti Daughton. The other DCU School of Communications postgraduate students been supportive of my research, and it has been very encouraging to watch others who successfully completed their PhDs before me - Aphra Kerr, Roddy Flynn, Des McGuinness and also Peadar Kirby. Many thanks to my family and friends in Canada for their solid support. I have to mention Bill Dare, who by his own example encouraged me to start a B.A. degree as a mature student in 1984 and who is still encouraging my academic and other pursuits.

Belated thanks to Professor Naomi Goldenberg, University of Ottawa, who opened my being to the radical potential of scholarship in her Women's Studies seminars in the mid-1980s.

Finally, thanks Gerry, for helping to keep me on track.

Contents

Chapter 1: Introduction	1
1.1: Introduction	1
1.2: Research overview	3
Part I: Literature review and analytical framework	6
Chapter 2: Background: The Internet	7
2.1: The development of global telecommunications networks	7
2.2: The development of the Internet	12
2.3: Internet access	18
2.4: Media forms or processes on the Internet	23
Chapter 3: Global alternative media on the Internet	29
3.1: Global feminism on the Internet.....	29
3.2: Global information and support: the Breast Cancer List.....	33
3.3: APC Networks.....	36
3.4: Chiapas on the Internet.....	41
3.5: Global movements/countermovements on the Internet	44
Chapter 4: Local, regional and national alternative media on the Internet	50
4.1: Santa Monica's Public Electronic Network (PEN).....	50
4.2: Community Internet networks in Europe	54
4.3: American militias on the Internet	59
4.4: Alternative media on the Internet for women.....	61
4.5: Community and voluntary organisations and the Internet	67
Chapter 5: Theoretical contexts for alternative media	72
5.1: Examples of traditional alternative media	73
5.2: Alternative media and the public sphere	76
5.3: Alternative (small) media and social movements	82
5.4: The globalisation of alternative media	93
Chapter 6: An analytical framework for empirical research	102
6.1: Alternative media participants, process and content	103
6.2: Links with the wider political, social and global contexts	111
6.3: Summary (chart) of analytical framework	123

Part II: Empirical research	124
Chapter 7: Methodologies for empirical research	125
7.1: Overview of empirical methods	125
7.2: Research framework and methodological approach.....	131
7.3: Summary (chart) of analytical framework and research methods.....	134
7.4: VSIA research: postal survey, telephone survey and focus group.....	135
7.5: Womenslink research: participatory research, content analysis, in-depth interviews and feedback session.....	140
Chapter 8: VSIA research	146
8.1: Postal survey (1996).....	146
8.2: Focus group (1997)	150
8.3: Telephone survey (1997).....	152
Chapter 9: Womenslink research: findings of content analysis	163
9.1: Edition 1: August 1997 to June 1998	163
9.2: Edition 2: June 1998 to December 1998	168
9.3: Edition 3: December 1998 to May 1999	172
9.4: Edition 4: May 1999 to August 1999	176
9.5: Edition 5: August 1999 to November 1999.....	181
Chapter 10: Womenslink research: findings of in-depth interviews and feedback session	186
10.1: Case study of the Women's Tri-County Network	186
10.2: Case study of the Women's Urban Network	190
10.3: Case study of the Women's Political Network.....	193
10.4: Case study of the Women's Rural Network	196
10.5: Feedback from Womenslink members (1999)	200
Chapter 11: Discussion and conclusions	205
11.1: The participants	205
11.2: The production process	208
11.3: The content.....	213
11.4: Links with political participation	215
11.5: Links with social capital.....	218
11.6: Links with the public sphere(s)	221
11.7: Linking global and local.....	226
11.8: Conclusions about the research	229
Bibliography	236

Charts

Chart 1: Summary of analytical framework and research questions.....	123
Chart 2: Summary of analytical framework and research methods.....	134
Chart 3: Organisational features of respondents in postal survey (1996)	148
Chart 4: Income level and other features of women's organisations in 1996.....	149
Chart 5: Reported constraints of and encouragements for of ICTs in 1996.....	150
Chart 6: Organisational features of respondents in telephone survey (1997)	155
Chart 7: Income level and use of ICTs by women's organisations in 1996 and 1997.....	156
Chart 8: Revised research questions for the analytical framework	251
Chart 9: Summary of suggested methods for future research	252
Chart 10: VSIA project questionnaire (1996)	254
Chart 11: Telephone survey questionnaire (1997)	256
Chart 12: Focus group process (1997)	258
Chart 13: Question guide for in-depth interviews (1998)	259
Chart 14: Discussion guide for Womenslink feedback session (1999).....	263

Chapter 1: Introduction

1.1: Introduction

The aim of this research is to investigate the production of alternative media on the Internet by social movements and groups - in particular by women's organisations in Ireland - and to develop a framework to critically assess this activity.

Although the Internet infrastructure is increasingly privatised and the Internet is developing primarily as a vehicle for commercial media forms and processes, there is room on the network for the production of alternative media - particularly email and email-based media forms or processes - by social movements and groups. It will be argued that an understanding of this activity must be situated within the specific social, political and cultural context of the media participants and the production process. Alternative media on the Internet are shaped significantly by social and structural relations.

The research focuses on alternative media rather than the social movements and groups themselves. Alternative media have a long history of association with social movements, as will be discussed in an early chapter; however alternative media theory is underdeveloped within media and communications theory. The current research will locate aspects of alternative media theory within two more well-developed sociological theories - the public sphere, and social movements. This thesis aims to contribute to the advancement of alternative media theory by developing a framework for understanding and evaluating alternative media on the Internet.

The analytical framework is multi-level, looking primarily at media participants, the relations of production, the media content, and the links with the wider political social and cultural contexts. The framework is a set of key elements and questions that will develop a full scope of structural, social, political, cultural and other factors involved in the production and use of alternative media forms and processes on the Internet.

Globalisation - of social movements, alternative media, telecommunications, and the world economic system - is a theme running throughout the research, which was carried out during a time of significant change in the global economy, particularly in the telecommunications and media industries. At the time of writing (February 2000), the music company EMI has just merged with Time Warner's music division to form the world's largest music company. The merger followed another merger weeks earlier of

Time Warner with AOL, the world's largest Internet company, creating a media giant valued at £300 billion. In Europe, the UK's Vodaphone has just merged with France's telecoms conglomerate Vivendi to bolster its takeover bid of Germany's telecoms giant Mannesmann, one of Europe's largest Internet service providers. The background to these global developments will be discussed in an early chapter.

Also during the research period - 1995 to 2000 - countries in the developed world saw a remarkable increase in Internet penetration. On a global scale, significant disparities are growing in telecommunications access: most people are without telephone access while a growing number of elites are using the Internet to increase further their influence and wealth. These changes are occurring as governments withdraw from the regulation of telecommunications, leaving market forces to shape who can access the technology. Reliable research on Internet access rates is rare indeed but, as will be discussed in an early chapter, the evidence is clear that the division is growing between those with and without Internet access along lines of income and education, with those not using the Internet having much lower incomes and formal education levels.

During the research period there was also a significant growth in the number of social movement organisations with an Internet connection. The current research includes empirical investigation that mapped the growth of Internet use by women's organisations in Ireland. Popular interest in the relationship between the Internet and social movements also grew during the research period. For example, media articles in 1999 linked the Internet to "transnational activism" at two major events, the "carnival against capitalism" in London on 18 June and the WTO summit in Seattle in December, both of which saw a mass movement of protesters battling police. One media article about the WTO summit begins by asserting that: "History might have been very different if Karl Marx had been able to send emails" (BBC Online 1999b) and goes on to note the crucial role played by the Internet in the Seattle and London protests. It quotes an activist saying that: "Websites are open to everyone, and that includes police, but emails are more private." Another article quotes a protester saying that: "The Internet is a military experiment that the state has lost control of." The article describes an Oxford-based group of Internet hackers called the "Electrohippies" who planned to block the main Web sites for the WTO Seattle conference (BBC Online, 1999a).

The current research focuses on alternative media on the Internet, primarily four types - email, mailing lists, newsgroups and Web pages - produced by social movements and groups (although not the recent activities in London and Seattle mentioned above). It will be shown that it is important to distinguish among these media forms or processes

because each is used in different ways, and for different reasons, by social movement actors. The empirical research focused on Internet use by women's organisations in Ireland. A central research method was participatory and empirical research of Womenslink, an Internet mailing list created for this research which linked women's organisations in Northern Ireland and the border counties.

1.2: Research overview

After this introductory chapter, there are 10 more chapters in the thesis, divided into two parts.

Part I is the literature review and analytical framework. **Chapter 2** begins by reviewing the history and growth of global telecommunications networks and continues by reviewing literature on the Internet, which is rapidly becoming the central core for all. Discussion will focus on the key issues of Internet access and media forms and processes on the Internet.

Chapter 3 will review a number of published studies of alternative media on the Internet; the material fell naturally into two categories: alternative media with a global reach or orientation; or local, regional or national. In this chapter global alternative media on the Internet are considered. The studies reviewed include: global feminism on the Internet, the Breast Cancer List, the APC networks, Chiapas on the Internet, and global movements/countermovements on the Internet.

Chapter 4 will review published studies of alternative media on the Internet in local, regional or national contexts. The cases reviewed include: PEN, community Internet networks in Europe, American militias on the Internet, alternative media on the Internet for women, and community and voluntary organisations and the Internet.

Chapter 5 will discuss the theoretical contexts for alternative media on the Internet, exploring the role of alternative media within two more developed theoretical areas - the public sphere and social movements. The chapter will begin with examples of traditional alternative media and then continue with a discussion of alternative media theory.

Chapter 6 will summarise the material presented thus far in Part I in the context of an analytical framework for empirical research on alternative media on the Internet. The framework is discussed in two parts: the alternative media participants, processes and

content; and the links with the wider political, social and global contexts. The chapter ends with the framework in chart form.

The empirical research will be the focus of **Part II**. **Chapter 7** will begin with an overview of the methods used for the empirical research, followed by discussion of the methods in the context of the analytical framework. This will be followed by a detailed description of the specific methods and studies.

Chapter 8 presents the findings of the first phase of the empirical research, conducted as part of the DCU project, The Voluntary Sector in the Information Age (VSIA). The three VSIA studies were: 1) a postal survey of 50 women's organisations, conducted in the Spring of 1996; 2) interviews by telephone with staff or volunteers of 42 women's organisations conducted in the Spring of 1997; and 3) a focus group of women's organisations conducted in July 1997.

Chapter 9 and the next chapter will focus on Womenslink, the Internet mailing list which linked women's organisations in Northern Ireland and the border counties of the Republic of Ireland. The research period for Womenslink was mid-1997 to end-1999. Chapter 9 presents the findings of a content analysis of all 500 Womenslink messages produced during this 124-week period.

Chapter 10 presents the findings of qualitative research with the staff members of the Womenslink member organisations who produced the Womenslink messages, from in-depth interviews and feedback session with staff of Womenslink member organisations. The findings are presented as case studies of four Womenslink member organisations.

Chapter 11 brings together the various strands of Part II in the context of the analytical framework. The discussion under each element of the framework includes the original research questions, analysis of the findings, the links with the theoretical issues and previous research in this area, and the usefulness of the methods and triangulation of methods. In light of this discussion, revisions to the analytical framework are made where relevant along with suggested methods for future research.

Part I: Literature review and analytical framework

Introduction to Part I

Part I includes five chapters, four of which include a review of literature on the Internet, alternative media on the Internet, and theories of alternative media. The final chapter is a summary of the literature review and outline of an analytical framework for the empirical research.

Part II uses the analytical framework to structure the empirical research, which investigates Internet use in Irish women's organisations, focusing on Womenslink, an Internet mailing list for Irish women's organisations.

Chapter 2: Background: The Internet

This chapter will first review the history and growth of global telecommunications networks and then continue by reviewing literature on the Internet, one of the thousands of global telecommunications networks that is rapidly becoming the central core for all. Discussion will focus on the key issues of Internet access and media forms and processes on the Internet.

2.1: The development of global telecommunications networks

The discussion in this chapter follows a political economy analysis of communications and media, beginning with a recent article by Herbert Schiller, a prominent analyst of the relationship between information and advanced capitalism. Schiller has played a central role in developing the political economy approach to communications, which looks at the economic structures behind the messages, such as the patterns of ownership, the sources of revenues, and the spending patterns and capacities of the audiences. Such structural elements profoundly constrain the types of media content created.

A political economy approach is a systematic analysis of information and communications, locating a particular process in the context of the larger socio-economic system. The approach emphasises history - the periodisation of trends and developments in this sector. Schiller and others using this approach analyse the capitalist system to assess the developments in the information and communications sector, key industries in the current era. The central questions asked about global telecommunications networks by Schiller and others using this analysis are: for whose benefit, and under whose control will they be implemented? The focus is generally on three issues: the role of market criteria and the profit motive, which results in the commodification of information in

which information is available only if it is saleable; class inequalities in the distribution and access to information and the capacity to generate it; and corporate capitalism, how the economic structures are dominated by corporate organisations which have a powerful influence in shaping the development of new ICTs, primarily how they develop for private ends rather than the public good.

In a recent contribution, a half-century review of major trends in US communications and culture, Schiller (1998) highlights the US mastery over the sphere of global communication and culture, which resulted in large part from the role of the US state in achieving and maintaining American global domination in this sphere over the past five decades. Schiller observes that while the US state has acted frequently to assume the promotion of the ever-expanding communications sector, big business has consistently denied the legitimacy of government intervention on behalf of social needs. In the current era, the market is strongly defended as the solution to all social problems, and private enterprise is seen as the means to achieve solid economic results. At the same time, vast subsidies for state-funded research and development have contributed incalculably to American ascendancy in information technology. In fact, Schiller points out that the underlying infrastructure of the "information age" could not have been built without significant amounts of government (taxpayer's) money. Schiller also points to the "incredible" system-wide concentration of capital in the 1990s, with the communications/media sector at the forefront. Growth through merger, consolidation and capital expansion in this sector has been especially significant.

Murdock and Golding (1989) point out that the term "privatisation" is a general description of four economic initiatives: denationalisation, selling shares in public companies to private investors; liberalisation, introducing competition into areas that were previously public or private monopolies; regearing regulatory regimes to allow corporations more flexibility to manoeuvre; and commercialisation of public sector organisations, through the introduction of market mechanisms and commercial criteria of evaluation.

Dan Schiller and RosaLinda Fregoso (1991) believe the concerted drive to privatise telecommunications should be viewed as an effort to create a global foundation for systematic corporate exploitation of information. The intended outcome of privatisation was always explicit: to remove state control and interference in telecommunications networks. The objective of privatised telecommunications firms was exclusively profitability; this eliminated the social overhead objectives, such as concerns for public employment, and more generally, the notion of public accountability. Unencumbered

with public service obligations, the new telecommunications firms could be aggressively ambitious private businesses.

In their research into global privatisation of telecommunications networks, Schiller and Fregoso identify three stages of privatisation. The first, beginning in the late 1950s, was to maximise private control in the US of information systems and their data. Regulators acquiesced to business users' demands, first for private microwave networks and then for private satellite networks. Prior to the mid-1980s, telecommunications were conducted almost entirely as national non-profit or regulated monopolies for whom subsidizing widespread public access was a priority. Then came a burst of privatisation and deregulation. The breakup of AT&T in the early 1980s was the largest corporate reorganisation in history. It transformed the corporation at the core of the US public telephone network into an advocate of privatisation. By the late 1980s more than half of US spending on capital facilities for telecommunications was by companies other than common carriers.

The second stage, exporting privatisation, began with demands by US corporations for transborder satellites to link overseas affiliates and extension of Wide Area Telecommunications Service (WATS - 800 telephone numbers) from domestic to transnational centres. The authors quote an AT&T executive in 1981: "There really is no longer a domestic market separated from international dealings." Some of the most vigorous advocates of telecommunications privatisation were the World Bank, the International Monetary Fund, the US Agency for International Development, and the US departments of Commerce and State, with the international debt crisis contributing to the compliancy of Third World governments to their demands. In the Third World, privatisation is justified in the name of economic development; Schiller and Fregoso recall the earlier, and equally self-serving, call in the 1950s and 1960s for the introduction of commercial mass media as a path for modernisation - often by the same development agencies.

Gwen Urey (1995) points out that the impetus for global restructuring of telecommunications comes from internal forces in industrialised nations and external forces in developing nations. Restructuring national telecommunications industries in the developing nations involves investment from industrialised nations, usually in the form of manufactured goods and telecommunications services from multinational corporations. Urey argues that the global growth of the telecommunications industry has been central to global financial integration. The global economy is most fully realised in financial markets. Of the 50 most "global" big banks, only three are from developing countries, and

capital markets in the developing world are mostly perceived as insignificant. Two important relationships exist between capital markets and telecommunications: telecommunications are a precondition for the operation of modern capital markets; and telecommunications systems require large capital outlays - new investments in telecommunications systems require capital finance on an international scale. As in the Third World, the pressure to privatise telecommunications in the OECD nations was introduced by various US government agencies, in concert with transnational corporations. Spiralling research and developing costs by then had made it impossible to recoup outlays for digital switches within any single market; in 1991, for example, the current generation of the digital central office switch cost between £1 - £2 billion to produce.

The third stage of privatisation was building global private networks. In 1984, more than 1,000 transnational computer communications systems spanned the globe, almost all established by transnational corporations from developed market economies to service their worldwide affiliate networks. Van dijk (1993) relates that in the 1980s, corporations spent billions of dollars for their own global corporate networks; they installed broadband networks and put in place satellites to an extent and quality far exceeding the capacities of public networks. By the mid-80s, electronic products became the largest single category of US capital equipment spending. Companies became "vociferous" in demanding the ability to use networks to interconnect to other organisations; this led eventually to their entry into the Internet, then a non-profit enterprise, as will be discussed shortly.

What is broadly referred to as convergence - with digital technologies blurring the barriers between traditional media industries and also between media and communication sectors - has increased at an accelerated pace in the 1990s. Digital communication networks are changing the media landscape, according to Herman and McChesney (1997). The info-communication sector (their term) has been growing at twice the rate of the balance of the global economy in the 1990s, with no sign of a slow-down. Globally, the info-communication sector had output valued at \$1.5 trillion in 1994, with telecommunications being the largest element (46%), followed by computers (33%) and media (21%). The fastest-growing segment is international communication. Global convergence in this sector has created greater uncertainty in what had been relatively stable global markets of media, computers, and telecommunications. With convergence, firms in these sectors are concerned not only with their immediate rivals but also with new rivals in what were previously different sectors. The mass of mergers and acquisitions in recent years is spurred on by companies protecting themselves and hedging their bets, as nobody is sure how the new markets for the industry will unfold.

Herman and McChesney (1997) relate that the drive for liberalisation culminated in the 1997 World Trade Organisation Telecommunications agreement, requiring signatories to open markets to foreign competition and to allow foreign companies to buy shares in domestic operators. Telecommunications liberalisation has improved services for business and the affluent in the developing world but the principle of universal access has been compromised, if not abandoned. Significantly, this sector is increasingly unregulated, or more specifically, the profit motive is the regulator; according to the authors, "governments have moved from being proactive policy makers to being market policemen enforcing competition law," and the core notion is to let the markets determine the course of events. The US Telecommunications Act of 1996 is the most important law affecting global telecommunications firms. The law removes barriers to entry and consolidation within the telecommunications industry as well as the media and information industries. The EU has also been in the forefront to liberalise the telecommunications and IT industries, and to make continental, rather than national business empires the norm. Communications and information activities - with the Internet increasing at the centre - are now central to investment and growth in the world economy.

2.2: The development of the Internet

Internet analysts generally agree on the main issues involved in the development and commercialisation of the Internet; the differences in perspectives relate to the degree to which governments have made a policy priority of democratising the technology through universal access as opposed to increasing (primarily US) corporate advantage. Certainly the more critical observers, such as Winston (1998), Herman and McChesney (1997), McChesney (1996) and Stallabrass (1995) claim that the development of the Internet, particularly since the 1990s, has followed patterns of capitalist growth found in earlier communication technologies. Authors such as Herbert Schiller have been analysing these patterns for the past few decades, as described in his recent review of US corporate dominance in telecommunications (Schiller, 1998).

Looking at the development of the Internet, a similar pattern of development was foreshadowed in the early 1920s in the US, when, as McChesney (1996) describes, there was great confusion concerning who should control the powerful new technology of radio broadcasting and for what purpose; the players had little sense of how radio could be made profitable and much discussion took place of its liberating and democratic potential. The earliest radio broadcasters were amateurs and non-profit groups who quickly grasped the public service potential of the new technology. Commercial interests realised that

radio broadcasting could generate substantial profits only in the late 1920s. These commercial interests were able to dominate the US Federal Radio Commission to ensure the scarce air channels were turned over to them with no public and little congressional deliberation. The American situation contrasted with Canada, the UK and Ireland, where a strong public non-profit broadcasting system was built. In the US, the discourse around radio broadcasting policy changed from one of "commercial domination in the marketplace" to one of "competition in the marketplace," a pattern continuing for the development of policy for the Internet, which assumes that corporate control and the profit motive are central to its development.

Winston (1998) traces the history of the Internet to theoretical tools such as information theory in the late 1940s, emerging from Norbert Wiener's wartime work and other work on cybernetics in that decade. Cybernetics and information theory are important in the context of the Internet because information theory "commoditises information, draining it of semantic content" (Winston, 1998). Thus digitalization and specifically, the packet-switching technology which is the basis for information transfer on the Internet, is linked to information theory - "encoded electronically and treated as being without meaning, messages become more malleable than they were traditionally."

In 1950, less than a dozen electronic computers existed in the world. When the Soviet Union launched Sputnik in 1957, the "US did not want to be caught napping again" (Winston, 1998) and created ARPA shortly afterwards. ARPA - the Department of the Defence's Advanced Research Projects Agency, was set up specifically to leapfrog over existing technology, and it funded a small group of unorthodox computer designers working on projects that would later become the basis for computers and computer networks known today. Rheingold (1993) has a very romantic view of the first ARPA researchers, believing that they had altruistic intentions. Winston (1998), on the other hand, believes that ARPANET was very much a military project and other objectives were only a cover. Whatever their motives, these scientists went on to develop such foundational products in the computer world as the graphic screen display, word processors, mouse devices, and hypertext.

As Rheingold (1993) tells it, in the 1960s, researchers working on different projects funded by ARPA were meeting several times a year; for logistical purposes, they started discussing how they could share their data more regularly using telecommunication lines. At that point, ARPA researchers had already developed computer networking but it was limited to computers connected by cables, generally over short distances. The telecommunications firms approached about the idea at the time were pessimistic about

the possibility of using telephone networks for this purpose, so ARPA issued a request for proposals to develop the network on its own. Packet-switching had been invented in the 1950s as a way of making a communications system survive a nuclear war, but it remained only a theory in the 1960s. However, the researcher who wrote the successful proposal for the ARPA network was familiar with the theory and decided to base the computer network on packet-switching. Packet-switching means a communications system has no central control, because the packets and the entire network know how to move the information around. Packets can carry any digital information - including text, voice, data, computer programs, photographs, full-motion video and sound - and can send that information through copper and fibre optic wires and cabling, and through microwave, satellite and other transmission devices.

The ARPA network was ARPANET. The University of California at Los Angeles (UCLA) became the first ARPANET node in the Autumn of 1967, followed by three more nodes by that December. According to Rheingold, by the time ARPANET was up and running, the Vietnam War was beginning to politicise ARPA policy, and many of its young researchers were not comfortable working for the Department of Defense. When Xerox built a state-of-the art information processing research facility in Palo Alto California at the end of the decade, it poached many of the top ARPA scientists. Now working for the private sector throughout the 1970s, their earlier idealism resurfaced, according to Rheingold, and: "their goal was unchanged: liberating computer power for non-programmers to use to help them think and communicate" and their focus was to design a highly graphic human-computer interface on a personal computer, using a point and click device.

Throughout the 1970s and 1980s, the technologies of computers and computer networking evolved rapidly. Rheingold points out that the speed that information can be transmitted through a medium is one fundamental determinant of the kind of information that can be transmitted, the value of the information, and who can afford to send or receive it. ARPANET used 56,000 bps (bits per second), a very high speed compared to the first personal modems using 300 bps. In 1987, NSFNET moved to 1.5 million bps, and by 1992, the NSFNET backbone had moved to 45 million bps, a 700th-fold increase in five years. At the same time, the number of computer users increased exponentially. According to Rheingold, changes in the design of computers allowed an expansion of the computer-using population "from a priesthood in the 1950s, to an elite in the 1960s, a subculture in the 1970s, and a significant and growing part of the population in the 1990s."

Also by the late 1970s, the "PC revolution" made possible largely by the technological developments of scientists working at ARPA and for the private sector in Palo Alto had created a new industry and subculture. The utopian ideas of the Internet regarding its contribution to progressive political culture can be traced to its anti-commercial origins, "when enthusiasts established an exclusive counter-culture based on the free exchange of information and programming tools" according to Stallabrass (1995), adding that the ideology of the Internet's founders would later collide with the commercial ethos of the society in which they live.

In the late 1970s and early 1980s, pressure increased on the US government to build a publicly accessible computer network. This pressure led to the development of the NSFNET, whose backbone was in place by July 1988. Access to the NSFNET was opened at first to virtually all US academics, most employees of the US government, and some employees in private corporations. Traffic on the NSFNET grew very rapidly. The network that eventually emerged was called "ARPA Internet," and then just "Internet," and then the residual ARPANET was decommissioned in 1990. Through the 1980s, significant computing power became available to students in colleges and universities. Rheingold (1993) points out that the Internet culture worldwide will come largely from those who connected with it in third-level institutions.

As discussed earlier, also by the mid-1980s, the private sector had developed more than 1,000 independent computer communication networks and wanted access to the Internet backbone to link up more efficiently. Increased efficiency was necessary because the transnational economic system, characterised by the division of labour between the production sites of large corporations, "is unthinkable without high-capacity international communication networks" (van Dijk, 1993:398). Around the same time, according to Rheingold, the Internet began to outgrow the government's ability to manage it; however, because packet-switching and networking technology were created with tax-supported funding, successive generations for network had implemented "acceptable use" policies ruling out commercial activities. The process of handing off the government-developed Internet to the private sector was controversial from the start. It began in 1987, when NSF awarded a contract to manage and upgrade the Internet backbone to a private computer company, and commercial use of the Internet was extended to some private firms.

By the early 1990s, Internet users were growing at 10 percent per month. In 1992, the Internet was a loosely organised system of interconnected computer networks primarily serving the research and education communities, with some private corporations using the Internet as a WAN (wide area network) to connect their LANs (local area networks).

Commercial Internet Service Providers (ISPs), such as CompuServe and America Online based in the US and Ireland Online in Ireland were opening Internet access to a wider public. The telecommunications firms which owned much of the Internet infrastructure were becoming increasingly privatised, and pressure increased on the US government to open the Internet infrastructure further to corporate control. However, as late as 1991 it still appeared the Internet backbone would remain under US government control (Hart et al, 1992).

In early 1993, a press release "electrified" the Internet, according to Rheingold, because it announced that the NSF was handing over Internet management to the private sector. The news created considerable controversy on Internet fora, specifically around the question: as commercial organisations take over management of the Internet from government institutions, who will make policy over access and use? When it became clear that the government was acquiescing to demands to make the publicly-funded Internet available for purely commercial users, the president of one of the public networks said in 1991 that: "It's like taking a Federal park and giving it to K-MART. It's not right, and it isn't going to stand. As a taxpayer, I think it's disgusting" (quoted in Hart et al., 1992). In May, 1995, the NSF transferred ownership and management of the Internet backbone to the private sector.

The rise of the Internet in the 1990s has been dramatic. A comprehensive analysis by Herman and McChesney (1997) found that the 1995 privatisation of the Internet backbone and the remarkable popularity and commercialisation of the Web (the graphical interface to the Internet allowing multimedia applications) since its introduction in the early 1990s are the two factors leading in recent years to a burst in Internet growth: in 1996, the US recorded a 50 to 100 percent increase in Internet usage, and the growth continues globally at a rapid pace. They point out that although the Internet is supposedly a global medium, its course is directed primarily in the US and a few other Western nations, a point to be developed shortly.

Golding (1998) says that there were 30,000 sites on the Web in 1995, with the number doubling every few months, and the significant change has been the rise of commercial sites. He cites an MIT study finding that the proportion of commercial Web sites had risen from less than five percent of the total in 1993 to 50 percent in early 1996. By 1994, domain names ending in .com (denoting a commercial user) had outnumbered those ending in .edu (denoting an educational user in the US), and by 1996, .com was larger than .edu and .gov (government) combined.

The privatisation of the Internet infrastructure and commercialisation of the Internet is growing exponentially. The first quarter of 1995 saw more venture capital investment in Internet companies than in all of 1994. Internet-related revenues increased from \$300 million in 1994 to \$10 billion by 1999; other estimates put the figure at \$200 billion by 2000. Much of the commercial activity involving the Internet is still speculative; few firms are generating a profit from their Internet investment, as with private radio stations in the 1920s, "who know they had a hot ticket but did not know how to cash in," says McChesney (1996). The two primary means of generating revenue and profit for commercial Internet media are advertising and direct sales. In 1995, a survey showed that two-thirds of US adults were opposed to having advertising on the Internet, but advertisers hoped that, as was the case with the commercialisation of US radio broadcasting, Internet users would gradually accept it (Herman and McChesney, 1997).

The burst in Internet growth has had a dramatic impact on the computer manufacturing, consumer electronics, and computer software industries. In the latter, for instance, the industry has become dominated by one firm, Microsoft, which provides 80 percent of personal computer operating software globally and an increasing and majority share of Internet interface software¹. Telecommunications firms have also been forced to realign their operations with the Internet in mind, especially in the growing area of Internet service provision. Firms other than telecoms, particularly cable services, have entered the Internet service provision field. Herman and McChesney point out that despite the vast private and public resources being poured into the Internet, uncertainty still exists about its future; no one can say for certain if the medium will ever make money for content providers, and as long as that remains the situation, the Internet will not be in a position to unseat the dominant commercial media. However, all the major media firms have significant stakes in the Internet, just in case.

2.3: Internet access

The regulatory environment surrounding the Internet is dramatically different from the traditional telecommunications regulatory environment. The discussion above reviewed how the Internet and other telecommunications networks have become increasingly

¹ This dominance was challenged successfully by the US Justice Department, which won the first stage in a lengthy court process to direct Microsoft to stop its current practice of requiring computer manufacturers and distributors to link Microsoft Internet software with Microsoft computer operating software in computers for the retail market. It is unclear at the time of writing (January 2000) if this legal process will have a significant impact on the dominance of Microsoft in the market.

privatised, market-driven, and deregulated. Massive state subsidies have allowed US firms to dominate global telecommunications infrastructures. Regulatory changes, primarily the 1996 Telecommunications Act in the US and the 1997 World Trade Organisation Telecommunications Agreement, assure that the market and not public policy will direct the course of the Internet.

In fact, an argument central to the discourse of telecommunications privatisation and deregulation is that the market is a democratic regulatory mechanism - because it rewards businesses that give consumers what they want and penalises the others. In reality, as Herman and McChesney (1997) point out, the market is a highly flawed regulatory mechanism, based not on one person, one vote but rather on one dollar one vote; consumers can choose from only a very limited range of what is most profitable to produce; and markets, driven strictly by profit considerations, downplay values and concerns not associated with profits, such as universal access. If an information and communication technology is regulated not by government policy but rather by private interests motivated by profits, then access will likely be highly uneven for different socioeconomic groups, and indeed this is the story of access to the Internet. This trend has been foreshadowed by communications theorists such as Peter Golding (1994), Graham Murdock (1986) and Robert McChesney (1995), as well as Herbert Schiller (1998).

Looking at the global picture, Golding (1998) makes the point that the emergence of the Internet has coincided with an increasing disparity of income globally and that the emerging inequalities seen on the Web reflect those seen with all previous communication technologies. He recounts the statistics: Third World nations are experiencing an endemic economic crisis; by the year 2000, about a billion people globally will be living in absolute poverty. In 1994, the EU and North America accounted for almost 70 percent of global telecommunications revenues; Africa accounted for one percent. The 24 OECD countries, containing 15 percent of the global population, have more than 70 percent of the global telephone lines. In the Third World, Internet users are almost entirely from the upper and upper-middle classes.

Herman and McChesney tell us that by 1996, 64 percent of the Internet's host computers were in the US, with less than six percent in Eastern Europe, Asia, Africa, the Middle East and Latin America combined. Likewise, 73 percent of Web users were in the US, compared with four percent from the Third World. They predict that the Internet could be superseded by giant private 'Intranets' operated by global telecommunications alliances, resulting in "a two-tiered or multi-tiered Internet industry with high-speed bandwidth options for those willing to pay, a low-speed clunker Internet for others, and nothing at all

for the rest." They also believe that it will take decades for the Internet to become fully integrated in the US and longer than that elsewhere. Handling such heavy usage would require dramatic improvements in Internet technology and an enormous increase in bandwidth: they estimate the necessary investment to bring broadband capacity to the entire US population to be in the order of hundreds of billions of dollars. Commenting on this overall state of affairs, Julian Stallabrass (1995) writes that: "The idea that high-band global networking will become truly universal in a world where only a fifth of the population currently have even telephones is laughable," and that "even in the highly improbable event of the hardware price sinking to that of a can of Coke, there are still insuperable obstacles for the impoverished."

Very few OECD countries have official data on Internet access and use². However, a number of commercial and university-level surveys have been conducted in many countries. In Ireland, for instance, the government's Information Society Commission (ISC) has released several reports conducted by commercial research companies, and one commercial firm, Amárach Consulting, has been conducting regular surveys of Internet access since 1998. The ISC reports on access are the most comprehensive in Ireland in terms of profiling Internet users; however they do not include variables such as income and education of users. The most comprehensive official research on Internet access which does include these variables has been undertaken in the US. The analysis will focus on a review of official surveys by the Rand Corporation (1995) and later by the US Department of Commerce (1999).

The Rand study of computer and communication technology in use in US households is based on an analysis of the 1984, 1989, 1993 and 1994 CPS data. The CPS is a large-scale random sample survey of adults and children - approximately 200,000 - conducted by the US Bureau of the Census. In their study, Rand looked at six core variables related to computer and computer communication use: income, education, race/ethnicity, age, gender and location of residence. The review will focus in particular on their findings regarding income, education, gender and location of residence. The US Department of Commerce study of Internet access is also based on CPS data. They contracted the Census Bureau to add questions regarding the Internet to the 1998 CPS, administered to

² The author conducted a survey in December 1999 of census data on Internet use available from the various Census Offices in OECD countries and found that almost none existed aside from the US materials described here. The first Irish Census Bureau survey of Internet access will be conducted as part of the next Quarterly Household Survey in 2000. A question about Internet access in households is also planned for the 2001 Census in Ireland.

48,000 sample households. The latest study found that in December 1998, about one-third of all Americans had Internet access from some location, with about one-quarter accessing from home.

The Rand (1995) study concludes that information society haves and have-nots exist, with membership determined largely by income and education and to a lesser degree, by race and ethnicity, location of residence and age. They note that these disparities have persisted even though computer technologies have decreased dramatically in price and increased in user-friendliness. In addition, gaps based on income and education have increased significantly. Without policy intervention, they believe, these gaps will not close.

The US Department of Commerce study based on data collected four years later (1999) concludes that:

The data reveal that the digital divide - the disparities in access to telephones, personal computers and the Internet across certain demographic groups - still exists and, in many cases has *widened significantly*. The gap for computers and Internet access has generally grown larger by categories of education, income and race ... The information "haves" have dramatically outpaced the information "have nots" in their access to information services ... The digital divide has grown over time. (emphasis in original)

The most significant variable related to computer and electronic use is household income. Both studies found highly significant differences in household computer access across income categories. The 1995 study found that in the lowest income households, the rate of computer use rose from six percent in 1989 to seven percent in 1993. In the highest-income households, the rate rose from 35 percent in 1989 to 55 percent in 1993. Looking at computer access both inside and outside the home, the 1999 study found that access rates varied from 12.1 percent of the lowest income group to 58.9 percent of the highest income group. The later study found also found that the most common reason for removing Internet access from the home was cost, especially among lower income households.

After income, the second most significant variable related to Internet access was education level. The 1995 study found that the use of computer communications is dominated strongly by highly-educated users, and again, the differences in use by education attainment widened significantly between 1989 and 1993. The 1998 study also found that Internet usage both inside and outside the home was highly correlated to

education, with individuals having primary school education or less having an access rate of 6.6 percent, and those with four-year college degrees having an access rate of 61.6 percent.

Turning to Internet access and gender, the Rand study found only a minor variation by gender in access to home computers and network services in 1994, a difference explained by other socio-economic variables. A gap in computer access between women and men existing in 1989 had almost closed by 1994, suggesting that the gap will continue to narrow. The 1998 study found only a three percent difference in Internet access between women and men.

A more in-depth analysis of the relationship of women to the Internet conducted by Leslie Regan Shade (1998) found that one of the most important factors related to Internet access is women's relationship to paid work, with many women excluded from the paid workforce where they would have access to computers. Although public access points will undoubtedly increase the number of women using the Internet, many women have childcare responsibilities and find it difficult to get out of the home. This is confirmed in another survey in 1995 of women on the Internet, conducted by a commercial company, IPA and sponsored by Apple Computer (IPA, 1995). This survey found that the biggest barrier to women using the Internet was time and money. Shade (1998) also found that sexual harassment on the Internet and pornographic content online had an impact on women's access to the Internet.

The last variable reviewed is location of residence. The Rand study characterises location as urban or rural, with "urban" referring to residences within a standard metropolitan area. They study found that in 1993 the use of computers by individuals in urban households (29 percent) was much higher than in rural households (19 percent), but about half the difference was due to other variables such as household income or education. The gap was narrower for computer communication use - with 12 percent of residents in urban areas and eight percent in rural areas connecting with the Internet at home. These gaps remained almost constant between 1989 and 1993. The 1998 study found that rural areas still lagged behind urban areas but that some rural areas had experienced a surge in Internet access.

The latest picture available of Internet users in the US is summarised by the 1999 study: typically high-income households, Whites or Asians, middle-aged, highly-educated, employed and or married couples with children, and living in urban areas and the West. The least connected are low-income, Black, Hispanic or Native American, elderly,

unemployed, single-parent (especially women-headed) households, those with little education and those residing in central cities or especially rural areas.

Regarding Internet access in Ireland, the latest access report by the Information Society Commission (1999) was based on a less reliable survey of the population and did not look at the variables of income and education. The report found that those with Internet access were more often: men, younger age groups, students, middle classes, those working in an office environment in medium to large companies, and living in Leinster. Those without an Internet connection were more often: elderly, manual workers, housewives and the farming community, and living outside of the Leinster region³.

The problem with unequal access to the Internet is not only that the benefits of the technology are enjoyed by a privileged few but also that the more privileged members of society have an additional avenue of access to information and communication resources, thereby further deepening the divide between them and the rest of society. McChesney (1996) reminds us that theories of political democracy suggest that a concentration of media and communication in a small number of players mostly unaccountable to the public represents a significant challenge to the democratic political culture and public sphere. On the other hand, the Internet could possibly undermine the traditional hierarchical control of communication. Herman and McChesney raise this possibility in their review of Internet developments:

In our view, the evidence suggests that the Internet and the digital revolution do not pose an immediate or even foreseeable threat to the market power of the media giants... Yet... [t]he nature of the communication system that the media giants do dominate is in the midst of sweeping change, introducing new players, new possibilities, stunning technological developments, and considerable instability (Herman and McChesney, 1997 :107).

2.4: Media forms or processes on the Internet

Much has been written about the "democratic potential" of new media forms or processes on the Internet, referring to its unique architecture which supposedly has the capacity to democratise social relations. This claim, based on the technology's ability to support interactive many-to-many communication among users separated geographically, was

³ The report uses the terms "early adopter" and "late adopter" to refer to those with and without an Internet connection.

articulated clearly by Ithiel de Sola Poole (1983), who called computer networks "technologies of freedom."

The essential problem with technologically determinist visions is the presumption that a technology can shape social relations, rather than the other way round. As will be discussed in later chapters, there is no empirical evidence that Internet communications are any more "democratic" than those using more traditional communications technologies. Robert McChesney has pointed out that a technology cannot create a democratic political culture where none previously exists (1996:114). Research has found numerous examples of undemocratic social relations on the Internet, particularly gender relations, including Saunders et al. (1994); Alam (1996); Rogers et al (1994:408) and Schmitz et al (1995)⁴. Stephen Jones makes the important point that "just because the spaces with which we are now concerned are electronic it is not the case that they are democratic, egalitarian, or accessible, and it is not the case that we can forego asking in particular about substance and domination" (Jones, 1995:23). Contrary to the claims of the technological determinist arguments, computer communications, like other communications technologies, can be expected to reflect and reproduce the social relations of the users (Spears and Lea, 1994; Winston, 1998).

Although Internet media are no more "revolutionary" than traditional media forms, the Internet does support new media forms or processes and thus offers new communication possibilities to people and organisations. Morris and Ogan (1996) have identified four categories for grouping producers and audiences on the Internet:

- (a) one-to-one asynchronous communication, such as email;
- (b) many-to-many asynchronous communication, such as Usenet, electronic bulletin boards, and Listservers [mailing lists] that require the receiver to sign up for a service or log on to a program to access messages around a particular topic or topics;
- (c) synchronous communication that can be one-to-one, one-to-few, or one-to-many and can be organised around a topic, the construction of an object, or role playing,

⁴ As will be discussed in later chapters, the PEN system in California had major problems with male users making sexist attacks online on some of the women using the system. In another example, the non-profit computer system in Bangladesh had great success with the one-to-one e-mail system. However the interactive bulletin boards were "entirely dominated by men and many of the jokes were sexist. Some even racist. When a woman user objected to a sexist statement the men retaliated viciously" (Alam, 1996).

such as MUDs (Multi-User Dungeons)... Internet Relay Chat and chat rooms on commercial services; and

- (d) asynchronous communication generally characterized by the receiver's need to seek out the site in order to access information, which may involve many-to-one, one-to-one, or one-to-many source-receiver relationships (e.g., Web sites, gophers, and FTP sites) (1996:42-43).

The current research will focus primarily on email and email-based media, including mailing lists and newsgroups (bulletin boards), and on Web pages. Email, mailing lists, newsgroups and Web pages are the primary forms of alternative media produced and used by social movements.

A Web page is a document, in digital form, stored on a computer connected full-time to the Internet. Using a software tool called a "Web browser" - the most common are Microsoft Internet Explorer and Netscape Navigator - Web users can view the digital document in a highly visual form on their own computers linked to the Internet. An estimated 800 million Web pages currently exist on the Internet, far more than the Web search engines can handle; the best search engines catalogue only 16 percent of all Web pages (BBC Online, 1999c).

The Web is the focus of commercial interest in the Internet, rather than email, because its highly visual form can be used to market and sell products to consumers. Web pages have potential for marketing high-volume applications and products, such as digitalized movies and music, and live transmissions of sporting events and rock concerts, delivered to consumers through the high-end forms of data transfer available on the Web. Web pages can also contain catalogues of commercial products which can be purchased online. In addition, Stallabrass (1995) points out that the Web provides corporations with the opportunity to have a dynamic and exciting public face - and as potential customers gather information about a company's products on the Web, so do corporations gather data about their customers.

The Web is essentially a one-way media form, much less interactive than email; however the Web is often described as interactive so that claim will briefly be examined. First is the notion that some products downloaded from the Web are interactive. An example would be computer games or the so-called interactive movies. These products are entirely pre-programmed, and they are not interactive in the sense of the term of allowing communication between the person using the programme and the person writing the program. The Web is often called interactive for another reason, referring to the Web

pages allowing readers to click on an icon and send a message to the owner of the Web page, and encourage a response on that end. An example would be the Web shopping malls, where the consumer can purchase a product listed on a Web page simply by clicking the mouse at the appropriate spot and agreeing on the payment arrangements. This kind of commercial transaction is very similar to catalogue shopping except that a consumer can presumably spend money much more quickly by clicking a mouse than by placing the order by phone or by post.

Stallabrass (1995) believes that because cyberspace is highly complex, people will need guidance through it, and corporations will step in increasingly to provide regular and assured channels of access in the familiar form of television. Web content providers have largely patterned their medium after commercial television. Herman and McChesney find that, to increase their presence and market position, content providers are increasingly making deals with Internet service and software providers assuring their Web sites and online activities take prominence on the Internet, for example by ensuring their Web sites come up automatically on a consumer's computer when it connects with the Internet. Media firms are entering the Internet fray both as content providers and through offering digital satellite broadcasting services, in particular through Internet "push" technology broadcasting popular or targeted Web sites to consumers. Media giants are "pushing" the types of sport and commercial news and entertainment that play well in broadcasting. Herman and McChesney forecast the likely outcome of these trends as "a web within the web" assuring favoured content producers recognition and audiences, with less well-endowed websites drifting off to the margins.

Most major Western newspapers and periodicals produce versions on the Web, and at the end of 1996, more than 400 television and 1,200 radio stations also had Web sites, with content closely tied to their traditional production. However, media firms do not have the same degree of control over the Internet content market as they have in their traditional media markets. Anyone with access to the technology can produce a Web site, with production costs far lower than for a traditional production or publication. All the same, marginal players will have difficulty attracting audiences and competing with the resources available to media firm Web sites.

At the other end of the Internet spectrum to the Web is email; email messages travel very quickly on the Internet bandwidth. Generally speaking, an email message is in text format and does not have a highly visual dimension taking time to download and view⁵. Web

⁵ However, an email message can be sent in a Web page format which can be viewed through a Web browser and emails can contain attached documents which are highly

pages, generally speaking, are more formal documents remaining stationary on an Internet-linked computer, waiting for a user to visit and view. In contrast, email is more informal, created by many more Internet users for the purpose of communicating with a specific person or group of persons. From the very beginning of computer networking, email has always been the most popular use of the technology. As soon as ARPANET went online, the users began exchanging email, "far beyond the requirements for maintaining the network," according to Rheingold (1993). By 1998, email was still the most popular use of the Internet by American users (US Department of Commerce, 1999).

Email has the capacity to make communication a group conversation, through media forms or processes such as an electronic mailing list and a newsgroup. Mailing lists and newsgroups have been called "collaborative" media, a media form in which the audience is the primary source of media content. Rafaeli and LaRose (1993) believe that collaborative mass media systems are a new and significant departure from conventional mass media forms, because the audience produces much of the content with little or no editorial control. They believe that to understand collaborative media, the factors that prompt audience members to make the contributions should be studied. (1993: 277).

The electronic mailing list media form was developed in 1977. The first electronic mailing list was SF-lovers (Science Fiction lovers) which began appearing publicly on ARPANET in the late 1970s. According to Rheingold (1993), attempts were first made to suppress it, because it "clearly fell outside even the most liberal interpretation of research-related activities," but ARPA's top managers decided to let it happen, and the ARPANET system operators were forced to design the system again and again to keep up with the exponential growth in network communications traffic.

The mailing list technology allows interactive communication over vast distances among many participants. Mailing lists are one of the most popular methods of group communication on the Internet; many thousands of free mailing lists exist for exchanges on different topics, mailing lists that can be accessed free-of-charge by anyone with an Internet address. The core technology is a software programme (common programmes are Listserv, Listproc, Majordomo and Mailbase) which can be loaded onto a computer, making the computer capable of interactive, automatic distribution of electronic mail among a specific group of Internet users. The essential features of the technology are as follows: A listowner can set up a mailing list on a server computer. Any person with an

visual, such as Web pages, photographs, videos, etc.

email address can subscribe to the mailing list, free of charge. A subscriber can send an e-mail message to the server, which will automatically distribute the message to all other subscribers by way of the information carrier. Other subscribers can respond by sending their own e-mail message to the server, which will again distribute it to all other subscribers.

Newsgroups (bulletin boards) are the second kind of collaborative media discussed in this current research. A newsgroup is different from an electronic mailing list in that the email messages sent by contributors are not distributed but rather kept in a central database on a computer where they become part of the newsgroup. The best-known system of newsgroups is Usenet. Usenet is a network of hundreds of thousands of computers that exchange email messages posted to different "newsgroups" - more than 5,000 in 1993 and many more today. Millions of Internet users contribute to these newsgroups by sending email messages to the newsgroup which can then be read by other readers. Aside from Usenet, other newsgroups are available freely on thousands of Web pages or on private systems, not open to any Internet user but only to subscribing members, who in some cases pay a subscription fee to have access to the newsgroups.

This chapter will end by returning to Herman and McChesney (1997), who conclude their review of Internet developments by suggesting that "perhaps the most striking change in the 1990s is how quickly the euphoria of those who saw the Internet as providing a qualitatively different and egalitarian type of journalism, politics, media, and culture has faded." However, Herman and McChesney also point to an important feature of the Internet which is radically different from other communications media: it permits global access to "marginal" websites and Internet information services (such as email and mailing lists); this suggests the Internet could be an important tool for political organising, even as a commercial vehicle. (1997:125). This "alternative" use of the Internet will be the focus of the remaining chapters.

Chapter 3: Global alternative media on the Internet

This chapter will review a number of published studies of alternative media on the Internet⁶; the material fell naturally into two categories: alternative media with a global reach or orientation; or local, regional or national. In this chapter global alternative media on the Internet are considered. The studies reviewed include: global feminism on the Internet, the Breast Cancer List, the APC networks, Chiapas on the Internet, and global movements/countermovements on the Internet.

3.1: Global feminism on the Internet

This section will review four studies concerning alternative media and global feminism on the Internet: Sreberny (1998), Kole (1998), and Gittler (1999) on the NGO Forum at the 1995 Women's Conference in Beijing, and Lengel (1998) on women and the Internet in Eastern and Central Europe.

Sreberny analyses a range of women's media and cultural activities, both grassroots and more formal women's information and communication networks, developed around the NGO Forum at the 1995 UN Women's Conference in Beijing. The APC (Association of Progressive Communications) women's program trained Internet trainers, supported women's Internet training, and trained women in Internet skills in preparation for the conference. The Beijing conference, Sreberny believes, was an important example of a feminist global civic culture at work, with 36,000 women registered for the NGO Forum, 60,000 email messages sent and received, more than 30,000 visits to the conference Web site and more than 100,000 visits to the APC international conference Web site. She believes this activity indicates "the speed at which women are moving along the 'information superhighway' (Sreberny, 1998:217).

Another example of women's networking cited in her analysis is the Global Faxnet which helped diffuse information about the change of venue for the NGO Forum in Beijing (the

⁶ In late 1995 and again early 1999 a comprehensive search was undertaken on databases of research journals in the social sciences and humanities, and the sciences, for published literature on alternative media on the Internet. This process came up with almost 90 published articles and chapters primarily concerned with alternative media on the Internet. A Web search was also conducted for materials published on the Web but few of the Web materials were of sufficient quality to use for the current research. These published articles were reviewed, and 32 were sufficiently relevant to be discussed in Part I of the thesis. Some of the articles not selected were used to inform the overall research.

Chinese government moved the NGO Forum to a site about 40 miles away from the official UN conference). The Global Faxnet was augmented with GlobalNet, a website of email addresses. Global Faxnet was used mostly in the South and GlobalNet mainly in the North. Both Global Faxnet and GlobalNet distributed thousands of messages and generated thousands of letters and petitions of protest about the change of venue for the NGO Forum. However, Sreberny points out, this activity was ultimately not effective in persuading or forcing the Chinese government to change the location of the NGO forum.

Sreberny notes that access is the first concern to be raised when new information technologies are discussed in the context of global organising, and she acknowledges that access is a valid concern which must be creatively addressed. She also notes that the endemic challenges hindering women's broader access to cultural and political participation, such as literacy, are less often raised. Sreberny acknowledges that issues for alternative media include the dominance of Western feminist discourses and methods, and class and race inequalities within global feminism; however, she believes that to focus too much on these issues "is to both ignore the huge challenge for women to organize themselves and to be over-schematic about the correct forms the activity should take" (1998:21). She believes that the global interactivity she describes provides support to local and national groups of women struggling to achieve specific goals within their own national context.

The contribution of Kole (1998) challenges Sreberny's optimistic analysis of global networking. Kole points out that popular discourse presents email and the Internet as the solution to the many challenges of developing countries in the South and for women's organisations globally. However the reality of structural relations, the slow speed of organisational adaptation of new technology, and lack of involvement of women in communications technologies serve to limit and hamper this potential use of the Internet. Global digital networks support some empowerment objectives but also reflect existing gender relations and reinforce the South's dependency on the North, Kole believes. She uses a critical theory of technology and development as her theoretical model. Traditional development theory is economic and describes a deterministic evolution of society after the introduction of technology. On the other hand, the critical view addresses non-economic factors, and starts with the basic needs of local communities and their members.

Kole's research focuses on the activities of women using the Internet at the NGO Forum in Beijing, the same activity discussed by Sreberny. Kole found that many of these women were experiencing a low priority or limited time available to participate in

Internet activities in relation to other activities at the conference, a preference for other communications media, and language and technical problems. Her research found that most women's organisations had introduced email and the Internet only recently, email and the Internet had a low priority within women's organisations, and few had time to use it. Most perceived it as just another practical device for communication, subordinate to their regular activities. Email was not used very much for communication among women's groups in the South, where there was low connectivity and high costs for the exchanges. Some members of these groups realized that the Internet could be used to link social movements but did not know how this could be achieved. She found that NGOs in the South experienced no improvement in performance after the implementation phase of the Internet, with ongoing technical and learning problems continuing to occur. Training projects within Southern organisations did not emphasise capacity-building, with the result that after the trainer or support was removed, the organisations could not sustain their use of the technology. An example was a Web page, made for a Southern organisation to distribute information about the NGO Forum, produced in English and which the Southern organisation lacked the language and technical skills to update.

At the Beijing NGO forum, Kole found that Northern women's groups found the information on the Web to be too general, trivial and irrelevant to the goals they pursued at the conference, but women from the South all valued the Web site information as of great or very great importance. Regarding using the Internet for networking, she found that women's groups without email addresses at the Forum were excluded from key processes, unaware that women around them were communicating and organising on the Internet. Groups using the Internet searched for information on familiar organisations, and they sent email to groups they already knew. Most email traffic occurred between coalition partners, colleagues and regional NGOs, and the technology was not used to reach outside or extend coalitions, except for some Southern NGOs from isolated areas previously not able to access the technology. Most email messages were sent within continents. Many grassroots groups did not participate in the Internet activities, because of problems of literacy as well as low use of technology in their own environments due to lack of electricity. Most women she interviewed perceived the Internet as a practical tool only and did not see it as a means of networking. American women dominated the Internet traffic: 643 of the 1,129 registered email users at Beijing were from the US. Among the 186 registered users from the South, 30 percent were from the newly-industrialised nations. The computer equipment at the NGO Forum was entirely high-tech US-based configurations unfamiliar to many women's groups from the South.

Kole believes that the NGO Forum activities reflected the structural relations between North and South. Internet communications were dominated by the English language. The Southern NGOs were dependant on the Northern NGOs for technology, information, financing, knowledge and organisation. North-South communications flows dominated. While Southern NGOs experienced increased access to information, they rarely distributed their own content on the Internet. On the more positive side, Kole found that women used the computer networks at the NGO Forum successfully to influence the UN conference agenda. They acquired new knowledge and skills from their participation, and women from the South experienced improved information access. She concludes that Internet networking does not necessarily contribute to the empowerment process, and that non-technical aspects are the ultimate influence of the technology's possibilities and constraints.

Gittler, another analyst of the Internet activities in Beijing, made similar findings to Kole:

Much of the information to be found on-line was in English. Groups in developing countries incurred much higher relative costs to send and receive information. Even with equipment in place, inadequate telephone lines and lack of Internet access in countries made linking into electronic forums difficult and at times impossible. The costs associated with filtering and passing on information drained resources and meant that those receiving information relied on others to select information for them. Those without direct e-mail access could often only participate in a one-way fashion (Gittler, 1999:95-96).

However, Gittler also points out that many creative solutions were found to address these difficulties, such as downloading the information to disk for storage in local libraries, translating documents and re-posting them, and disseminating information in print form and by fax to groups and women without Internet access.

Moving to research on women's organisations in East Central and South-Eastern Europe, Lengel (1998) also questions the notion of the new global village created by the Internet. The key issue is access: in the regions she studied, Internet service cost more than monthly rent, and costs of computers, modems, phone lines and electricity were prohibitive. The Ukraine had only one phone line for every seven or eight citizens, and in many areas electricity was inconsistent, phone lines were poor and technology was primitive, and the government had more pressing concerns to address, including political survival. Yet many examples existed of innovative uses of the Internet in these areas, particularly in Bulgaria, designated the "Silicon Valley" by the Soviet regime and remaining highly networked compared to neighbouring regions.

Gender differences had become more marked since the fall of the Soviet regimes, with women being encouraged to return to their "natural" mission of bearing children and raising them at home. Before the fall of the Soviet Union, many women held high positions in technological fields, and many women were employed in mundane factory jobs producing computer hardware and software. After the fall, factories were closed along with many educational institutions.

Despite these barriers, women had a growing presence on the Internet in the region, Lengel believes. A Network of East-West women (NEWW) with offices in Warsaw, Moscow and Washington was creating links between women in the former Soviet areas and women worldwide. Their Web site included discussion space, regional and global women's news, and links to the Web pages of women's groups hosted on the site. Although Lengel believes that acquiring an Internet connection is not in itself more empowering than picking up a telephone, she also believes that the Internet can encourage dialogue between women if there is widespread access and opportunity.

3.2: Global information and support: the Breast Cancer List

The second example of a global alternative media form or process on the Internet is the Breast Cancer Mailing List (BCL). Barbara Sharf (1997) studied how the BCL provides support and empowerment for its users around the globe. She begins her article with a quote from a list user illustrating the function of the list:

This list was a great source of support for Deidre in the last months of her life. She was amazed that she could connect with people from Australia who understood exactly what she was going through. I thank you and salute you all who are fighting this war. (from the Breast Cancer List) (1997)

The BCL was created by a male academic at Memorial University in Newfoundland for people with concerns about the disease. The list's purpose is wide-ranging, from discussion of breast cancer issues, a forum to vent frustrations and offer alternative strategies, and a venue for discussing the work of various grassroots breast cancer advocacy groups worldwide. There was no charge to be a subscriber. BCL was an unmoderated list, meaning that nobody moderated the contributions of subscribers. On an average day, 100 messages were exchanged. Although it would have taken several hours daily to read all the messages, subscribers opposed suggestions to limit the length of messages. Sharf found that the overall quality of the discussion on the BCL was very high; messages were characterised by their sophistication, awareness and intelligence. The communicative style of the messages was very supportive, which Sharf attributes to

the high number of women on the list; she believes that flaming - sending emails with hostile or abusive commentary - is not generally found in women-dominated Internet discussion groups. A high level of intimacy was expressed overall. Most postings were acknowledged by other subscribers and most often as an encouragement.

BCL membership fluctuates but was growing steadily; at the time of the study there were 825 subscribers, approximately 25 percent men. As is the norm with mailing lists, most BCL subscribers were lurkers, meaning they received the messages but did not themselves contribute. Most contributors to the list were women anxious to talk about breast cancer, and the most active posters were women diagnosed with breast cancer. Also contributing were partners of women with breast cancer and their adult children, parents, and friends. Most subscribers lived in the US and Canada but some were from one of 25 other countries represented on the list, including Australia, 13 European countries, South Africa, and in South America and Asia. Sharf believes that the list members were not a representative sample of people concerned with breast cancer - although breast cancer is a disease of older people, a large proportion of the postings were from younger women.

Sharf found that the most common function of the BCL was the exchange of information and personal views. Most emails exchanged on the list were requests or responses to requests for information on breast cancer issues, especially information about the classification of tumours and diagnosis. Also circulating on the list was detailed analysis of major news items related to breast cancer. Non-political announcements about sources of information of interest was also a feature. Messages advocating or supporting organised advocacy represented a small percentage of the email exchanged - these usually took the form of announcements of fundraising events and messages urging political response on funding for breast cancer research.

The second function of the BCL was providing psychological support. BCL subscribers discussed their fears and the realities of breast cancer, including different treatments and surgery. The discussions tended to emphasise the positive and be hopeful about the future. Sharf points out that the BCL list differs from traditional support, in its availability around the clock, regardless of geographical location. She believes the list was especially beneficial to people bedridden or without transportation, or living in more remote areas. Another difference from traditional support services was the wide and varied range of experiences and expertise available on the list - the chances that a BCL subscriber would interact with others sharing specific important commonalities was much greater on BCL than in a small local group. However, there was a need to complement the Internet

communication with face-to-face contact; a meeting was organised in the US for list members.

Finally, the third main function of the BCL list was empowerment. Sharf found that individual decision-making was enhanced through the email exchanges on the list. As well, the social interactions of participants on the list were strongly tied to personal actions taken outside the list. List subscribers, and even the lurkers not contributing to the exchanges, could benefit from others' knowledge, and again, the BCL offered a wide variety of experiences and opinions. There were very few instances of negative commentary; Sharf believes that the nature of the content served to protect the list from inappropriate contributions.

Sharf points out that studies have found that social support among women with breast cancer not only improves their quality of life but also increases their longevity by 50 percent. From this perspective, she believes that BCL has positive value, and that Internet-based support services should be used more widely.

3.3: APC Networks

The third review of studies of global alternative media looks at the APC network (Association of Progressive Communications), the best-known non-profit global computer network, connecting more than 30,000 activists and activist groups worldwide. APC comprises more than a dozen interconnecting networks with nodes in many countries. The largest APC network, IGC (Institute for Global Communications), is in the US with more than 15,000 members. The Canadian APC network WebNet is the second largest, with more than 1,000 members. Pegasus in Australia and GreenNet in the UK each have around 1,000 members, and the other APC networks around the world have memberships ranging from a few dozen to many hundreds. They include, for example, Alternex in Brazil, LaNeta in Mexico, Nicarao in Nicaragua, Wamami in Argentina, EquaNex in Ecuador, Chasque in Uruguay, NordNet in Sweden, Comlink in Germany, GlasNet in Russia, GLUK in the Ukraine, Histrina in Slovenija, Zamir in the post Yugoslav countries, SangoNet in South Africa, and GhasNet in Ghana.

A number of studies have been undertaken on the APC networks, including Lewis (1993b) and Sallin (1994). The materials used in this analysis include Friedland (1996) on the APC as a decentralised network, Frederick (1992), Sachs (1995) on opinion-formation on APC, and Stubbs (1998) on the APC Zamir network and the wars of the Yugoslav succession.

Friedland (1996) investigates the conditions under which existing Internet networks might be used to extend democratic practices and lead to a broadened public sphere, particularly through strengthening social capital, the infrastructure generating norms of reciprocity and civic engagement. Looking at new citizenship movements, he argues that the Internet activities of real social movements actively engaged in local problem-solving will strengthen social capital and broaden the public sphere. Friedland sees the APC networks as a good example of an advocacy and problem-solving model of Internet network. Friedland believes that the APC grew from the specific needs of community organisers and progressive organisations, and that their strength is their distributed model, making the widely decentralised APC affiliate nodes the primary information gatherers and producers. He describes how the IGC-APC network in the US grew from an earlier computer network which failed because of the economics of maintaining a high-quality centralised database.

Frederick (1992) describes the APC network as the "world's largest computer system dedicated to peace, human rights and environmental preservation." Like Friedland, he notes that the APC networks are highly decentralised, encouraging local autonomy. More than 800 newsgroups are on the APC system, with the content produced by and accessible only to APC subscribers. APC also carries alternative news agencies such as IPS, the Third World news service. The system is email-based and can be used in countries without access to the Web. His analysis of the use of APC networks to coordinate a NGO response to NAFTA (the North American Free Trade Agreement) found that the anti-NAFTA computer network was still fragile but it had supported the movement in its self-identification, by encouraging ties among NGOs with diverse agendas, facilitating the exchange of valuable information and the development of joint strategies, among organizations separated geographically.

Sachs (1995) examines how public opinion is formed in PeaceNet, an APC network in the US. Sachs believes that the electronic newsgroups on the APC network are ideal for studying formation of political opinion because the discussions can take many diversions and be informed by numerous viewpoints. Sachs makes an important point about "lurkers," the people reading the newsgroup exchanges but not contributing. Previously, analysts assumed that lurkers diminished the effectiveness of interaction online. On the contrary, Sachs believes that the conversation on the newsgroups is of such high quality that lurkers derive benefits simply by reading the exchanges; by sampling public opinion, they formed their own opinions.

The PeaceNet contributors he interviewed believed that the APC network offers left-of-centre viewpoints missing from mainstream media. The newsgroup postings were generally very detailed, much more so than would be available in a print media format. In particular, much of the international news on the network was unavailable elsewhere. Further, Sachs found that the PeaceNet users harboured dislike and animosity towards both individual journalists and the press as a whole. Specific complaints about the mainstream media by PeaceNet contributors included the weakness of the editing process, the dominance of corporate interests, and commercial ownership and advertising.

PeaceNet contributors used the network to combat the isolation they felt from other individuals and groups with similar political values and interests - often the isolation was geographic but some of the network's most active users lived in major cities. The network provided the means to develop a support group with others of similar alternative views and a space where users isolated from political discourse could come together and participate in a dynamic forum.

Sachs found the cooperative nature of the information exchange on Peacenet remarkable. Although some of the information posted was from mainstream sources, most was written by the network users themselves. Contributors were local sources or experts, with local sources serving as witnesses or participants in events. Sachs points out that a potential challenge associated with the lack of gatekeepers for the information is credibility of sources. Newsgroup discussion threads could last for months, with contributors entering and leaving at will; this allowed new aspects of the topic to be explored from fresh angles but it also increased the impact of misrepresentation. However, while PeaceNet provided an important space for opinion exchange, he found that the newsgroup content was generally of a narrow and well-defined ideological framework, and even the debates operated within a given set of assumptions.

The final article on APC discussed in this section is a case study of how the APC networks were used during the wars of Yugoslav succession. Stubbs (1998) believes that the discourse of "online communities" is limited. Rather, he prefers to examine "the complex identities which users present online and offline, and the ways in which email participation satisfies some of their needs for sociability, some of the time." He believes that the cost of Internet access is likely to be the major prohibitive factor limiting access but notes that there has been a growth of low-cost non-profit servers in the Yugoslav region. Stubbs believes that the use of English as a dominant language on the Internet is a significant barrier to online participation on the APC network. Those using the Internet actively are a small world, he believes, a world often populated largely by the "politico-

teckie." He refers to Manuel Castells' assertion that the early adopters of the technology will continue to frame the future direction of the Internet as it becomes more widely available.

Zamir.net is the APC network established in 1992 in an explicit attempt to use email in peace building and conflict resolution. "Zamir" is the Serbo-Croat word for "peace." The network grew to link anti-war groups in Zagreb and Belgrade whose communications were cut or slowed significantly during the conflict. Network servers were set up in the two cities, with another in Germany; more servers were later added in five other cities in the region. Zamir.net was used during the war years by a wide range of anti-war groups, other social movement organisations, and individuals. The network, funded by the West, offered free access at point of use in most cities served.

Stubbs believes that Zamir.net was a visible part of an experimental social movement involved in globalisation from below, and that at its best, it was:

... a kind of experimental participatory democracy, in which Western peace activists ... formed relationships with local activists ... which were very different from the exploitative ones often found in such encounters.

The network of women's groups throughout the post-Yugoslav countries were active Zamir.net users, and women constituted more of Zamir.net's users than is the norm for such networks. Training groups for women, such as the "Electronic Witches" played a key role in encouraging women's participation on the Internet. Stubbs found that women's participation on the network differed from men's in one key aspect: they used more email (interpersonal communication) and less of the formal newsgroup participation.

Zamir.net was crucial in stimulating global news coverage of key events, such as massacres. This process involved internal "witnessing," a key strength of the network. However, Stubbs believes that Zamir.net never achieved its objective of being a genuine transnational movement because most groups using the network had not been actively communicating with each other since the 1980s, and the network was not able to get them to begin communicating again. Zamir.net was one of the few avenues available for those using the network to exchange messages with friends around the world. Although most network users appeared to be committed to its broader social goals, they used it primarily to maintain their own global social networks.

Locally, Zamir.net was part of a larger alternative or oppositional scene in Zagreb, capital of Croatia. The network linked with real activist events locally such as petitions, demonstrations, and other happenings. Stubbs believed that this wider alternative scene developed a specific local cultural code not easily understood from afar. Although Zamir.net's stated role was to explain local events to a wider public, this never happened to any significant degree. The newsgroup apc.yugo.antiwar (AYA) on the APC network was accessible to APC users around the world, who could read the emails posted and contribute their own. Activists outside the geographical area criticised the low level of critical discussion on the AYA newsgroup, and some contributors abused the network by posting "limitless... daily ramblings." For instance one contributor on the inside posted voluminous personal thoughts on, among other things, his mother's cooking. This contributed to tensions between activists locally and outside in Western Europe. Part of the difficulty was that the complexity of the war, with many different viewpoints and political positions, made it difficult to determine exactly who should be supported strategically. When Stubbs was writing his article (April 1998), most of the postings to the AYA newsgroup concerned the situation in Kosovo. News briefs and reports comprised the bulk of the content, with very little online debate.

Stubbs concludes that the AYA newsgroup was an example of wasted potential, a "pseudo-democracy" in which the real civic dialogue occurred at offline events rarely reported on the network. Although Zamir.net was an effective part of a "localised repertoire of counter-hegemonic meanings," it was less successful when meeting a wider discourse, specifically, the peace movement in Western Europe and North America. His analysis highlights the difficulty of constructing a global social movement.

Finally, Stubbs makes an observation similar to Sachs's findings - he was struck by the fact that the discourse on the network was remarkably similar. The stability of network seemed to depend upon a constant reconstruction of fixed positions, and was not flexible to the shifting concerns of the people involved in the war. There was no place for "the profane, the dubious, the doubting, or the simply confused."

3.4: Chiapas on the Internet

In the literature on global social movements and the Internet, the situation most often discussed is the Chiapas uprising, and particularly the use of the Internet to sustain global support for the EZLN. The Zapatista National Liberation Army (EZLN) rose up in Chiapas, Mexico on January 1, 1994, in resistance to the expropriation and enclosure of lands. Since then, despite their vulnerability - the EZLN consists of about 3,000 poorly-equipped peasants - they have successfully forced the Mexican government to address their demands. Analysts of the situation have noted the strong links between the Internet and global support for the uprising (Cleaver, 1994). In mid-1995, the Mexican secretary of foreign relations announced to a delegation of 150 industrialists from 37 countries that: "Chiapas, please take note, is a place where there has not been a shot fired in the last 15 months. The shots lasted 10 days, and ever since the war has been a war of ink, of written word, a war on the Internet" (O'Donnell, 1995).

This analysis of research will consider five sources: Cleaver, 1994; O'Donnell, 1995; Schulz, 1998; Everett, 1998; and Glusker, 1998. Two of the above sources, Schulz and Everett have developed a theoretical framework guiding their work.

Schulz (1998) situates the Chiapas Internet activity within a wider social movement analysis, referring to the social movement theories of Habermas, Melucci, Touraine and Eyerman and Jamison. Schulz identifies four fundamental elements of the uprising's dynamics: the socio-economic and political context, the political-military opportunity structure, global network capacity, and the communicative praxis; the latter two are the most relevant for the current study. He makes the important point that unlike vanguard guerilla movements, the EZLN were engaged not only in a military struggle but also a communicative discourse. The EZLN rebels were committed to coalition building and gaining international support. Schulz believes that computer networks were crucial for the EZLN to spread their messages freely to a huge audience and to build national and international support. Schulz believes that the EZLN struggle is increasingly one of words to win public attention and sympathy, the "communicative praxis." He makes the point that, unlike other guerilla movements, the EZLN are not isolated from the rest of society but have strong links with other peasant and indigenous groups, unions in Mexico and abroad, and significantly, the coalition of groups in Canada, the US and Mexico against NAFTA⁷. These anti-NAFTA networks provided the EZLN's anti-NAFTA messages with

⁷The North American Free Trade Agreement came into force in Mexico on the same day as the Chiapas uprising.

potential supporters. In Canada, for instance, the anti-NAFTA Action Canada Network includes groups representing labour unions and environmental, women's, indigenous and religious interests networking within Canada and with similar groups in Mexico since 1991, three years before the uprising. Their communications were facilitated by the Internet, including email, mailing lists, and Internet bulletin boards. Schulz believes that linkages with Mexican civil society and to supporters abroad were crucial in creating the pressure to prevent the Mexican government from waging a sustained military campaign.

Everett (1998) is an anthropologist whose main criticism of the Chiapas Internet activity is the restricted access to the technology. Despite phenomenal growth, access to the Internet remains extremely limited in Latin America and reflects existing class, gender and regional inequalities. In many countries in the region, it takes a year to have a phone installed; in 1998, 97 percent of Latin American municipalities did not have Internet access, and no Latin American government has policies aimed at democratising access to the Internet. Although the Internet affords the possibility to circumvent traditional media and government censorship, to organise across borders, and to voice political opposition in anonymity, the victims of repression must typically rely on outsiders for access to the technology. She believes that this indicates a lack of meaningful interaction between repressed groups and their allies in the technology and results in romanticism about the process, with Internet supporters of the Chiapas rebels painting an equally romantic picture of themselves as they do of the Zapatistas. Another significant barrier to Internet access is language, not only literacy but also the English-language bias of much of the information on the Internet.

Many Internet information sites and processes were set up to support the struggle in Chiapas. Cleaver (1994) points out that one of the most striking aspects about the Chiapas uprising is the speed with which news of the struggle circulated and mobilised international support. Messages circulating on various Internet networks were sometimes repackaged by interested parties in other forms, such as *Chiapas News* and *Chiapas Digest* or were archived on other Internet sites. The *Chiapas-l* mailing list, circulated 175 messages every 10 days among more than 600 subscribers during mid-1995 (O'Donnell, 1995). The EZLN homepage (www.ezln.org), maintained by a San Francisco-based Internet consulting group, was accessed 160,000 times in the 14 months since October 1996 (Shultz, 1998).

O'Donnell (1995) found that the subscribers to the Chiapas mailing list on the Internet were almost all from North America, and most were from educational institutions. Further, the large volume of email on the list acted to discourage the participation of other

subscribers, especially those paying to download the messages. The primary function of messages on the Chiapas list was disseminating news about the struggle, mostly written by journalists working for mainstream newspapers and alternative publications. Many articles were circulated to subscribers within a day of publication in *La Jornada*, a left-leaning Mexican daily, and selected articles were translated into English by the NGO the National Commission for Democracy in Mexico (NCDM) and distributed on the list within several days of publication. Also circulating on the list, to a lesser degree, were news and information written by solidarity organizations: reports of meetings and events taking place in Mexico, the US and Canada, including public demonstrations and other solidarity activities. More than one in 10 of the messages circulating on the Chiapas-l was linked with a solidarity function outside the Internet: encouraging readers to participate in actions, including contact information on outside activist groups, and reporting on activist activities. Many of the list subscribers spent a significant amount of time and space discussing the potential impact of their solidarity activities. Another notable feature of the discussion on *Chiapas-l* was the highly critical perspective on mainstream news, and in particular, the critical discussion of news circulating on the list itself.

The Zapatistas claim that their decision-making is collective, democratic and based on local traditions and that women have equal rights in the movement - a claim which has gained the support of feminist activists in Mexico and globally (Schulz, 1998). Glusker (1998) believes that the active networking by Mexican women on the Internet is a reflection of their networking outside, and believes the Internet activities around Chiapas are an example of how women's networks extend outside of Mexico's borders. Yet Everett criticises the advocates of mobilisation of technology to close the growing gaps in inequality. Referring to the fact that women comprise two thirds of the world's illiterate population, she believes that technology alone will not solve social problems but rather will exacerbate them unless the technology is introduced alongside social programs such as literacy programs, women's education and greater employment opportunities for women, and policies to make technology more accessible and relevant to women.

Cleaver believes that the process of alliance-building has created a new organisational form: "a multiplicity of rhizomatically connected autonomous groups" previously disconnected and separate. On the other hand, Everett believes that much of Chiapas' "virtual resistance" is highly romanticised and has very little direct connection to the actual victims of repression and inequality. She also underlines the fact that the very people that advocates argue will benefit from the Internet in Latin America are the most marginal to the process of social change. Commercial and military interests continue to

dominate the development of the Internet, providing governments and militaries new powers of surveillance, and new forms of control, she believes.

3.5: Global movements/countermovements on the Internet

In the last series of studies of global alternative media on the Internet, several studies examining conflicts on the Internet by social movements and social networks will be reviewed, including "discredited communities" (Mukerji and Simon, 1998), right wing groups (Zickmund, 1997; O'Donnell, 1999). These will be discussed under the general title "movement/countermovement," which to some degree describes the interaction on the Internet.

In the second movement/countermovement discussed in this section, Zickmund (1997) examines right-wing social movements on the Internet, in particular neo-nazi groups. She believes that the Internet has affected the cohesiveness of subversive organisations. Traditionally, individuals propagating Nazi ideologies have been isolated and had limited ties to organisational structures, and neo-nazi materials had been difficult to access. With the Internet, messages circulate beyond the pre-established alliances, and the free distribution of materials has encouraged a thriving neo-nazi culture. Zickmund uses Althusser's expression "interpellated" to describe the discursive process of "evoking a collection of individuals into a group through an ideological screen." Ideological interpellating is crucial to understanding subversive cultures on the Internet, Zickmund believes, because the people communicating do not have the spatial markers that determine group membership.

The distribution of neo-nazi material on the Internet has come up against legal challenges. In Germany, there has been a constitutional ban since WWII on Nazi documents, and since 1990 on music with hate lyrics. However, with the Internet, the power of one nation to restrict literature is greatly reduced. Germany attempted to assert control by calling on CompuServe (a US-based ISP) to restrict access to neo-nazi materials; instead CompuServe responded by restricting Germany's access to the Web. Since that time, a US court judgement to maintain free speech on the Internet has effectively rendered the Internet self-regulating, without the interference of governments⁸.

⁸ A brief history of this development: In February 1996, the US Congress enacted the Communications Decency Act, which made it a crime to post "indecent, obscene, lewd, lascivious, filthy" material on the Internet. The Act was met with legal challenges by civil liberties and other groups. On 26 June 1997, the US Supreme Court declared the 1996 Act unconstitutional, for violating the First Amendment guarantee of freedom of speech.

Zickmund describes the US radical right as a compendium of groups with different, often conflicting agendas sharing a "vociferous" hatred towards one or more groups, disdain toward government authority, and a link to the Ku Klux Klan or other nazi-based organisations. She estimates the membership in these organisations as from 20,000 to 100,000 in the US (a substantial number but of course only a fraction of the total population). On the Internet, their activities in the US and other Western nations included Aryan and white power and skinhead Web sites, mailing lists, and Usenet newsgroups. The Internet traffic centred on the US and included ties to groups in Canada, Denmark, Norway, Sweden, Britain, Germany and Spain. The newsgroups were seen by the radicals themselves as central to attracting new members to the network. The White Aryan Resistance home page on the Web provided free Web space to any racist homepage censored by commercial services. Skinhead Web pages were most prominent in Germany. The discourse in this Internet material centred on war, with the radical right associating themselves with icons of political oppression, violence and death. They commodified fascist regalia, selling goods on newsgroups and through mail-order catalogues on the Web. Zickmund notes that:

The solicitation of Nazi goods reinforces culture icons while encouraging a consumerist orientation towards radical materials. In this way, this virtual marketplace for Nazi goods offers for sale valued symbols and texts as it spreads and strengthens the ideas which these items signify (1997).

In the radical discourse, the place of the "Other" was crucial - predominately people of African descent, homosexuals and Jews. Zickmund points out that the Other must not have a voice but must remain mute or speak only in the ways permitted by the dominant discourse. This was maintained in the Internet materials by using derogatory terms for the Other. At the same time, the radicals denied the oppressed condition of the Other and instead saw themselves in that position. Zickmund believes, however, that the Internet is also a place where non-racist individuals can intervene. Interactions occurred daily on Usenet, with antagonistic messages triggering dialogue and functioning as "an ideological dialectic." An example of intervention on the alt.politics.white-power newsgroup follows, with the first posting from an army officer:

[User 1]: Well, I am proud and will not take crap from anyone. I hate niggers, spics, wops, kikes and yes, white trash.

[User 2]: Such thoughtful, considered brilliance clearly shows that the US special Forces only pick men of the highest calibre - intelligent and logical thinkers who scorn

danger. I suggest the US military may need to rethink its recruiting policy. And by the way, your mother dresses you funny. Pip pip! (1997)

Zickmund believes that substantial intervention from antagonists may serve as an alternative to censorship of these radical newsgroups, with the openness of the Internet making it less likely for radicals to break away to form isolated cultures away from moderating influences. She concludes that the Internet may endanger the notion of a closed community and could become an important site in the struggle against bigotry and racism. However, a later review of research on neo-nazi activities on the Internet (O'Donnell, 1999) found that most of the Internet activities by these groupings takes place behind the scenes, by email and mailing lists, where it cannot be challenged by other Internet users.

The final article analysed in this section on movements/ countermovements also challenges Zickmund's assertion that the Internet endangers closed communities. On the contrary, Mukerji and Simon (1998) argue that the Internet supports closed communities. The authors believe that questions about new media should be placed in historical perspective - what earlier media could or would not do has shaped user interest in the Internet. The authors believe that print and traditional media have been used successfully in constituting a public sphere but have not successfully supported community-building, whereas the Internet offers new opportunities to groups not well served by public media. Internet interactions, they believe, can support many of the informal interactions taking place in communities, giving members a new tool for negotiating and rehearsing public forms of group life.

Compared to print, with the capacity to mass produce exactly repeatable messages, Internet email can be tailored to emerging local communities, and can be copied and reworked into new messages passed on to new readers. For these reasons, email can support the evolving concerns of social groups, including community building. The authors use Erving Goffman's theory of frontstage and backstage to describe different social interactions⁹. Groups use social backstages for planning, managing or responding to their collective public life on the frontstage. The authors see the Internet as providing backstage spaces to social groups - they also use the term "green room" to describe these spaces, referring to the backstage areas where stage actors go to socialise and discuss their performance and the audience. Mukerji and Simon's research focuses on two

⁹ Goffman, Erving, 1963, *Behaviour in Public Places*; 1959, *Presentation of the Self in Everyday Life*.

instances where groups were in effect forced to retreat from the frontstage or public sphere, to regroup and discuss strategies for their return to the frontstage. Both were groups of scientists responding to public ridicule of their research, and in both cases, they used the Internet as a tool for discussing and continuing their work away from the public eye. The Internet provided these groups with the means of withdrawing from the world of print and "reconstituting themselves as serious researchers prepared or preparing to reassert their legitimacy as public voices in modern American science."

The authors' second study focused on email communication by research scientists working on cold fusion (generating nuclear fusion cheaply at room temperature), which was formally rejected by the scientific community in 1990. The authors describe how those continuing to pursue cold fusion research had to contend with ridicule, funding cuts, restricted access to research space and materials, and rejection from journals and patent offices - the normal "scientific frontstage," including access to the world of print.

Cold fusion scientists used the Internet as a space for continuing to discuss and distribute their work. The Usenet newsgroup sci.physics.fusion (SPF) was set up originally to discuss current developments in cold fusion, but as the controversy developed in the outside world, the SPF newsgroup became divided into sceptics and supporters. In 1995, the core group of cold fusion supporters split off to form their own private mailing list, "leaving a number of very vocal sceptics with virtually no one to argue with." List members formed their own separate mailing list after becoming frustrated with debating about whether or not cold fusion existed; the new list provided a communal space "away from the frontstage pressures of establishing and maintaining credibility." The mailing list was an important space for a range of backstage activities including collective theorising, exchanging experimental data, advice on where to buy cheap equipment, and news from the scientific literature, as well as providing support for community members. Away from the attacks on the SPF newsgroup, the mailing list members created a space in which they could be more coherent and optimistic about their plans to make cold fusion acceptable in the scientific community. The number of messages exchanged was very high, 200-300 messages a month amongst the 10 to 15 core participants, and the authors believe that the volume of messages indicates that it helped to build trust among the participants. There were many examples of members offering support to one another, for example when articles to scientific journals were rejected. In addition to the mailing list, several list members set up Web pages, to which new members were always referred, consisting of data, graphs and calculations from experiments. The Web pages illustrated the earnestness and seriousness of the group and helped "maintain standards of what counts as legitimate discussion on the list."

Mukerji and Simon conclude that mailing lists are "technologies of the backstage" promoting more intimate and focused communication. In contrast, Usenet newsgroups are public and visible; they are very useful for attracting new supporters to a cause but can discourage group cohesion when the cause suffers from public censure and critics threaten stability on the newsgroup. In both cases studied, mailing lists "provided participants with opportunities to grapple with common problems and prepare to reenter the public sphere as respectable actors."

This chapter will conclude by highlighting several key points from the review; these and other aspects of the literature on global alternative media on the Internet will be discussed in Chapter 6 in the context of the analytical framework for empirical research.

*Access barriers significantly shaped the global aspect of alternative media on the Internet in almost every case studied. Participants in the global alternative media were primarily Western, English-speaking, and predominately from the United States.

*Only a small percentage of the target audiences for the media participated in production in most cases, as a direct consequence of the access barriers. Email was more accessible than Web pages to most Internet users.

*The content in many cases was successful in challenging the dominant codes of mainstream media and culture to the participants creating the media.

*Global alternative media varied widely with respect to links with mainstream politics and movement politics and organising.

*Global alternative media were successful in some cases in creating or strengthening communities of interest, especially of individuals and groups who were marginalised or isolated from the mainstream.

*The links between global alternative media on the Internet and the public sphere were complex and varied considerably in type and nature from case to case.

*There is no clear link between global alternative media on the Internet and support or strengthening of a global alternative culture or movement; again, the experiences varied considerably among the cases.

Chapter 4: Local, regional and national alternative media on the Internet

The previous chapter reviewed studies of global alternative media on the Internet, and this chapter will shift the focus to alternative media in local, regional or national contexts. It is important to point out that the studies in this chapter, although diverse, focus on alternative media in Western countries, primarily because almost all the materials found in the literature review focused on activities in the West. The selection in this chapter does not mean to imply that social movements outside the West in local, regional or national contexts are not using the Internet. On the contrary, some activists outside the developed world are using the Internet actively for this purpose (see, for example Alam, 1996; O'Donnell and Delgado, 1995), and there are activities in this area in developed countries outside the West (see, for example, Wheeler, 1998; Taubman, 1998). The selection of materials for this chapter was made primarily on the basis that they contained enough information or data to allow a critical review to be made of the alternative media participants, production process and content, as well as the wider social and political issues. The cases reviewed include: PEN, community Internet networks in Europe, American militias on the Internet, alternative media on the Internet for women, and community and voluntary organisations and the Internet.

4.1: Santa Monica's Public Electronic Network (PEN)

This chapter on local, regional and national level alternative media on the Internet will begin with PEN, the best-known, and most well-studied, urban community network in the United States. PEN, the Public Electronic Network, was launched in 1989 by the City of Santa Monica in California. PEN was the first publicly-funded, municipal, free-to-users computer network in the world. PEN's goals were to: provide greater access to public information, enhance residents' communication with public officials, and establish fora for discussing public issues. Literature reviewed for this analysis of PEN includes: Rheingold, 1993; Collins-Jarvis, 1993; Varley, 1991; Schmitz et al., 1995; Rogers et al., 1994; and Dutton, 1996.

The PEN network offered its users three basic services, or media forms: private email, public newsgroups, and online access to civic information. Email was used behind the scenes as members mailed each other personally in instances when public online communication was not appropriate. The PEN system operator said that: "The ability to operate behind the scenes with email is the glue that keeps the [newsgroups] going" (Varley, 1991). The newsgroups proved to be the most popular use of the system, followed by email and access to city databases. The general use patterns suggest, as

several authors point out, that people turned to PEN for new venues for communication with each other more than for new information sources.

PEN's designers were committed strongly to creating a community-based "truly democratic" online network. Messages in PEN were attributed to users under their real names, similar to rising at a public meeting and stating their name. PEN's designers saw the system as a public good; public terminals were a key design component, accounting for more than 20 percent of the log-ons. Many homeless people used PEN, especially a "homeless" newsgroup, with most accessing through the public terminals.

The PEN registrants' profile differed in significant ways from city residents. They had higher incomes, most were male, they were more educated, and they had a higher political interest and activity level. Dutton (1996) notes that although fewer than five percent of Santa Monica residents registered on PEN, this was more than on other online community systems. PEN was able to sustain 400-500 active users in any given month, a significant number compared to the numbers participating directly in local public affairs. Collins-Jarvis (1993) found that compared to other public online systems, PEN had a relatively high rate of adoption by women, which she attributes to the public access terminals.

Of the 3,000 PEN registered users, only 500-600 logged on every month; about 50 were "hardcore" users whose names appeared again and again on the system. Rogers points out that this pattern was similar to other online systems, which averaged a 20 percent active use pattern by users. The pattern remained consistent over the years on PEN, although the identities of the heavy users changed. The number of PEN users peaked in the third year and then dropped one-third the following year.

The PEN users group chair suggested that the online newsgroup encouraged social interaction different from traditional media:

It's not like writing a letter to the editor of the local newspaper, where you have a chance in a thousand that it will be published, and no one ever responds to you even if it is. You put something provocative on PEN, and you get responses. And then other people chime in and pretty soon you've got a good debate going (Varley, 1994:46).

All PEN users had to sign a written agreement to abide by certain rules but most online activity was self-policing. Dutton found that self-policing was active, with some PEN users known as "thread police," incurring complaints by other users. (A thread is a

discussion sub-topic.) His survey of PEN users found that users' concerns regarding norms on PEN were: civil discussion, including decorum, flaming and obscenities, and freedom of speech and censorship.

The PEN system was vulnerable to abuse. The system had "resident bullies" who dominated the discussion by commenting on almost every topic and engaging in name-calling. The system administrator described PEN newsgroups as like "trying to hold a meeting while allowing somebody to stand in a corner and shout" (Varley, 1991). City staff believed that email messages from PEN users were more often rude than other messages they received through traditional communication channels. As PEN users became more concerned with what they perceived to be breaches of civil discussion, they began dropping off the public newsgroups but continued using private email. The increasing hostile entries led to restructuring the newsgroup system, introducing moderators on some newsgroups, and establishing new rules for restricting the posting frequency and length. These changes were controversial, attacked by some users as restrictions on free speech. Newsgroup participation dropped, and an open, unmoderated newsgroup "contains sections resembling electronic combat zones" according to Schmitz.

Dutton (1996) concludes that online communications should not be unmanaged and unregulated. The benefits of computer mediated communication (CMC) - including stimulating public debate, bringing in new people to the public arena - are at risk without norms and rules effectively regulating electronic meetings. Unregulated interaction will alienate users and therefore fair rules for public electronic fora are vital. He suggests that electronic fora should be conceived as and run as public meetings, with rules of order governing protocols for speakers designed to facilitate communication and decision-making.

In his wide-ranging review of community networks, Rheingold (1993) echoes the need for public rules of order on PEN and other networks. Schmitz (1995), also, found that the commitment to "empowerment" and openness online led to non-participation. He believes that the greatest challenge to community online systems is the "tension between freedom of expression and unrestrained, potentially abusive invective." However, he also notes that the PEN members deemed the most offensive seemed immune to criticism and social pressure, and he suggests that software could be used to delete emails from participants deemed offensive.

Regarding gender relations on PEN, the first few women on PEN were "badgered," by male users making disparaging remarks and innuendos. The badgering took two forms:

incorporating female PEN users' names in an interactive sexual fantasy narrative with a domination theme, and making offensive remarks to female users supporting a pro-choice position in an online abortion discussion. One woman user described how "several of the 17 and 18-year-olds started to post their very violent fantasies. They would use initials of women on PEN and say that they would dismember and rape us." Rather than dropping off the system, PEN women formed a support group, called PEN Femmes, to welcome new women PEN members. Harassment from men subsided when more women were online. The women also lobbied successfully for online newsgroups on women's issues. Collins-Jarvis describes that in her interviews with PEN women users:

... a common story emerged concerning how a few male users threatened to socially construct the PEN system as a males-only communication network and how the respondents restructured the PEN system in a fashion more conducive to female participation (1993:59).

Looking at PEN's links with political participation, several authors link the system's emergence with the generally left-leaning political climate of the city and suggest that the city's political character also shaped the political participation on PEN. Those using PEN for political reasons were a different group than the people involved in civic politics. Most women using PEN in its first year were active also participants in community politics and used PEN as an extension of their participation. PEN allowed some women to develop supportive social networks with other politically active women. In particular, PEN's abortion issues newsgroup brought together women with similar positions previously unknown to each other. PEN provided for a few women a new means of involvement in community politics, and an alternative source of social support. Yet several authors believed that most PEN hardcore users differed from other community activists in the city. A city council member stated that the PEN group "is less of an insider crowd." This suggests that PEN might be a forum for alternative politics, one perhaps attractive to women. The interaction on the "homeless" newsgroup sparked a group that met and worked together both online and offline, successfully lobbying for funds to build a structure to provide showers to the homeless and vouchers to wash clothes in a commercial laundromat. Later, this included a classroom with computers for training job skills to homeless persons.

The city's political insiders generally stayed clear of PEN. Some council members tried participating but were driven off the system by users attacking them online. Varley (1991) found that PEN users "tend to pounce on any officeholder bold enough to enter the online fray, making accusations and demanding a response." Difficulties also emerged for national-level politicians involved with PEN. The local congressman volunteered to

sponsor several online discussions about national and international policy. His staff monitored the newsgroups and replied to queries for information, sending most for research and reply to Washington. This arrangement proved unsatisfactory - PEN users were unwilling to wait the several weeks for a reply from Washington, they resented that the congressman himself did not get involved online, and the congressman's office was frustrated at spending considerable time responding to only a few constituents and then being criticised for not doing enough. Varley notes that: "Even Santa Monica's guru of participatory democracy, State Assemblyman Tom Hayden, insists that he and his staff don't have time for PEN."

4.2: Community Internet networks in Europe

Many community Internet networks exist in Western Europe but few have been the subject of published academic study. Most published reports are early feasibility and exploratory studies, self-evaluation reports, interviews with network managers, or oblique references in larger studies (c.f. Ducatel and Halfpenny, 1993, and Gallimore, 1997, on the emerging Manchester Community Information Network; INSINC, 1997 on various community initiatives). The three community networks discussed here were the subjects of more in-depth analysis: Amsterdam's Digital City (Brants et al., 1996); the Craigmiller Community Information Service in Edinburgh (Malina and Jankowski, 1998); and the Dublin Inner City Computer Network (Ennals, 1996; O'Donnell, Trench and Ennals, 1998). This discussion will conclude with some comments on digital cities (Aurigi and Graham, 1998).

The Inner City Computer Network (ICCN), which ran in Dublin from mid-1995 to mid-1997, operated through email and bulletin boards accessed through the Internet. The network members were six community organisations in the inner-city, and the network objectives focused on improving access to information on local job opportunities, providing information about training and counselling, setting up a campaigning group for unemployed people, and establishing an active information flow between the ICCN members. After initial technical problems were ironed out, 10 electronic bulletin boards were set up on topics ranging from "jobs" and "skills" to "news" and "development." However, after the first few months of operation, the coordinator was the only member posting information to the bulletin boards; after that, only one other ICCN member put information up on the bulletin boards, although others did read and download the information.

Exchanging information presented problems for the network members, who had no established information procedures. Operating on a parochial basis - each organisation was responsible for a particular geographic area - did not facilitate information sharing among the network members. They had no history of working together before the ICCN network was established. The organisations had little common ground aside from working in the inner city with unemployed people; it was expected that this common interest would encourage lobbying activities as a group but few organisations had lobbying or publicity operations and this never emerged. The network members found they had little time to use the network and cited work pressures as a significant obstacle to staff training and practice with the network. Hardware issues included the fact that most ICCN network members had only one computer with a modem and few others in the office, making access to the modem-linked computer difficult. The evaluation concluded that computer networking was not compatible with the processes existing in their organisations, and they found it difficult to change themselves to fit the requirements of the technology or to adapt the technology to meet their needs. The ICCN network was not successful in meeting its objectives. At the end of the ICCN project, the network was expanded and re-designated as the "Inner City Employment Service" network, funded nationally by the government and run by a local Partnership company. Government members thus joined the network. The principal objective of the Employment Service network was to tackle unemployment in the area. Thus the focus changed from a community-oriented network to one representing national employment policy.

The second community network reviewed in this section is the Craigmillier Community Information Service in Edinburgh (Malina and Jankowski, 1998). The authors note that until the late 1980s, many community networks in the US were non-commercial but turned to a more commercial model to provide financial support. Malina and Jankowski note that the virtual democracy concept can be traced back to experiments with earlier telecommunications technologies - such as the telephone, radio, teletext, and cable television, mostly in the US - aimed at increasing democratic participation in decision-making and governance and that similar experiments with the Internet have similar aims to stimulate citizen involvement in the political process.

The Craigmillier Community Information Service (CCIS) was a non-profit computer network established to provide community information and a means to communicate, and to provide an opportunity for local groups to link to emerging communication networks. Craigmillier, a housing estate on the periphery of Edinburgh home to 11,000 people, is "the most distressed district in Scotland." The CCIS was conceived locally by several representative groups who believed the network could play a role in reducing social

isolation and regenerating the community. The service provided local groups with dial-up Intranet access as well as free email, file transfer and online conferencing. In the first years of operation, CCIS users numbered around 700; this dropped to around 500 a few years after that. An evaluation found that very few local citizens had access and contributed to the network. Many basic access problems persisted. Users were positive about the project and its aims but disappointed that the information posted was less useful than expected. The anticipated "lively debate" on social issues never materialised. The system was premised on the expectation that content would be provided voluntarily, which proved a problem. The authors conclude that it remained uncertain whether local citizens would contribute to the network in the future.

The final European community network to be reviewed is Amsterdam's Digital City. Brants's (1996) account of the Digital City begins with an uncritical view of the Internet which sees the Internet as inherently anarchistic and non-hierarchical but then goes on to acknowledge that many local level initiatives have been top-down, government initiatives aimed at giving access to official information, with only a very few aiming at what Brants terms "the socialisation of democracy: the improvement of responsiveness of political representatives, active citizenship, communication and public debate..."

The breeding ground for the Amsterdam online projects included a dramatic decline for voter turnout in elections, prompting many city executives to review their links with the electorate. The centre-left city council looked to the city's advanced cable network and sanctioned several IT-based projects aimed at encouraging more political participation. Three projects were piloted: City Talks, City Consultations, and Digital City. City Talks, aimed at improving the quality of public debate, began in 1989 on television and telephone, progressing to an online network accessed in libraries and the town hall. An evaluation found that few "ordinary people" got involved; participation was largely limited to those already participating in or having access to other forms of public debate; and most participants were well-spoken, educated and politically interested. Users complained of a lack of political follow-up to public interventions. Eventually the interactive element was removed, and City Talks became broadcast only with a live studio audience. The second project, City Consultations, aimed at making the decision-making process more transparent and accessible, was an interactive electronic questionnaire delivered through teletext and telephone in 1993. During the trial period, 500 users called the system (one percent of the target population) and only 157 people answered the questionnaire. There were also technical problems, and the experiment was terminated.

The third Amsterdam project, Digital City, began in 1994, aimed at making both the sender and receiver the centre of information, discussion and opinion-formation. The project began in a community politics and cultural centre with roots in a computer hackers' group and evolved into a structure financed by advertising and information providers. The Digital City was in effect a freenet, similar to many dozens of community freenets operating mostly in North America. The Amsterdam service was accessed through the Internet and in public terminals in libraries. Visually, the Digital City interface presented Amsterdam as a virtual city, with a library, coffee bar, post office, office block, museum and dark alleys "(for one's wildest dreams)". An evaluation found that most initial users were young, well-educated, employed, and male - women users grew from nine percent in 1994 to 15 percent by the end of the next year (Brants et al., 1996). Half the users did not live in Amsterdam. The discussion topics were potentially limitless. However in practice they centred on computer technology and its democratic potential, indicating that the Digital City is more a place for 'techno freaks' than 'ordinary citizens.'

In light of these outcomes, the authors (Brants et al, 1996) question whether the Internet offers new opportunities to broaden the public sphere. However, they remain optimistic, concluding that:

The streets of the Digital City are lined with the prerequisites for socializing democracy: its bottom-up philosophy, its "flat" organisational infrastructure and voluntary nature. Up to now, the social structure of the discussion groups makes them more comparable to Habermas' elitist salons than to alternative public spheres, but their potential accessibility and their sensitivity to new social issues could well turn them into a vehicle for counterculture of the 21st century (1996:246).

A different perspective is offered in the analytical overview of community networks on the Internet by Aurigi and Graham (1998) who observe that most civic websites are essentially urban databases with a top-down information flow, with little opportunity for genuine interaction among participating residents. They continue:

The absence of citizens and public life in many of these sites means that, seen on the Web, most 'cities' resort to simulation, idealisation and even parody, as each attempts to electronically construct the virtual version of the perfect postmodern city... The private, commodified, urban marketing ethos leads to widespread sanitization: crime reports are never among the topics covered, and information and debate about other typical urban problems such as pollution, racial and social tensions, and levels of poverty are usually ignored (1998:68).

They also make the important observation that the Internet allows competing "virtual cities" to co-exist on the Web. In Bristol, for example, they found six municipal sites, including the site managed by the council and five alternative sites: Bristol OnLine, Bristol Cyber City, Digital Bristol, Bristol.Net, and Bristol Index. The authors conclude that the result is that the real Bristol had six digital counterparts, none offering space for citizen debate or communication with the public administration.

4.3: American militias on the Internet

Manuel Castells (1997) has analysed the role of the Internet in the growth of the American militia movement, whose direct appeal may reach five million people in the US although the number of "terrorists" among them is very small. Since 1994, the year before the Oklahoma City bombing, these "terrorists," "underground patriots," have been responsible for a growing number of bombings, bank robberies, and railway sabotage and have stolen tons of explosives from commercial sites and stocks of military weaponry. The actual number of militia members was estimated to be between 15 and 40 thousand in 1995, armed and structured into a military-style command chain. The militia are the most organised wing of the "Patriot movement" comprising established, extreme conservative organisations and "a whole array of traditional, white supremacist, neo-nazi and anti-semitic groups... and anti-federal government groups" (Castells, 1997, 85-86). What links these groups is the common enemy: the US federal government and the "New World Order."

Despite having a common enemy, the militias are a diverse, chaotic movement using the Internet extensively to link together, using numerous militia mailing lists, newsgroups, chatrooms and Web pages. Castells agrees with author Kenneth Stern (1996) that the Internet was a major reason why the movement expanded faster than any hate group in history. The Internet more than compensated for the militia's lack of an organized center because it linked any militia member with an Internet connection, no matter how remote his or her location, into a global network with similar thoughts, aspirations, and fears. Castells believes that the Internet and the militia movement both shared the frontier spirit of making a statement without mediation or government control. He also believes that the Internet structure matched that of the militia and Patriot groups, and that the movement thrived and organised itself in cyberspace.

Kevin Ward (1999) conducted an empirical analysis of how the militias used alternative media to maintain their movement. Although his search conducted in the Spring of 1999 found 10 Usenet bulletin boards and hundreds of Web pages used by militia members, he

believes the Internet media most important to the movement were mailing lists. The common theme of all the Internet content he studied was a complete mistrust of the federal government. The community thrived "on getting access to news that mainstream media will ignore. Dozens of Associated Press articles float through mailing lists and news groups." Instead of advocating violence, most of the militia material on the Internet suggested using the political process to bring in change. Information on the mailing lists, bulletin boards and the Web was concerned with how to influence the political process, with the names of US congress representatives and how to get in touch with them, and a list of politicians militias opposed.

Ward analysed three militia bulletin boards on Usenet: misc.militia, or.politics, and talk.politics.guns, each with hundreds of messages. The bulletin boards followed a similar pattern: one person would post a message describing his annoyance about a particular act of congress or police action, often including a news article, and inviting commentary from other newsgroup readers, and dozens of readers would respond by posting their own commentary. Ward believes that the main function of the Usenet newsgroups was to "spread newspaper articles from AP and hold a forum to see what people think."

The hundreds of militia Web pages ranged from personal pages to extensive sites with hundreds of links. The content on the Web pages was for the most part not a call to action but rather an information resource with documents, articles and links to other materials on the Web. Among the notable Web pages was "The Freedom Page" providing information about the United Nations and how their policies affected Americans. On this page, as well as almost all the content he analysed, Ward found that the call was not for violence but rather to collectively speak out against the government. The 51st Missouri Militia, believed to be behind the Oklahoma City bombing, had a Web site including the names of their leaders, their email addresses, and an invitation to subscribe to their email newsletter. On the Web site of the Militia of Montana was a line-by-line interpretation of the US Constitution.

Ward found Web pages for actual militia units, some of which allowed for immediate enlistment into the organisations and locations for training exercises. One of these pages had a counter indicating 165,000 hits. The site of the militia in Wayne County, Michigan:

... makes direct references to readiness levels and how to actively resist government. One particular link tells potential member what equipment is needed to be ready for resistance. Most of it was about weapons, ammunition and other miscellaneous field gear. The most interesting thing that this group requires for membership is to carry copies of the US Constitution and the Declaration of Independence (Ward, 1999).

Ward believes that Internet mailing lists were where the militia movement thrived. He found dozens of militia mailing lists on each of the commercial mailing list servers onelist.com and Egroups.com which provided free mailing list services. He subscribed to four lists, producing more than 200 messages in a week. One list was Constitution-Coal. Much of the content was AP news articles about the New World Order, and the main concern of the group was the possibility of a unified world government. They advocated emailing government representatives to voice their concerns. During the week-long survey period, the list had 50 members, 30 of whom posted content, resulting in 80 messages, with no reference to violence. Another list was AmericaFirst, promoting the use of the Internet to lobby the government. This list had 126 members with many producing almost 80 emails in the week.

The PIML (patriots information mailing list) featured heavy circulation of AP news articles and commentary taking: "a slant on the news that they felt was missing in mainstream media." The PatriotAwareness list on Egroups.com was the largest, busiest and most comprehensive list. Much of the content concerned activities in Congress, AP news articles, and long lists of grievances with the federal government, as well as information on and hyperlinks to government reports. One message was a response from a US Senator attempting to address some of the concerns of the group members.

Ward found that the four mailing lists had some common members but hundreds of individuals participated in these few groups. He notes that:

People contacted each other on a daily basis with newspaper articles, news stories and in some cases, just plain rumor. The point however is that this was a quick way of getting an article published in Seattle out to everyone in the community nation wide (1999).

4.4: Alternative media on the Internet for women

The literature review found four studies of women's networks on the Internet. Leslie Regan Shade (1997) provides an overview of issues for women-only fora on the Internet. Shelley Correll (1995) discusses the communication practices on a women-only discussion group, an online "Lesbian Cafe." In the final article, a research team (Dunham et al., 1998) investigates an action research project providing computer-mediated support for single mothers in Nova Scotia, Canada.

Shade reviews evidence that women-only fora increased the comfort level of the women users, who might have been intimidated by the pervasiveness of "masculine computer culture." She notes that many women have alleged sexual harassment or hostility on the Internet, in both public fora and private email. In most online discussions, male contributors predominated. She refers to studies of male and female participation on academic discussion lists which found that women and men did not participate equally but rather a small male minority dominated the discourse, contributing more content than the women and using more self-promotional and adversarial strategies. Women on academic mailing lists risked being censured, ignored or deligitimised and tended to avoid participating as a result. Women-only newsgroups could counteract this situation. Among the more well-known women-only newsgroups in the US were WOW (Women on the WELL, a California-based bulletin board system); two newsgroups on the Echo system, WIT (Women in Telecommunications) and WAC (Women's Action Coalition); and Systers, a private, unmoderated mailing list for women computer professionals and students. In 1993, Systers had 1,500 members in 17 countries. A survey of Systers members confirmed their positive view of women-only fora. Overall, members perceived the Internet to be a male culture. More than 30 percent reported being harassed online; 68 percent felt more comfortable in women-only fora; and 84 percent believed women-only fora were necessary.

In the second published analysis, Correll (1995) investigates how a community can be created and sustained through Internet communication, specifically, how a lesbian community can exist through an online lesbian bar. She describes the lesbian community as a social grouping in which lesbians share similar understandings, visions, and a sense of self. Historically, lesbian bars have been central to lesbian communities, providing a place to learn group norms and culture in addition to a social space and place to form relationships. Correll uses the interactionist theory developed by Erving Goffman to explain how this process works in an online situation. In interactionist theory, individuals engage in performances, presenting themselves as persons with certain characteristics, in order to define a situation. The concept of "team" is important, as people work together to project a certain definition of a situation. Team members move between a frontstage, or performance area, and a backstage area where the behaviour is more informal and oriented toward maintaining solidarity and high morale among team members.

In the Internet newsgroup the Lesbian Cafe (LC), the "patrons" could create their online persona in relative anonymity. The online LC patrons lived all over the Eastern and Southern US. Correll found they were able to construct the LC's visual appearance

through constant references to items found in real lesbian bars, such as a pool table, as well as in a "fantasy" lesbian bar, such as a fireplace and a rocking chair.

As the cafe became more established, a ritual for "entering" it emerged. Each time a patron reenters the cafe, she orders a drink by posting a note asking the bartender (whoever it might be that day) for a specific drink. This behaviour announces her presence and indicates that she is familiar with the cafe. Next, she places herself in a specific location in the bar. For example, one woman writes, "I am going to warm up by the fire." Another comments, "Anyone care to join me for a game of pool?" When I asked one of the original patrons why she always ordered a drink on arriving at the cafe, she replied rhetorically, "Don't people always order a drink when they arrive at a bar?" In an environment with very little ritual to guide behaviour, these women follow that associated with real bars (1995:279)

However, in interviews, Correll found that most LC regulars did not frequent real lesbian bars. When the group met in person for a weekend in Atlanta, she was struck by how much more at ease they were over a coffee in the morning than in a real lesbian bar in the evening, when all the women wanted to leave long before closing time, even though they would have stayed logged on longer to their computers at home. In interviews, she found that many LC patrons were not comfortable in bars; for them the LC was more an opportunity to make friends, talk and play with each other.

Through her analysis, Correll found that the LC patrons could be categorised as regulars, newbies, lurkers, and bashers. The regulars had a smooth conversational style; aware of the norms, they did not violate them. Newbies had an awkward conversational style and were gradually "shown the ropes" of the LC by the regulars. The lurkers, who spent much time observing the interaction before making the leap to posting themselves, had a humble conversational style and deferred to the regulars. The bashers, usually male, accounted for less than one percent of LC patrons but their hostile style was very disruptive. Bashers usually left after a day, after the other patrons ignored their postings, but the bashers were talked about for several days afterwards. They served to unite the lesbian patrons against the common enemy.

Correll found that the LC served primarily as a lesbian community for people either lacking a community in their geographical area or unable to be visible members of a lesbian community. Most lived in small towns without women's spaces. For them, the LC offered an opportunity to be around people of their own kind. LC patrons had a strong community sense, and they often helped each other out with real problems. In interviews, one said that, "The bar may be a fantasy, but the friends we make are as real as anywhere." The LC also functioned as an information centre on lesbian and gay news.

There were occasional calls for political action on issues such as gays in the military, with the phone numbers of politicians to call.

Using Goffman's interactionist framework, Correll found that with Internet communications, fronts and idealisations were more controllable and emotions and appearances could be contemplated before posting an Internet message. However, public Internet communications could also be inhibiting, with LC patrons frequently complaining that their postings were "zapped" by the system's censors for being sexually explicit, although they could carry on interaction by private email. Correll believes that public bulletin boards are the frontstage, and private email, the backstage. Frontstage, posts are polite and new members welcomed. With backstage email, communications are more informal, less polite, and marked by few pretences, serving to increase group solidarity. Correll believes her study demonstrates "that a locale need not be confined to a specific geographic location but can instead be created and maintained in cyberspace."

Dunham et. al. (1998) describes the most successful network studied in this literature review. Forty-two young single mothers in the Halifax, Nova Scotia area were given access to a computer-mediated social support (CMSS) network concerned with parenting issues. The project was motivated by the perceived need for support for these young women. The authors note that adolescent mothers report very high stress levels associated with parenting, and that their own and their child's development can be undermined by isolation from their peers and other sources of social support. Their babies are also most likely to suffer various physical health and development problems. At the same time, there are fundamental weaknesses in the community services typically provided for young single mothers, primarily because they are brief one-dimensional interventions addressing only one of the myriad of problems single mothers face.

The CMSS network designers asked whether a properly designed network for single, young mothers could meet their needs for multidimensional social support. In particular, they believed that several attributes of the CMSS environment seemed particularly appropriate: making the collective group knowledge continuously available when needed and making the sharing of knowledge also a process to counter social isolation and social embarrassment.

The 42 network participants (here called the "mothers") were recruited from among the low socioeconomic status, single mothers seeking resources from government agencies. They were unemployed, single, aged 15 to 28 and had at least one child under the age of one. The 42 mothers interested in joining the experiment were supplied with computers,

modems and networking software in their homes. The telephone call to the CMSS central computer was free of charge. The CMSS network, available to them 24 hours a day over six months, offered newsgroups accessible to all participants, private email, and text-based teleconferencing for up to eight participants at once. Also available online was a database of all community services available for single mothers. The authors evaluated the CMSS experiment with comprehensive and wide-ranging methods, including analysis of all online exchanges, post-participant interviews with the mothers, various assessments of their stress levels and social isolation, and assessments of various aspects of the system and the online community by the mothers themselves.

During the six months of the study, the 42 mothers accessed the CMSS 16,670 times - a phenomenal level of activity compared to other community online networks. The CMSS social group that evolved seemed very similar to face-to-face support groups. Most email exchanges were emotional support, followed by information and tangible support. Almost all the exchanges were positive. Close personal friendships and a sense of community developed in the CMSS environment. The mothers participating regularly were more likely to report a decrease in parenting stress.

The total CMSS accesses averaged out to 396 calls to the CMSS per mother over the six months. However this ranged from 25 calls for the one mother who accessed least compared to 1,475 for the most frequent caller. An average of 102 hours was spent online over the six months; again this ranged from 3.8 hours to 365.4 hours for the mother who spent the most time online. Analysis found that the individual differences in CMSS participation could be accounted for not by their socioeconomic resources, age, previous computer experience, education, or living arrangements. Rather, the most frequent CMSS system users had the youngest children and they themselves were the most socially isolated.

A core group of 15 mothers called the network daily for the entire six months; the CMSS was part of their daily lives. A smaller group of eight mothers participated in the CMSS community on a weekly basis. Their participation was more event-driven, such as having a sick baby. Finally, a third group of 19 mothers participated in the early months but stopped using the CMSS before the six months was out. The CMSS users considered themselves as part of an online community, and the more they accessed the network, the stronger their community sense.

How did the mothers use this service? The data reveal that they used the public forum to discuss a diverse array of worries and concerns best described as daily stresses. In just one typical day, the online information disclosed the following topics of

discussion: treating sore breasts associated with nursing, finding a cheaper apartment, dealing with various family court procedures, managing child custody issues, treating persistent ear infections, managing various kinds of allergies, coping with an infant's sleep patterns, worrying about developmental milestones, dealing with teething problems, understanding social service regulations, using community transportation, managing birth control, using hospital emergency services, settling conflicts with parents, using a breast pump, resolving conflicts with male partners, continuing education, finding a cheap source of diapers, and managing infant constipation. It is difficult to image any single community service providing in such a timely manner the diverse amount of information and support that these women exchanged on a daily basis (Dunham et al., 1998:299).

An evaluation of the messages exchanged on the system found that more than three-quarters focused on the mother and one-quarter on the infants. Most messages concerned the mothers' mental health. On average, two replies were posted for every message sent, with most (98%) providing positive support. Intensive arguments also took place online, such as around abortion. The authors found that both animosity and friendship were possible through online communication. Most support was emotional (56%), informational (37%) or tangible (3%). The mothers receiving the most support also provided the most and those receiving little provided little. The follow-up survey found that the mothers who participated actively in the CMSS had decreased stress, and the inverse. When the funding for the CMSS project ended, the participating mothers "insisted on maintaining the support group," and so the system was moved to a local freenet, giving the young mothers access to the broader community and a much broader range of ideas, information and attitudes.

4.5: Community and voluntary organisations and the Internet

Many studies in this and the previous chapter refer to the role of community and voluntary organisations in alternative media production. This section will look at Internet use in the community and voluntary sector, or more specifically, barriers to Internet use, because the studies to date highlight primarily the significant restraints and barriers to Internet use by these organisations.

Early studies on computers in the voluntary sector were undertaken in the 1980s and early 1990s in the UK¹⁰. They include, for example: Plant's (1992) survey of community computing in Avon; the Boyle et al. (1993) study of a small group of community care organisations; Cassell (1990) on the Sprite community computer initiative in Sheffield;

¹⁰ For a bibliography of these studies, see Gaskin et al, 1993.

and Deacon and Golding (1991) on the information environment of the voluntary sector. The most comprehensive research review in the UK found that: "adoption and use of IT will continue to be problematic, and its exploitation will continue far below potential, while organisations lack money, appropriate advice, and the appropriate training, in order to commit the kinds of investment which technology calls for" (Community Development Foundation, 1992)¹¹. Their findings about computers were in keeping with a singular study on computer networks in community and voluntary organisations in the US. Rubinyi (1989), who looked at a computer network in the US linking 72 small non-profit organisations, and found the best resourced groups were best able to take advantage of the computer for internal office tasks and group networking. The computer network's slow development was attributed to difficulties in coordinating efforts between groups, lack of time within individual groups to use the network effectively, technical problems, and budget constraints.

To date, comprehensive studies of Internet use in the community and voluntary sector in Europe include: the DCU survey of the use of computers and the Internet by Irish community and voluntary organisations (O'Donnell, Trench and Ennals, 1998¹²; Trench and O'Donnell, 1997) the Glasgow Caledonian University study of information technologies in the UK voluntary sector (Burt and Taylor, 1999) and the Loughborough University survey of Internet use by the local voluntary sector in the Borough of Charnwood Forest, Leicestershire (Hallam and Murray, 1998).

The DCU study is the most comprehensive in terms of the range and scope of the organisations studied. O'Donnell, Trench and Ennals investigated ICT (information and communication technology) use in the community and voluntary sector - groups and organisations in a range of income categories and across six interest areas. Regarding access, the research found that low income was the most significant barrier to access and the more widespread diffusion of computers and the Internet in the community and voluntary sector. The number of Internet users, especially higher income users, was growing significantly but the organisations with an Internet connection were under-

¹¹ A particularly telling description features in a report by David Deacon and Peter Golding (1991): "Much initial enthusiasm for new technology has turned to frustration and disappointment as inadequate training and support, over-enthusiastic and exploitative marketing, and inexperience have led to many a portable computer languishing unused and unloved in the back room while users revert to time-honoured hard copy practice - the shoe box filing system and low-technology scissors-and-paste newsletter which are the hallmark of information processing in the voluntary sector."

¹² A sub-set of data from this study, on Irish women's organisations, is discussed in Chapter 6.

represented by rural organisations, small community organisations, and women's organisations. Women's organisations had the lowest access rates. Low-income organisations may have been able to afford a computer and modem but not computer training, technical advice and support, ongoing maintenance, and Internet service and increased telephone costs. Groups and organisations in rural areas often found that no computer training courses were available locally. However low income and geographic peripherality were not the only barriers to access. Some organisations without computers or an Internet connection believed they did not need them because their work involved face-to-face personal interaction for which computers were irrelevant or would even have been an intrusion.

Regarding the Internet and the culture of the sector, the research found that only a minority organisations with an Internet email address were actively using it. Activist groups - such as environment and international development groups and others communicating on an international level and oriented toward campaigns - were the most active Internet users. Two out of every three Internet users were inactive users. Within any organisation was a range of technology expertise, with some staff or volunteers very comfortable with the Internet and others not knowing how to use a computer. Many community and voluntary organisations had very low or old computer resources, or only one computer for many staff or active volunteers. Computer and Internet technical difficulties related to hardware and software were a significant barrier to more frequent use. Time pressures could be so great for staff in community and voluntary organisations that they did not have time to learn properly how to use the Internet.

For many organisations, the individuals or organisations they communicated with were not hooked up to the Internet. Organisations for whom relations with members were paramount and the members are not online saw their Internet connection as marginal to their operations. Organisations for whom the core function was personal and professional development of community members saw the Internet as relevant only for serving this core function, such as Internet training to skill-up the unemployed. Many organisations had characteristics making it difficult to use the Internet effectively, such as poor organisational procedures for information exchange. The conclusion of the above discussion is that for most community and voluntary organisations with an Internet connection, many barriers discouraged using the technology regularly and effectively, barriers both within and outside the organisation's control.

As just noted, the research found the most active organisations online were "activist" organisations using the Internet as a natural extension of their use of traditional

communications media for campaigning, organising, coalition-building and related activities with a purpose to inform and persuade people of their particular cause or viewpoint. Irish environment and international development organisations in particular were very active Internet users; they used the Internet to link up with their international counterparts to exchange information and strategies and to build coalitions on environment and development issues.

Overall, the research found that email was the most useful and popular use of the Internet. To a much lesser extent, electronic mailing lists were used for interactive, many-to-many exchanges. Again, the survey found that environment and development organisations were the most active mailing list users. Electronic bulletin boards, for many years a primary means of group information exchange on the Internet, may have been replaced largely by Web pages for this purpose. The Web, although considered less useful than email, was clearly of use to many community and voluntary organisations for two kinds of activities: searching for information, and providing (publishing) information. Despite the technical problems (i.e. computer crashes) sometimes accompanying Web searches, some community and voluntary organisations found the Web useful, albeit only occasionally. Again, the most active Web users were environment and international development organisations searching for reports when preparing campaigns, keeping up-to-date on international campaigns, and making contacts with experts internationally.

The findings of Hallam and Murray (1998) in the UK were similar to the Irish findings. They found an uneven access to IT resources among community and voluntary organisations. More than a third of their sample did not have access to computers, with some stating they did not want access. Women's organisations had the lowest access rates of all the groups surveyed. Only a tiny minority of organisations surveyed were using the Internet. The results suggested an inequality in the sector, with some organisations fully operational on the Internet and others not having taken the first steps.

This chapter will conclude by highlighting several key points from the review; these and other aspects of the literature on local, regional and national alternative media on the Internet will be discussed in more detail in Chapter 6 in the context of the analytical framework for empirical research.

*Access barriers significantly shaped the alternative media on the Internet studied in this chapter. In many cases, within specific geographic areas, participants had a higher socio-economic profile than non-participants, except in the cases where specific supports or programmes were set up to improve access.

*Rules of order and a democratic process for participation was a concern in many cases.

*There were opportunities for participants to produce content reflecting their own experiences; however in some cases the content was offensive to others and in others there were few opportunities to correct misinformation.

*Where user profile surveys were conducted, it was clear that they had higher levels of political participation than the norm; many difficulties were experienced using alternative media on the Internet as part of the mainstream political process.

*Several of the cases studied showed clear value in using alternative Internet media to create and strengthen networks of support and social capital, especially for women's networks.

*Organisational barriers and constraints were key factors in Internet use for community and voluntary organisations

Chapter 5: Theoretical contexts for alternative media

This chapter will discuss the theoretical contexts for alternative media on the Internet, exploring the role of alternative media within two more developed theoretical areas - the public sphere and social movements. The chapter will begin with examples of traditional alternative media and then continue with a discussion of alternative media theory.

Some authors have remarked that alternative media - media production outside the mainstream - remain largely unexamined in media and communication theory (Sholle, 1995; Downing, 1995; Sreberny-Mohammadi and Mohammadi, 1997; Waterman, 1990). One of the few theoretical texts published on alternative media situates them within Denis McQuail's normative mass media category of "democratic-participant media" (Lewis, 1993a:13), and this is how they are commonly portrayed in more popular texts, which stress their democratic and participatory aspects. The key feature of democratic-participant media, according to McQuail, is that the voice of the citizenry is important. Democratic-participant media processes are concerned with the rights of citizens to access information, to answer back, and to use the media to interact with other citizens in small-scale settings (McQuail, 1987:122). However a theory of "democratic-participant media" has not been developed by McQuail or elsewhere. Lewis also states that: "the notion of the public sphere has become an important reference point for contemporary discussion of democratization of communications" (Lewis, 1993a:17). He also submits that alternative media can be situated within the context of social movements, positing that there are:

... three sorts of 'breeding grounds' for alternative media. Firstly, the new social movements such as the women's movement, ethnic minorities, migrants, environmentalists, peace campaigners, gay rights activists and anti-racist organisations... Secondly, there are the old, continuing struggles - for human rights, language rights, trades union (labour) rights, on behalf of rural populations against the urban centres of power, for the poor against the rich and powerful... Thirdly, newly emerging political demands may use alternative media: for example, native peoples in North America, Western European nations that lack statehood, the post-Communist nations of Eastern Europe, or African nations moving to multi-party rule (Lewis, 1993a:15-16).

Both these theoretical frameworks for alternative media - the public sphere, and social movements - will be discussed shortly.

5.1: Examples of traditional alternative media

Traditional alternative media forms include print, video, film, radio, television, and theatre. A few examples of alternative media will be discussed in this section in order to illustrate its range and some central issues, focusing on women's and feminist alternative media.

Rupp (1997) analyses the earliest alternative media production by international women's organisations. The International Women Suffrage Alliance launched the first newspaper, *Jus Suffragii* in 1906. In 1922, the International Council of Women began publishing its *Bulletin*, and shortly afterwards the Women's International League for Peace and Freedom (WILPF) began publishing a simple newsheet, *International*. A proposal to publish a common or shared newspaper did not develop because of the different political positions of these organisations on key issues. Rupp found that the three publications carried reports on international conferences and other substantive issues, reports from the national groups, information about other transnational organizations, the birthdays or deaths of prominent women in the membership, and news of the activities of the League of Nations, along with regular columns and regular appeals for contributions and information. Rupp believes that these publications served both to publicise activities and to tie members more closely together. Readers could take an active involvement through letters, debates and surveys.

Another historical example of feminist alternative print media is *Bean na hÉireann*, 'The Woman of Ireland,' the journal of the Sinn Féin women's organisation, Inghinidhe na hÉireann (Curtis, 1994). The journal was launched in 1908 as the suffragette movement was on the rise, and *Bean na hÉireann* actively promoted a number of campaigns in which its publishers were involved, including the 1910 campaign for the local authorities to provide school meals for Irish children. A driving force behind the journal was Constance Markievicz, an important figure in the Irish nationalist struggle who saw England as the barrier to both national freedom and equality for women. She combined both these issues in her writings for the journal, for example, in this extract from July 1909:

As our country has had her Freedom and her Nationhood taken from her by England, so also our sex is denied emancipation and citizenship by the same enemy. So therefore the first step on the road to freedom is to realize ourselves as Irishwomen - not as Irish or merely as women, but as Irishwomen doubly enslaved and with a double battle to fight (quoted in Curtis, 1994:206).

A contemporary example of global alternative print media is the Women's Feature Service (WFS) headquartered in New Delhi. The WFS began as a project funded by UNESCO from 1978 to 1983. It aimed to create a place for women journalists and news about women in existing news networks. Byerly (1995) notes that the WFS aim reflected a liberal reformist strategy but also supported "oppositional (feminist) personnel and ideas in a previously closed male system." The original project set up women's news services in conjunction with established news agencies in Latin America, the Caribbean, Southeast Asia, Anglophone and Francophone Africa, and the Middle East; major news agencies in the West refused to participate. When the funding ended in 1983, only one of the sponsoring news agencies - IPS, the Inter Press Service - adopted a long-range strategy to continue the service. Since that time, the WFS has circulated stories in English and Spanish, with IPS as a distributor, to client news outlets in both the First and Third World. WFS produces about 500 stories annually from all regions of the globe which are in steady demand, including by mainstream publications in the West. Byerly's analysis of WFS stories found that they are framed by feminist analysis of issues. The stories develop the issues within the context of women's daily lives and social participation, for example by interviewing women affected by the news. Byerly concludes that news production under the control of and in the service of women is the best way to ensure that women's voices are heard among each other and in the general population.

In another example of alternative print media, Young (1997) analysed five feminist publishers of books in the US. She found that the presses were driven by the political rather than financial motives of the publishers, and these shared motives distinguished them from mainstream, commercial presses. Very few of the publishers were earning significant incomes. They all considered their work to be a form of feminist activism, maintaining that feminist publishing contributed to social change, although their views on the exact nature of that contribution differed. For example, one of the publishers suggested the feminist press had both a political and cultural function within the women's movement:

I'm not under the illusion that a book gets written and then people begin to mobilize, but the thing is it's a synergistic process, and once a movement is in motion, then books are a way of people having dialogue with each other... that can inspire [them] to keep on struggling. Most of the books we've done are catalysts, particularly for younger people who may be open to doing things in new ways (quoted in Young, 1997:32).

The last example of alternative print media is the Moroccan feminist newspaper *Tamania Mars*, published since 1983 (Tamania Mars Collective, 1993). A principal barrier to the

more widespread diffusion of the newspaper is the high illiteracy rate among women in Morocco - 78 percent of Moroccan women as a whole and 95 percent of women in rural areas cannot read or write (1993). *Tamania Mars* was the first feminist newspaper in the region, providing an alternative to the many commercial women's magazines which, they believe, objectify women. *Tamania Mars* publishes articles and analysis on women's rights, educational issues, women and work, and cultural issues. The publishers explained that the newspaper set out to create favourable conditions for a united women's democratic mass movement. *Tamania Mars* drew up a series of demands and action programmes to meet this aim, going well beyond its publishing activities to involve women through "petitions, meetings, general assemblies, seminars, lectures, literary get-togethers and festivals (theatre, cinema, committed songs, exhibitions of paintings, etc.)." These activities were not confined to the centres (Rabat and Casablanca) but organized in towns throughout the country. When the price of newsprint soared in 1989, the paper had to close down for one year while the Collective revamped the structure. Despite this and other barriers, the Tamania Mars Collective believes their newspaper has played a leading role in making public opinion favourable to women's emancipation.

Theatre is another alternative media form used in the women's and feminist sphere. The Sistren Theatre Collective has been very successful both in its home country of Jamaica and on its overseas tours (Wilson, 1993). Sistren grew from a short-term employment initiative introduced by a democratic socialist government in the early 1970s. All 13 women in the original Sistren Collective came from poor backgrounds, most were single parents, and many were from rural areas and had moved to Kingston to seek employment. Having no previous experience of drama, they developed a technique of creating scripts through a process of improvisation and oral tradition "rooted in African Ancestry." The main issues addressed by Sistren include the impact of the International Monetary Fund (IMF) and the question of external debt; and health, education and employment as they affect women. The aim of the Sistren Collective is to "use drama within working-class communities to help search for solutions and give expression to the lived experiences of women from these communities." Sistren theatre methods stimulate questions about the situation of women and use theatre as a tool for problem-solving (1993).

Another example of theatre used as alternative media is the Stree Sangharsh women's group in Delhi (Butalia, 1993). Established in 1979, the Stree Sangharsh was an agitational group, at first campaigning against the dowry. The group prepared a street play on the dowry theme, called *Om Swaha*, in which one woman character was killed because she had not brought enough dowry into the home and another survived because she protested. The play was produced on the streets in areas of dowry burnings. Over the

years the play was reworked and performed by numerous groups in different areas. According to Butalia (1993), *Om Swaha* led to a realisation about the extent of the dowry problem and the silence around it, and resulted in the establishment of support centres and a shelter for victims of domestic violence.

5.2: Alternative media and the public sphere

Many authors have linked alternative media with the idea of a public sphere, including Lewis, 1993a; Friedland, 1996; Zarat, 1996; Keane, 1995; Sholle, 1995; McLaughlin, 1995 and 1993; and Sreberny-Mohammadi and Mohammadi, 1994 and 1997. David Sholle (1995) believes that the concept of the public sphere provides a useful meeting point between media theorists and practitioners of alternative media. He defines alternative media as: "those practices that stand in opposition to the media in terms of its structuring of access to the public sphere."

Public sphere theory has been central to contemporary understanding of the media and opinion-formation in liberal democratic states. Commentators have pointed out that in a liberal democracy, public opinion acts as "the ultimate source of authority for broadly setting a legislative agenda" (Zarat, 1996:1500) and that "the stability of modern governments is especially dependent on opinion" (Kovisto and Valiveronen, 1996:19). The concept of the public sphere is theorised most comprehensively in the work of Jürgen Habermas (1989 [1962]). He believes that the growth of capitalism in the 18th and 19th centuries allowed a public sphere to emerge. This public sphere has since been in decline, accompanied by a general increase in information management, entertainment, and commodification - developments contributing to narrowing the range of public discussion and debate.

The public sphere is an arena, independent of government and partisan economic forces, dedicated to rational debate and opinion-formation amongst citizens. Key elements of the public sphere include universal access, voluntary participation, rational argument, the freedom to express opinions, and the freedom to discuss matters of the state and participate outside institutional roles. The effective functioning of this arena depends on reliable and adequate information sources, in particular records of parliamentary debate and independent news sources. Habermas gave a clear definition of the public sphere in 1964, quoted at length below:

By 'the public sphere' we mean first of all a realm of our social life in which something approaching public opinion can be formed. Access is guaranteed to all citizens. A portion of the public sphere comes into being in every conversation in which

private individuals assemble to form a public body. They then behave neither like business or professional people transacting private affairs, nor like members of a constitutional order subject to the legal constraints of a state bureaucracy. Citizens behave as a public body when they confer in an unrestricted fashion - that is, with the guarantee of freedom of assembly and association and the freedom to express and publish their opinions - about matters of general interest. In a large public body, this kind of communication requires specific means for transmitting information and influencing those who receive it. Today [1964] newspapers and magazines, radio and television are the media of the public sphere (Habermas, 1964 as cited in Sparks, 1998:110).

Habermas's treatise on the public sphere, published in German in 1962, found an immediate and receptive audience. Ten years later, its first substantive critical analysis was published, also in German, by Oskar Negt and Alexander Kluge¹³. Negt and Kluge (1993[1972]) argue that the bourgeois public sphere described by Habermas cannot be conceived as a singular sphere; they distinguish three overlapping types of public sphere: the classical bourgeois public sphere, the public spheres of production, and the proletarian public spheres. The singular public sphere, they argue, is a mechanism for exclusion of certain social groups, including women and servants. They also argue that polite argument as conceived by Habermas is itself a mechanism of exclusion and silencing.

A key difference between Habermas and Negt and Kluge is their understanding of the media, conceived by the latter as the new public spheres of production. Habermas sees modern mass media "as leading to the total disintegration of critical communicative rationality," and his distrust of the media led him to emphasise face-to-face communication (Sholle, 1995). Negt and Kluge, on the other hand, are very critical of the mass media but do not see the public spheres of production as wholly negative. They believe that mass media create communities of consumers by blocking experience of everyday life. Sholle believes that alternative media can counter and disrupt this process by "fostering capacities for reflecting upon experience, remembering the past, and imagining a different future." However, Sholle also believes that all too often, alternative media reproduce the bourgeois practices of the dominant media, regarding their audiences as consumers. As an example, he posits that alternative media projects such as public television in the US and media arts centres are organised to meet the needs of private use rather than the needs of workers. In the case of public television, this would include "mimicking dominant media forms, programming schedules, production hierarchies and professional ethics," rather than producing real alternatives to the rigid forms of

¹³ Habermas's book was published in English in 1989, followed by the work of Negt and Kluge in 1993.

commercial media. Alternative media should emphasise production based on collaborative and democratic participation, and public involvement in organising and producing media texts, Sholle believes.

Feminist Nancy Fraser (1992), one of Habermas's most significant critics, offers a different analysis of the relationship between alternative media and the public sphere. Like Negt and Kluge, she believes Habermas's theory of the public sphere is substantively flawed, particularly in its failure to develop a post-bourgeois model of the public sphere. Referring to recent revisionist historiography, Fraser points out that the liberal public sphere was a place where status distinctions, in particular gender differences, could not be bracketed and neutralised. On this point, she offers a significantly different perspective from Habermas regarding face-to-face communication. Far from being natural and universal, as Habermas believes, public discourse as well as the emerging civil society associations were structured to exclude women. The discursive interaction within the public sphere was structured and ordered so as "to marginalise women and members of the plebeian classes and to prevent them from participating as peers" (1992:119). At the same time, avenues were open for women outside the official public sphere. In 19th century America for instance, elite bourgeois women constructed an alternative civil society of women-only philanthropic and moral reform organisations. During this time in both North America and Europe, women were actively organising against their exclusion from the political realm.

Fraser questions the central tenets of Habermas's vision and proposes instead an alternative framework, including the concept that a single public sphere is not always preferable to a nexus of multiple publics. Habermas's theory of the public sphere assumes that confining public life to a single, over-arching public sphere is positive and desirable, and that a proliferation of multiple publics is a departure from democracy. Fraser argues instead that in stratified societies - characterised by unequal social groups in structural relations of dominance and subordination - parity of participation in public debate is not possible. In fact, existing inequalities are exacerbated in a single public sphere with no alternative arenas for debate amongst the excluded groups. Fraser calls these alternative arenas "subaltern publics" - "parallel discursive arenas where members of subordinated social groups invent and circulate counterdiscourses to formulate oppositional interpretations of their identities, interests and needs" (1992:123).

These subaltern publics revolve around alternative media. Fraser believes that the most striking example is the late 20th century US feminist subaltern counterpublic, with its array of journals, bookstores, publishing companies, film and video distribution networks,

lecture series, research centres, academic programs, conferences, conventions, festivals and local meeting places. In these alternative public spaces, women have invented their own social reality and have reduced their disadvantage in official public spheres. Some such subaltern publics may be antidemocratic and antiegalitarian but they still help expand and widen discursive space. Fraser sees these alternative public arenas functioning both as spaces of withdrawal and regroupment and also as agitational training grounds for activities aimed at challenging the "unjust participatory privileges enjoyed by members of dominant social groups in stratified societies" (1992:124).

Another version of this argument linking alternative media with multiple public spheres has been articulated by John Keane (1995). Keane's central concern is the decline of public service broadcasting, arguing that the "old hegemony" of state-structured and territorially-bound mediated public life is being replaced by networked spaces of communication not tied to territory, and not resembling a single public sphere within a nation-state framework. Keane distinguishes among "macro-public spheres," hundreds of millions of people enmeshed in disputes at the global level; "meso-public spheres," millions of people interacting at the nation-state level; and "micro-public spheres," with dozens, hundreds or thousands of disputants interacting at the sub-nation-state level. These are not discrete spaces but overlapping networks defined by the lack of differentiation among spheres.

Micro-public spheres are the site for alternative media. Micro-public spheres - the contemporary counterparts to the coffeehouse, town meeting, and literary circle of early modern public spheres - are a vital feature of contemporary social movements, concerned with producing, defining and redefining symbolic meanings. As an example, Keane suggests that the contemporary women's movement not only raises questions about material inequalities based on gender but also challenges dominant masculinist codes. Keane bases his analysis on the work of Alberto Melucci¹⁴. In Keane's view, social movements - which will be discussed shortly - comprise low-profile networks of small groups, organisations, initiatives, local contacts and friendships submerged in everyday life. These networks use various means of alternative media and communication, including telephones, faxes, photocopiers, camcorders, videos, and computers, to question and transform the dominant codes.

In a sharp criticism of the multiple public spheres analysis, Lisa McLaughlin (1993, 1995) argues that it fails to address the underlying concern of the mainstream media's

¹⁴ Keane was translator for Melucci's seminal 1989 work *Nomads of the Present*.

hegemonic structures. McLaughlin posits that the practical problem for activists is finding ways to engage against those controlling access to communication and mass media production, to transform the media into a "site for the strategic distribution of public issues and interests, the mobilisation of representational politics, and the struggle for alternatives to existing hegemony" (1995:45). In this framework, counter-public activity and alternative media are not necessarily emancipatory; McLaughlin points out that numerous counter-publics and movements have notions of liberation based on repressing others (i.e. neo-nazis), and that even feminist discourses may be hegemonic, marginalising others (i.e. the ongoing struggle between feminists and prostitutes around prostitution reform). By neglecting this dynamic, oppositional identity is valorised and the opportunity is missed to analyse the antagonisms and inequalities that characterise intrapublic and interpublic relations. As well, McLaughlin believes that Fraser's analysis does not address the challenge of communicating in late capitalism; Fraser's analysis reflects a general trend in feminist cultural studies which does not consider the media's hegemonic tendencies a problem because the focus is on celebrating the resistance of consumption practices. Rather, McLaughlin believes that "resistance must be *doing something* oppositional, through writing, speaking out, engaging in representational practices in the public domain" (1993:615). She suggests critical theory should focus on media production and who has access to it, and address the challenge of unequal relations based on economic hierarchies. She concludes that feminism's effectiveness as a counter-discourse, or the media's effectiveness as a carrier of oppositional causes, cannot be taken for granted. Alternative media, in order to have a transformative role, must engage with the world of popular culture and mainstream politics. This last point is also argued by Sholle (1995).

A similar critique is offered by Nicholas Garnham (1992), who believes there must be a single unified public sphere for democracy to function. Garnham does not address alternative media but he rejects the pluralist public spheres framework, positing that "cultural relativism and a democratic polity are simply incompatible" (1992:369). He sees the pluralist perspective as linked with the right-wing argument that politics should be dissolved in favour of the universal pursuit of self-interest within a market. Garnham argues rather that systems of democratic accountability must be integrated with media systems of the same scale; if the impact of economic and political systems is universal, then so must be the media system. There must be a single public sphere, recognising the nation-state as the political structure within which democratic political action, allegiance and identity are still largely organised.

The Internet has been conceptualised by many theorists as a public sphere. Frank Webster, for example, suggests the Internet can extend the public sphere by broadening and easing the exchange of information and encouraging discussion and debate (Webster, 1995:134).

A central issue regarding the Internet's use as media or alternative media is the extent to which the Internet is seen as a unified public sphere or multiple public spheres. Analysts agree that if the Internet is conceived as a unified public sphere, then access to it becomes the primary concern: it needs to expand beyond a preserve of the elite. Robert McChesney (1996) believes that universal access to the Internet is far from certain, compromising its democratic potential. Other commentators who would agree with this assessment include Aurigi and Graham (1998), Calabrese and Borchert (1996), Calhoun (1998), Sparks (1998) and Friedland (1996).

For example, Aurigi and Graham, and Calabrese and Borchert, see three distinct groups emerging regarding relationships to the Internet public sphere. First, a "transnational corporate class" highly mobile and relying upon interactive global computer networks to operate, using the Internet to live where they chose while remaining connected to the economic mainstream. The second distinct group is the less mobile and less affluent workers using the Internet largely for passive consumption. The third distinct group is comprised of the marginalised groups living in poverty and structural unemployment excluded altogether from Internet public spaces.

5.3: Alternative (small) media and social movements

As suggested at several points in the discussion above, alternative media have been linked to the activities of social movements. Many authors have made this observation. Those discussed here include Sreberny-Mohammadi and Mohammadi, 1997, 1994; Downing, 1995 and 1984; Castells, 1997; and Melucci, 1996, 1989. Other authors linking alternative media with social movements include: Young, 1997; Friedland, 1996; Zaraf, 1996; Sholle, 1995; McLaughlin, 1995 and 1993; Murphy, 1994; Lewis, 1993a; Frederick, 1993, 1992, 1989; Waterman, 1990; and Bruck and Raboy, 1989.

John Downing (1995; 1984) links alternative media with revolutionary movements. He defines "alternative media" as "politically dissident media that offer radical alternatives to mainstream debate." He uses the analogy of the Boston Tea party to describe the impact that alternative media can have. Noting that the original sailing ship carrying the tea cargo to Boston was very small, even flimsy by today's standards, Downing says that the action

of tipping the tea chests overboard nevertheless "captured the imagination of the rebels and played a vital part in galvanizing resistance to the British Crown." His point is that size is no indication of impact. Other than their small size, alternative media are also characterised by "horizontal linkages" - allowing the public to communicate with each other - rather than the vertical communication model of the mainstream media.

Downing traces the history of alternative media in the US, beginning with pamphleteers such as Thomas Paine, whose *Common Sense* (1776) was widely read during the American revolution. In the early 19th century, a labour press concentrated in the eastern cities of Philadelphia, New York and Boston, were the voices of the working class and were aimed at improving wages and working conditions in factories. By mid-century, the ethnic press was developing, with the *Freedom Journal* voicing concerns of the Black population and campaigning for the abolition of slavery, the *Cherokee Phoenix* in the South, and the Chinese-language *Golden Hill News* in San Francisco. The emerging women's movement began publishing *Lily* and *Revolution* in the latter half of the 19th century, and both newspapers "contributed to the slow groundswell in women's consciousness and organization." From the 1880s, increased labour immigration from southern and Eastern Europe, where analysis was grounded in Marxist, socialist and anarchist theory, contributed to a flowering of political debate in the publications of the American labour movement. The Socialist Party's *Appeal to Reason* was published from 1895 to 1917 and at its high point was selling 750,000 copies. In the 1930s depression era, alternative filmmakers worked to highlight the scale of the economic disaster and the activists struggling against poverty and hunger. Downing highlights the struggle of KPFA, the first significant alternative radio station in the US. During the McCartyite period, the Federal Communications Commission (FCC) repeatedly threatened to suspend its broadcast licence, which meant spending considerable scarce funds for legal representation. Moving on to the political movements of the 1960s, KPFA and many other alternative projects, mostly print media, were involved on the front lines. Publications such as *Rat*, *Seed* and the *Liberation News Service* played their part in the movement and later folded. Downing also highlights the "alternative media explosion" within the armed forces, notably the publications *Bond* and *Ally* which the Army commanders did not manage to stamp out despite their efforts. Downing ends his history with the PeaceNet computer network (now part of APC, discussed in the next chapter) and Deep Dish TV Satellite Network which makes community programming widely available. He concludes that: "There is a vital interaction between political movements and media... Without their own media, political movements are stymied."

Sreberny-Mohammadi and Mohammadi have analysed the role of "small" media in the Iranian revolution (1997, 1994). They note that the term "small media" is used to describe alternatives to state-run broadcasting systems, but that the definition is imprecise. The distinction between "big" and "small" media depends not on the technologies used but rather on the way technologies are used. The authors posit that all revolutions are also communicative processes. They believe that a key factor in the revolution in Iran, as well as in all the revolutionary movements in Eastern Europe in recent times, was "the distribution of various kinds of small media and the ability to produce and disseminate messages, often through electronic means" (1997:222). These small media - in Iran mainly audiotapes and photocopied leaflets - helped to open a public sphere of dissent, strengthen and extend established cultural networks and communicative patterns, and support an oppositional discourse that led to the mass mobilization. Using this framework, the study of small media must situate them in a "complex net of economic, political, and cultural relations."

Analysts of social movement theory (Young, 1997; Buechler, 1995; Scott, 1990; and Eyerman and Jamison, 1991) point out that prior to the 1960s, the study of collective behaviour in the US assumed that the participants were suffering from a pathological psychological condition. The more positive theories emphasised grievances or deprivation, and the more negative, anti-social and irrational behaviour. The social movements of the 1960s sparked renewed interest in, and new theories of, root causes; the key work coming from that era is Mancur Olsen's *The Logic of Collective Action* (1965), leading to the development of the "resource mobilisation theory" of social movements, a theoretical approach still widely used in the US and less so in Europe¹⁵.

After resource mobilisation theory came New Social Movement theory, developed largely by European academics. New social movement theory, rooted in continental European traditions of social theory and political philosophy, emerged to analyse collective identities and sites of action other than class; the term "new social movements" refers to: "a diverse array of collective actions that have presumably displaced the old social movement of proletarian revolution associated with classical Marxism" (Buechler, 1995:442). Another key difference between resource mobilisation theory and new social movement theory is the latter's insistence on the importance of the cultural sphere alongside political action. Analysts of new social movement theory (Buechler, 1995; Scott, 1990) have identified the major theorists as Manuel Castells (Spain), Alain

¹⁵ The only theoretical work on the Irish women's movement as a social movement (Connolly, 1996) uses a resource mobilisation theory analysis.

Touraine (France), Alberto Melucci (Italy) and Jürgen Habermas (Germany). New social movement theory is not a single theory; indeed the main theorists themselves diverge sharply on key questions such as: the extent to which new social movements are "new," whether they are reactive or progressive, the extent to which they are political or cultural, and the class base of new social movements.

The discussion will focus on the work of two of the main theorists, Alberto Melucci (1986, 1989) and Manuel Castells (1998, 1997, 1996), whose work points the way to the link between social movements and alternative media.

The social movement theorist most identified with the Internet is Manuel Castells. He spent 12 years writing his trilogy on the "network society": *The Rise of the Network Society* (1996), *The Power of Identity* (1997), and *End of Millennium* (1998)¹⁶. A background to this work is his earlier *The Informational City* (1989), which analyses changes in the urban environment resulting from "information flows." His central thesis in this earlier work is that since the end of the Second World War and especially since the 1970s, a combination of capitalist restructuring and technological innovation is the major factor transforming society. In his trilogy on the network society, Castells builds on this analysis to examine in more detail the conflicts in contemporary society, including "the rise of the fourth world" (1998) - groups such as the working poor excluded from the network society - and social movements (1997). Castells believes that at the same time that globalisation and "informationalization" are transforming the world, they are also disenfranchising societies. Social movements are rooted in the resentment that people feel because of their loss of control over their lives, jobs and environment. A central theme in Castells' analysis is his insistence that all social movements are different from each other and must be understood within their cultural, social and political context. His analysis of the Internet and the environmental movement will be briefly discussed.

Castells uses an analysis and classification system of social movements developed by Alain Touraine (1985, 1981), who defined social movements by three elements: how they define themselves (their identity), how they define their opponent, and how they define their field of conflict. By using this classification, one can identify significant differences between social movements. Castells believes that much of the environmental movement's success is due to its strong links to the mainstream media and its ability to adapt to the conditions of communication in the network society - to use the Internet to organise.

¹⁶ Frank Webster (1998) writes that: "these three books together constitute, in my view, the finest piece of contemporary social analysis to come available for at least a generation."

Environmental issues enjoy a wide consensus and are broadly supported by all political parties. The movement actors address themselves to citizens, asking them to put pressure on governments or specific corporations. Their ultimate goal is to act on the political process, to influence the management of society by the representatives of society. He notes that the environmental movement has had a long history of involvement with the media. Although the movement relies on grassroots organisations, environmental action is geared towards creating events that call media attention. At the same time, the constant presence of environmental issues in the media has given environmental organisations a legitimacy in the eyes of the public. This strong link with the mainstream media is evident both on a global and local level and can be traced back to several sources. Non-violent direct action tactics, used since the 1970s, have provided good media material and images. The legitimacy of environmental issues, linked to basic human values, is a good area for media coverage, with environmental activists from the First World feeding video cameras to grassroots groups around the world, providing images of violations of environmental laws. Environmental groups have been active users of the Internet; for example, coalitions of environmental organisations used the Internet to mobilize against approval of the North American Free Trade Agreement (NAFTA). Perhaps most importantly, the Internet allows grassroots groups to suddenly have the ability to act globally. His analysis of the local-global dynamic will be discussed shortly.

Alberto Melucci is the second new social movement theorist of relevance for the present research. Despite the title of his latest work (1996), *Challenging Codes: Collective action in the Information Age*, Melucci does not analyse the Internet. In this work, echoing critical analysis of the media by Noam Chomsky and others, Melucci posits that the world media system "operates basically as the manufacturer of master codes at the world scale," with gatekeepers deciding the language used, selecting and organising the information broadcast and published, making decisions about the popular culture market, controlling the languages of computers and other information and communications technologies, and generally organising the minds of people (Melucci, 1996: 179).

Social movements, Melucci believes, have the power to reverse the symbolic order, through their alternative use of symbolic codes. Alternative media, including "music, bodily signals and clothing, radios and images, theatre and art, communication networks and virtual reality," can be used to alter and evade the codes imposed by mass society. Following on from this view, Melucci believes that collective identity is not a given but rather a starting point for investigation. Social movements are comprised of various organisations claiming to interpret and pursue the movement's aims, competing for support from potential political adherents. As a result, within social movements many

resources are allocated to creating and maintaining a specific identity rather than to pursuing external objectives.

Melucci believes society is entering an era qualitatively different from both capitalism and socialism, which he calls "complex society." He posits that the centres and peripheries of complex societies have a deeply ambivalent relationship; centres cannot impose their power but must exercise it in cooperation with the peripheries, a structural tension at the heart of the complex system. Social movements are a permanent feature of complex societies because they generate the forms of individual participation and collective mobilisation they require. A social movement must maintain a high level of internal unity, face the challenges of a hostile environment, and reinforce and legitimize itself within the larger society.

Melucci believes that the expansion and official recognition of the public spaces used by the submerged networks is essential for protecting contemporary movements and for enriching democracy. Independent public spaces (micro-public spheres in John Keane's terminology) help the social movements to articulate and publicise to the rest of society the themes they consider important, and to enable political actors to receive the movements' messages more clearly. Similar to large-scale commercial organisations depending on complex networks of everyday power relations, social movements are characterised by submerged, latent, networks. The first groups to mobilise are those most directly affected by the systematic influences on the formation of meaning - these groups become the indicators or symptoms of the structural problems with the system, and through their visible action they publicise existing conflicts. Mobilisations do occur but a great deal of activity takes place during the invisibility phase, "laboratories of experience, with experiments conducted on existing relations of power" (1989:208).

Melucci highlights several ways that the process of producing, exchanging and disseminating messages on the Internet could play an important role in maintaining a social movement. Cultural practices common within social movements - ranging from dissemination of alternative information to consciousness-raising and forms of psychotherapy - help maintain the movement, by providing alternative forms of self-understanding, friendship networks guaranteeing contact with sympathetic individuals, and many opportunities for friendship (Scott, 1990:124-125). Therefore using Melucci's analysis, alternative media production within social movements is understood partly in terms of a search for community, primary relations, and collective values, as well as its symbolic function to challenge the dominant codes. An example of this latter function

could be found in Soley and Nichols' (1987) study of clandestine radio broadcasting which found that it had important symbolic functions. Clandestine stations:

... provide status and legitimacy to the sponsoring organisation; demonstrate that the opposition can be successful, if at nothing more than operating stations; and provide catharsis to both listeners and broadcasters. The operation of a clandestine station gives the sponsoring organisation a status that other opposition organizations do not have, elevating the importance of the organization relative to other dissident groups. In mass communications theory, this is the "status conferral" function of the media (Soley and Nichols, 1987:317).

To summarise the new social movement theories of Melucci and Castells, these two theorists have views diverging on the central question of whether social movements are political or cultural. Buechler (1996) points out that Melucci assumes a post-Marxist stance whereas Castells could be seen as pro-Marxist. Castells characterises society as advanced capitalism - which he calls "network society"; Melucci on the other hand uses an information society framework - he refers to "complex society." Castells' analysis is macro-level and state-oriented whereas Melucci looks at the micro-level, everyday life. One area of interest to both theorists is how the identities of the movement actors are formed. Castells analyses social movements more through their instrumental actions, believing that important differences exist between social movements according to their adversaries, strategies and goals. He views political social movements as the most radical and views the cultural movements as apolitical. Castells' analysis of the Internet thus focuses on its use to meet instrumental goals. Melucci, on the other hand, sees cultural movements as the most radical and political movements as capable of being coopted. He is much more interested in the symbolic expressions of social movements than in their strategic concerns. Although not particularly interested in the use of the Internet by social movements, Melucci's analysis suggests that the Internet is primarily important for its role in maintaining the network of communications among members of the social movement, particularly the relations of friendship and common identity. There are also similarities among the theorists. In his later work in particular, Castells is more concerned with cultural production, and both he and Melucci agree that production of cultural codes that challenge dominant codes are central functions of social movements.

Critics of new social movement theory generally and Melucci in particular include Young (1997), who argues that the theory focuses too much on psychology and not enough on politics. Young believes that Melucci and new social movement theory in general concentrate too much on the internal workings and goals of social movements and not enough on the nature of domination. She believes that although many social movements

are organised along the lines of identity, this is not because they see identity affirmation as a primary task but rather because they share a common experience of oppression and a desire to affect change at a social level. "The main question these movements ask themselves, then, is not 'Who am I?' as Melucci ... would argue, but 'Why are we oppressed because of who we are?' and 'How can we change this state of affairs?'" (Young, 1997:157).

The issue of formation of identities and relationships through Internet media and communications could be discussed partly in the context of a field of study broadly termed "computer-mediated-communication (CMC)." CMC began as a new field of psychology and social psychology in the early 1980s, before use of the Internet was widespread. One early claim by prominent CMC researchers still holds some currency among popular commentators today, namely that the Internet technology is "blind" to social relations. This claim was based largely on experimental research conducted in laboratories in American universities by social psychologists which found that: "software for electronic communication is blind with respect to the vertical hierarchy in social relationships and organizations" and that the technology does not communicate status, power, and prestige (Kiesler et al, 1988:662). Since that time, research outside the laboratory setting has challenged the validity of the earlier research findings¹⁷. The perspectives of the early CMC researchers have been taken up by some contemporary writers on Internet communities, notably Howard Rheingold (1993), who believes that the Internet can liberate interpersonal relations from physical locality and create opportunities for genuine personal relationships. On the other hand, writers such as Clifford Stoll (1995) believe that the Internet can only create an illusion of community and that Internet relationships are shallow and impersonal. In an analysis of this issue, Parks and Floyd (1996) suggest that CMC is indeed able to convey relational and personal information but that it may take longer to do so than through face-to-face interaction.

Steven Jones, who has edited a series of books (1995, 1997, 1999) on the theme of CMC and online communities, believes that: "we can no more 'build' communities than we can 'make' friends" and that it is "not sharing in the sense of the transmission of information that binds communities in cyberspace [but rather] the ritual sharing of information" (1995:19-20). In a chapter in one of these books, Jan Fernback (1997) develops this perspective. He argues that individual identity is formed partly through contribution to the greater collective and that identity-formation in cyberspace can be found "not so much

¹⁷ For an extensive review of this early research and more recent research, see Spears and Lea, 1994.

within the content of virtual communities, but within the actual structure of social relations that constitute the use of CMC" (1997:42). Similar to physical communities, a tension exists between individuality and collectivity. Fernback argues that in the US, this CMC collectivity is formed through concerns with censorship and other restrictions of cyberspace. Using this framework, actions like development of group norms in CMC communities are markers of identity and community formation.

An important concept in the understanding of the role of networking and communication in social movements is "social capital," a term used to describe the resources inherent in family and community relations which contribute to development of individuals, families and communities. Two authors identified with the concept of social capital are Pierre Bourdieu (1993[1984]:32-33) and James Coleman (1994). Bourdieu sees social capital as "connections," or the benefits accruing to individuals through belonging in a group or family. In his view, social capital is linked to economic capital and the means for understanding the relations between them lies in analysis of the functions of institutions such as clubs, families, businesses and other social structures.

One of the most developed analyses of social capital has been made by Coleman (1994). In contrast to Bourdieu, Coleman focuses on the individual motivations for creating social capital, rather than the social and economic conditions underlying its creation. Coleman sees physical capital is something tangible because it can be observed in physical form. Human capital, an important concept in education, is less tangible and created when people change through learning skills and capabilities giving them more options for action. Social capital is the least tangible of the three, "for it is embodied in the *relations* among persons."

Social capital, human capital and physical capital all facilitate productive activity; Coleman suggests, for example, that a group with high levels of trust will accomplish more than a comparable group lacking that trust. Coleman believes that the value of the concept of social capital is its ability to identify certain aspects of social structure by their function, and that the function of "social capital" is as a resource that can be used by the actors to realize their interests.

Coleman describes six aspects of social relations that can constitute social capital resources. The first are obligations and expectations. Coleman sees obligations between persons as "credit slips" which can be drawn upon if necessary. In groups and communities where people are "always doing things for each other," there are many credit slips outstanding, on both sides of a relation. This form of social capital relies on a high

level of trustworthiness in the social environment, in order to insure that obligations will be repaid, and on the extent of the obligations held.

A second aspect is information potential, which Coleman believes is an important form of social capital. He notes that information provides a basis for action, and that social relations are one means of acquiring information. An example would be a person not deeply interested in current events but wanting to keep abreast of important news; that person can save the time involved in reading newspapers by interacting with a friend who pays attention to current events. In this case, the social relations are important for the information they provide. A third aspect of social capital relations are norms and effective sanctions. Coleman believes an existing norm provides a powerful but sometimes fragile form of social capital. An example would be norms inhibiting street crime, making it possible for women and older people to walk the streets without fear. However, norms can also inhibit social capital; for example, the same norms which make the streets safe may discourage young people from having a good time with their friends.

A fourth aspect of social capital relations is authority relations, in which social actors transfer control of certain actions to another actor. If a certain actor is recognised as an authority by others, that person has available a considerable body of social capital which can be applied in certain situations. A fifth aspect is appropriable social organisations, brought into being for a specific purpose but capable of being appropriated for other social purposes, constituting an important resource for individual actors. The sixth and final aspect is intentional organisation, particularly voluntary associations, creating an additional type of social capital to the preceding aspect: "because the organization produces a public good, its creation by one subset of persons makes its benefits available to others, whether or not they participate." Coleman concludes his analysis of social capital by observing that social capital depreciates when not renewed.

Riedel et al. (1998) define social capital as: "those resources inherent in social relations that facilitate collective action, including trust, norms and networks of association." Trust, derived from shared norms, allows participants in the social capital network to expect regular and cooperative behaviour, in turn facilitating collective action. Riedel et al. suggest that Internet networks should be evaluated in terms of their capacity to build or diminish existing levels of social capital. Questions to be asked include whether Internet networks can substitute for the social ties built through face-to-face interaction and how existing levels of social capital affect the development of the computer network. Indicators of social capital include: the strength of online relationships and networks - the extent to which they facilitate frequent, reciprocal, companionable and supportive

contact, especially among people separated geographically; the extent to which they help create social networks among the socially excluded; and the extent to which they support and strengthen existing civic networks and citizens organisations.

In a similar fashion, Aurigi and Graham (1998) believe that Internet public spaces need to be based in "some sense of collective identity, experience, solidarity and destiny," and grounded in real issues drawing the participants into meaningful relationships with each other. Friedland (1996) believes that by treating Internet public spaces "as social capital networks, rather than strictly as discourse communities, we can begin to ground the connective elements of new information technologies in social life and social structure."

In his analysis of Internet communications, Calhoun (1998) concludes that although the Internet does encourage public discourse, it does not go very far toward binding people to each other "in dense, multiplex networks" or toward creating a public space in which people from different communities can engage with each other across their differences. He believes that the Internet can however supplement organising work that also goes on face-to-face (1998:392).

5.4: The globalisation of alternative media

"Globalisation" is a term imbued with different meanings across many academic disciplines. Within sociology, definitions of "globalisation" range from Giddens (1990): "the intensification of worldwide social relations which link distant localities in such a way that local happenings are shaped by events occurring many miles away and vice versa"; to Roland Robertson (1992): a term "best understood as indicating the problem of *the form* in terms of which the world becomes 'united,' by no means integrated in naive functionalist mode." Perhaps the most neutral definition is John Tomlinson's (1997): "the rapidly developing process of complex interconnections between societies, cultures, institutions and individuals world-wide." A common thread through the writings of Giddens, Robertson, Tomlinson and other writers is the extent to which the process of globalisation links global and local actors. In the context of the current research, this would refer to the extent to which alternative media can link local and global social movements and groups for political and instrumental goals, or create or strengthen social and cultural networks and common identities on a global scale.

Much of the published material in the area of social movements and global alternative media uses a "global civil society" theoretical framework. However a core problem with using this framework for discussing alternative media is that the term is confusing - "civil

society" is used in different texts to describe two fundamentally different sets of social relations - one of which is essentially incompatible with a critical understanding of public communication and democracy. This will be discussed briefly. In his treatise on the public sphere, Habermas used the term "civil society" to describe the realm of social relations separate from the state, whose centre was market relations (Habermas, 1989[1962]:74-75). Habermas's original use of this term is consistent with its classical meaning. Colin Sparks, in a study of the texts of Hegel, Thomas Paine, Tocqueville, and contemporary theorists has made the following points: a clear distinction between state and civil society has no necessary connection with democratic theory; the notion of "civil society" is distinctly "economistic" and stresses the way that the whole of civil society is shaped by the production of material life; no necessary connection exists between the strengthening of civil society and of equality on the one hand and the degree of political freedom in a society on the other; and in the current epoch, to strengthen civil society means to strengthen the hand of the transnational companies (Sparks, 1994:31-45). Sparks concludes that theorists of civil society "correctly identified the state as an instrument of coercion but have reified civil society as a realm of freedom and equality. If it ever existed in this form, it no longer does" (Sparks, 1994:46).

According to political scientist Paul Wapner, who uses this classical meaning of "civil society" to describe the communication practices of transnational environmental organisations, "there is no single, static definition of civil society. The term has a long and continually evolving, if not contestable, conceptual history" (Wapner, 1995:313). Wapner sees movements such as Solidarity in Poland and Charter 77 in Czechoslovakia as being successful because they politicised civil society. In this sense, environmental organisations are concerned with identifying and manipulating levels of power shaping collective behaviour amongst non-state actors. They use channels of public communication to change "consumption patterns, reproductive practices, technological imperatives, life-style choices, and widespread poverty - none of which are completely amenable to government directives" (Wapner, 1994:393). According to Wapner, it was Antonio Gramsci and Talcott Parsons who shifted the meaning of "civil society" from its classical Hegelian understanding by introducing "a three-part model that differentiates civil society from both the state and the economy" (Wapner, 1995:313). Nicholas Garnham points out that the dichotomy of state versus civil society results in the debate about public communication being framed largely by a liberal theory of a free press, saying that only the market can provide the appropriate mechanisms of public communication free from state control or coercion (Garnham, 1992:363). Significantly, Habermas, in a critical commentary on his original work on the public sphere, later noted that "a search for clear definitions [of civil society] in the relevant publications is in vain"

but that the current meaning of the term "no longer includes a sphere of an economy regulated via labor, capital and commodity markets" and that "the institutional core of 'civil society' is constituted by voluntary unions outside the realm of the state and the economy" (Habermas, 1992:453).

Even though the term "civil society" is problematic in the context of the current research, the literature using this framework will be briefly reviewed because it introduces the important concept of Internet links between global and local social movement organisations. Frederick (1992, 1993) and Sreberny (1998) both use a "global civil society" framework to discuss the globalisation of alternative media and communication.

Frederick believes that nongovernmental organisations around the world were isolated from one another "due to communication obstacles." He believes that global civil society, which is neither market nor government, is using computer networks to strengthen a global network of non-governmental organisations (NGOs), a force in international relations circumventing hegemonic markets and governments. Using computer networks, NGOs have increased their capacity to communicate and build cross-border coalitions, and their visibility at international fora such as the United Nations. Frederick suggests that the APC (Association of Progressive Communications, a global computer network used by activist groups that will be discussed in the next chapter) and other computer networks used by NGOs are beginning to have an impact on international relations. The computer networks have been used to support activists in the 1989 Tienanmien Square massacre. During the Gulf War in 1991, they were used to disseminate alternative news and coordinate anti-war activism globally. During the 1990 attempted coup in the Soviet Union, APC affiliate networks were able to circumvent official control of the telecommunications system. Before, during and after the 1992 UN Conference on Environment and Development in Rio, activists used the APC networks to coordinate a global NGO response.

Sreberny (1998) uses a model of "globalism from below" proposed by international relations theorist Richard Falk (1996) and also "global civil society" theory, although she notes that the latter is not well-developed. "Globalisation from below" refers to new spaces for political action and global solidarity that provide alternative meanings to the content of dominant media (1998:208). Sreberny believes that the "decentralised women's movement" is an interesting articulation of the new global networking. The traditional model of global civil society, a centralised organisation such as Amnesty International, Friends of the Earth or Greenpeace, can be contrasted with the global women's movement, which has no central organisation but rather a variety of regional and locally-

based women's groups that network extensively. Sreberny believes that global activism for the women's movement is:

... built upon grassroots organisations, which combine into networks, build networks of networks, and then utilize communications technologies to exchange information as quickly and cheaply as possible and in ways that facilitate the greatest access and therefore mass participation (1998:218-219).

Using this analysis, Sreberny discusses the potential of the Internet for linking a global women's movement. Her analysis will be discussed in the first section of the next chapter.

Moving on from "global civil society," another framework for the political or instrumental function of global alternative media is used by Peter Waterman (1990). He believes that new social movements are a force behind "internationalist communication," meaning:

... transterritorial solidarity relations which enrich and empower popular and democratic communities or collectivities by exchanging, sharing, diversifying, exchanging and synthesizing their ideas, skills and arts (1990:82).

Waterman points out that alternative international communication is often characterised by heavy information flows from the North to the South. He criticises previous international communication projects in the labour movement, most of which have been designed and run not by workers but by university-educated intellectuals. Using an analysis similar to the social capital framework just discussed, Waterman posits that there needs to be more "humanistic and empowering" forums of computer information exchanges, based on the needs and capacities of the most marginalised potential users. He suggests that the four necessary characteristics for internationalist communication are:

...(a) a content, language, imagery and symbolism that comes directly from the people and confronts those of the oppressor; (b) an orientation toward total social transformation; (c) a mobilizing and organizing role, surpassing both vertical and horizontal information flows with a "spiral" communication model; (d) the active role in production and distribution by the relevant sector of the people and/or popular organizations. Such an active participation implies, amongst other things: (i) interaction between sender and receiver; (ii) messages that further interaction of both the population and the professional communicators; (iii) accessibility of both form and content to the masses, at a minimal educational level, education being part of the communication; (iv) public access to both production and distribution channels; (v) participation in the communication education structures;

(vi) organization of an audience capable of criticizing and eventually correcting the media (1990:81).

Waterman's conceptualisation of global alternative media moves us into the cultural aspect of global alternative media, that is the extent to which it can create and support common identities and cultural networks among people and social movements on a global scale. The cultural aspect of globalisation and computer networks has been discussed by many writers, including John Tomlinson (1997), Mike Featherstone (1993), and Deborah Wheeler (1998).

Tomlinson (1997) points out that many theorists have assumed that globalisation is an extension of "cultural imperialism," the domination of American and other Western cultural forms over non-Western forms. This view sees the foundation of global culture as the "expansionary imperatives of the capitalist production process and market."

Tomlinson makes three arguments against this view. First, while it is true that US cultural products predominate in the global marketplace of cultural goods - in television, for example - many products from non-Western cultures have also been exported widely, and indigenous cultural production tends to be more popular in the home markets.

His second point has also been made by many other authors, namely that audiences are not passive recipients of cultural products but rather that global culture is a dialectic. The discourse of cultural imperialism - words such as hegemony, dependency, core-periphery - characterise the cultural flow as one-way but no monolithic global culture is flowing uninterrupted to "dominated" audiences. In fact, Tomlinson points out that significant displacements of people from the Third World into the First world have occurred, and the idea of an "authentic culture" is deeply problematic. He believes a decline in "cultural power" has occurred between the West and the post-colonial regions, illustrated by the rise in popularity of non-Western cultural forms. Although non-Western forms will not supplant the dominant Western cultural forms on the global scene, they are undermining the certainties in Western culture. Tomlinson believes that global communications, including the Internet, are collapsing physical distance and bringing subordinate cultures into direct proximity with dominant cultures; myths of "the Other" are collapsing.

Tomlinson's third criticism of the "cultural imperialism" view of globalisation is that globalisation is a complex de-centred process, with cultural power more diffused than concentrated. The "centre-periphery" model of global capitalism is flawed, he believes, suggesting for example that the growing prosperity of a neighbourhood in Singapore is

linked to the growing poverty of another neighbourhood in Pittsburgh. He also points out that "capitalism has no loyalty to its birthplace," and that the current geographical patterns of dominance will not necessarily continue. Although globalisation is decentred, it is not equalised - there are clear winners and losers in globalisation. Tomlinson concludes that globalisation is not a "finely engineered machine" whose course and progress is easily managed but rather a "juggernaut" that no-one can fully control.

Mike Featherstone (1993) argues that "global culture" and "local culture" are relational and can only be understood through analysis of everyday work and living practices. A range of different responses are possible to the process of globalisation. He points out that postmodernism has highlighted the plurality of history and culture and that no single global historical narrative exists. Globalisation has contributed to a loss of a sense of a common historical past, by facilitating greater interchange among cultures and the "clashing of different images of global order and historical narratives." While isolated cultures can sustain fantasy images of themselves and the "Other," this process is challenged by globalisation. Featherstone believes that the process of creating a common culture requires ignoring or synthesising local differences. He also makes the point that the formation of common identities is made easier when a common enemy is identified, and that increased contact with outsiders could encourage increased generation of "we" and "they" images. He argues that the increased cultural flows made possible by communication technologies will not necessarily lead to greater tolerance. The threat of cultural disorder can encourage the strengthening of ethnic identities and lead to the growth of fundamentalism.

Featherstone argues that while a local culture is often perceived to be the opposite of a global culture, this is not necessarily the case. Common perceptions of local culture assume a relatively fixed situation reinforced by rituals and symbols linking people to a place and common sense of the past through collective memory. He points out that a sense of the past does not depend on written information sources but rather on non-written expressions, performances and ritual language. As well, postmodern developments in architecture and organisation of space reflect a past fictional experience, reinforcing a lost sense of place. However, experiences of this "playful" architecture are very different according to different positionings within local cultures. Differences in class, age and regional groups may consume the same cultural content but have very different affiliations to it.

Similarly to Tomlinson and Featherstone, Deborah Wheeler (1998) argues that the only way to study the impact of the Internet on local populations is to adopt research practices

that look at the daily lives and community narratives of the local population. Through her fieldwork in Kuwait, Wheeler found that local cultural frameworks play an important role in determining the response to the global economy and that local identities can be very resilient to globalising influences. For example, the ideals of "democracy" and market-based economic systems are actively resisted in many areas in the Islamic world. Wheeler observes that:

These differences in adaptations to global networked communications, such as men and women sitting on separate sides in Internet cafes, government censorship, Kuwaiti companies not using the Internet to seek global business deals but rather to reinforce local identity, or the use of the Internet to spread Islamic conservatism, are not presently acknowledged by hegemonic discourses of the information age, which stress homogenization (1998:260).

Manuel Castells (1997) offers another analysis on the connection between local and global. He believes that the world is being shaped by conflicting trends of globalisation and identity. Social movements are comprised of people collectively challenging globalisation. However social movements, as he understands them and were described earlier, are only one of the ways in which collectives react to globalisation. Social movements are proactive mobilisations, whereas most - or much - of the mobilisations against globalisation are reactive. The forces of globalisation encourage social atomisation and individualisation, and resistance to these globalising forces involves clustering in community organisations that induce a feeling of belonging and cultural identity.

Castells describes a type of grouping he calls "cultural communes" and which in many respects resemble the entities discussed earlier - Nancy Fraser's "subaltern publics," John Keane's "micro-public spheres," and Alberto Melucci's "independent public spaces." Cultural communes are organised around specific sets of historical contexts, meanings and self-identification, primarily around religion, nations or territory. Cultural communes are essentially created as defensive reactions to the forces of globalisation. These groupings are breaking away from civil society and state institutions and differ from civil society organisations because they are closed communities with high internal cohesiveness and little differentiation among members. Castells also suggests that alternative communications are central to the cohesiveness of cultural communes:

Because the new processes of domination to which people react are embedded in information flows, the building of autonomy has to rely on reverse information flows. God, nation, family and community will provide unbreakable, eternal

codes, around which a counter-offensive will be mounted against the culture of real virtuality. Eternal truth cannot be virtualized... (1997:66).

A central question for Castells is how and why these reactive cultural communes become proactive social movements, and he speculates that much of the cultural resistance to globalisation will remain contained within closed communities.

This discussion of globalisation and alternative media suggests that the use of the Internet may help build global networks of resistance and promote or support global social movements as well as the formation of common identities on a global level. At the same time however, there are many different reasons why this may not occur; some of these were discussed in the chapter reviewing published literature on global alternative media on the Internet; this will be discussed in the next chapter.

Chapter 6: An analytical framework for empirical research

The purpose of this chapter is to summarise the material presented thus far in Part I in the context of an analytical framework for empirical research on alternative media on the Internet. The empirical research will be the focus of Part II.

The framework generates a range of analytical tools, based on the issues and concerns raised in the literature review, for evaluating and understanding alternative media forms or processes on the Internet. The framework contains seven elements. The first three are characteristics of alternative media forms or processes: the participants, the production process, and the content. The last four elements concern the wider social, political and cultural contexts of the media activity.

The framework attempts to categorise the main areas of concern to researchers of alternative media on the Internet and contextualise these areas within social and media theory. It is more a set of guidelines and questions for researchers than a detailed map with clear directions. The issues raised in the literature review are complex and interdisciplinary, and this area of empirical research is still at the earliest, exploratory, stage. When conducting empirical research, it should be expected that the findings regarding any of the elements of the analytical framework will be different among different contexts of alternative media production and use on the Internet. The framework is intended to help develop a full scope of the structural, social, political, and cultural factors involved and to resist simple and superficial interpretations.

The framework is presented in this chapter; in Part II it will be used to structure the discussion of the empirical research, on Internet use and production of Womenslink by Irish women's organisations. The final chapter of this thesis will review the framework in the context of the research and discuss, among other things, its use for further research in this area.

6.1: Alternative media participants, process and content

The participants

The review of literature suggests that the profile of the participants of the alternative media on the Internet is a central element for analysis. The literature review highlighted that the Internet has become increasingly privatised, market-driven, and deregulated, and that critical communications theory suggests that because the Internet is regulated not by government policy but rather by private interests motivated by profits, Internet access will be highly uneven for different socioeconomic groups (Golding, 1994; Murdock; 1986; McChesney, 1995; Schiller, 1998). The review also highlighted that on a global scale, significant inequities exist regarding Internet access, with access in Third World countries almost entirely confined to the upper and upper-middle classes. Internet access and infrastructure reflects the income disparities and inequalities between regions and countries and within countries. Most Internet host computers are located in the US, and within that country, significantly different levels of access exist according to socio-economic grouping, and primary restraints to Internet access include low income and low levels of formal education.

Uneven Internet access presents an obvious challenge for alternative media production on the Internet. Alternative media aim to be as grassroots as possible and to reflect the experiences of those for whom they are produced. There are often the same groups and communities largely excluded from the Internet because of structural restraints and barriers to access. This situation reflects Nancy Fraser's (1992) criticism about structural exclusion from the public sphere and also the concern of Lisa McLaughlin (1993) that alternative media processes may also be exclusionary. In this context, it is important for the analytical framework to include analysis of the profile of the media producers and participants - who is participating and who is excluded from participation in alternative media forms and processes on the Internet?

The studies on global feminism on the Internet found that many women and women's organisations in the Third World and newly-developed countries had great difficulty producing alternative media on the Internet. The persistent illiteracy problem in the Third World hindered women's participation in Internet fora, as did the predominance of the English language on the network. The infrastructure problems of poor or few telephone lines, poor electrical supply and low quality computer equipment also hindered access. This situation resulted in significant inequalities in global feminism on the Internet, illustrated most strikingly at 1995 NGO Forum at the Beijing conference for women

where most Internet users were American women and the American computer equipment was unfamiliar to many women's groups from the South (Sreberny, 1998; Kole, 1998; Gittler, 1999). At the same time, however, many Third World women's organisations were active Internet users. Language was identified in other studies as a primary enabler and barrier - the English language dominated the Internet, and individuals speaking English well had the advantage in many of the alternative Internet media studied, such as the activities at the NGO Forum in Beijing mentioned above, Internet use in Eastern Europe (Lengel, 1998), the Zamir.net in the former Yugoslav region (Stubbs, 1998), and the Chiapas activities on the Internet (Everett, 1998). The Breast Cancer mailing list (BCL) was another example of uneven participation rates globally. English was the language of production, and despite the fact that BCL was global, most subscribers lived in North America (Sharf, 1997). Other studies on global Internet use by activists found similar disparities. In the Yugoslav region, the high cost of Internet access restricted Internet access, and the need to produce content in English for a Western audience significantly shaped who produced Internet content about the war zone in that region on alternative media fora (Stubbs, 1998). In the Chiapas situation, the key issues again were class, gender and race, facility with the English language, and the regional inequalities mirrored by the Internet infrastructure. Those producing alternative content about Chiapas on the Internet were mostly outsiders not from the region, leading to a situation where the views and voices of the local oppressed people went unheard in alternative media where their situation was being discussed (Everett, 1998).

Regarding gender, in some of the literature reviewed, women had lower levels of access to and involvement in alternative media on the Internet but the latest research from the US also found that the number of women with Internet access was approaching parity to men in the US (U.S. Department of Commerce, 1998). Several studies suggested that training and public access was an important factor in facilitating women's production of Internet content. On the Zamir.net the training programme of the "Electronic Witches" played a key role in encouraging women's participation online (Stubbs, 1998). It was also clear from the PEN research that the higher-than-expected participation by women was due to their access through the public access terminals (Collins-Jarvis, 1993).

Educational background was also identified as a significant enabling factor to producing Internet content, with individuals having a university education and university access to the Internet forming the most elite category of Internet users in several of the studies.

The studies found in one case that the age of the individual was another factor shaping Internet access - on the Breast Cancer List where most contributors of Internet content

were young women, whereas breast cancer was primarily a disease of older women (Sharf, 1997).

The research on the Dublin Inner City Computer Network (Ennals, 1997) and the VSIA research (O'Donnell, Trench and Ennals) raised the issue of barriers and restraints within organisations that discouraged participation by community and voluntary organisations. Some studies highlighted the difficulties of encouraging socially excluded members of society to participate in the production of Internet media. In the Craigmiller case, the network was unsuccessful in encouraging many people from the disadvantaged community to participate in producing online content (Malina and Jankowski, 1998). Similarly, on the ICCN network, the coordinator was the only one producing content for the network newsgroup, although members did exchange email (Ennals, 1997).

In summary, the analytical framework for empirical research needs to include analysis of the socio-economic and structural elements that shape the profile of the participants of alternative media on the Internet. The key questions are:

- *Who participates in the alternative media production, in terms of their socio-economic status, gender, geographical location and language and other factors?
- *What are the restraints and barriers to accessing the technology?

Production process

The literature review highlighted that different media forms or processes on the Internet have different ways of structuring the interaction of their participants, and suggested that participation rates and practices varied among the different media processes. For this reason, the analytical framework should also draw out the complexities of the specific alternative media production process. The four specific media forms or processes discussed were email, newsgroups (bulletin boards), mailing lists, and Web pages.

A central question is the extent to which the production of these new media forms and processes on the Internet represent an alternative to the production practices of the mainstream media. Sholle (1995) believes that too often alternative media reproduce the bourgeois practices of the dominant media, regarding their audiences as consumers rather than emphasising production based on collaborative and democratic participation and public involvement in organising and producing media texts. Similarly, Lisa McLaughlin (1993) believes that the production processes of alternative media should be examined for evidence of reproducing the hegemonic production practices of the mainstream media.

The published studies highlighted that email was the most common media form or process on the Internet. Some studies found that compared to print, which could mass-produce fixed messages, email could be reworked into new messages and passed on to new readers and thus support the evolving concerns of communities and social groups. Email was a social backstage where small groups of people could plan their appearance in more public forms of life, both on and off the Internet (Mukerji and Simon, 1998). In the PEN system, for example, email was used for one-to-one communication where public communications were not appropriate; the system administrator believed that email was the glue that kept the public newsgroups going (Varley, 1991). When a problem arose on the public newsgroups with some men posting aggressive and hostile comments about women, the women were able to use private email to develop a strategy to deal with the situation (Collins-Jarvis, 1993). In the Lesbian Cafe (LC) newsgroup, email was used as a backstage to the public newsgroup, where communications were less polite and more informal, serving to increase group solidarity (Correll, 1995). In the case of the neo-nazi activities on the Internet, email was used to communicate away from the public eye (O'Donnell, 1999).

The review of studies suggested that although Web pages were useful for some social movements and groups, they primarily involve a one-way information flow, produced by a limited number of individuals and organisations for widespread consumption. In one

case reviewed, the Web pages could not be accessed by the women's organisation staff themselves because they lacked the required skills (Kole, 1998). In Aurigi and Graham's (1998) study of civic Web sites, they found that most were essentially urban databases with a top-down information flow and little opportunity for genuine interaction among residents. Web pages also allowed competing representations. Six different versions of the city of Bristol could be found on the Web, none offering a space for digital debate amongst the actual citizens. In this sense, one could question whether these Web sites were "alternative" media in any significant sense, as they structured their audiences in the same way as commercial media, with a top-down information flow.

Some of the studies also highlighted that social movements and groups used Web pages in parallel with other alternative media forms or processes but for different purposes. The cold fusion scientists used their mailing list to maintain their closed community but some also published Web pages to which other members could be referred (Mukerji and Simon, 1998). Several studies suggested that different media forms or processes had inherent qualities which encouraged different types of relationships among participants. The research on Internet media produced by cold fusion scientists suggested that mailing lists allowed informal "backstage" relationships while newsgroups encouraged more formal "frontstage" communications (Mukerji and Simon, 1998). The research on the Lesbian Cafe also used this frontstage-backstage framework but instead suggested that private email was the backstage.

The email-based media forms and processes of mailing lists and newsgroups were more participatory than Web pages. Media forms in which the audience is the primary source of media content as well as its receiver represent a new and significant departure from conventional mass media forms. However the literature review raised questions about the democratic aspects of the production processes of these media forms. Many of the structural restraints and barriers to Internet access discussed earlier in this chapter - such as income, educational background and language - also shaped the production processes of the more interactive alternative media forms. In the global feminism studies, women's groups from the Third World had much lower email participation rates than those from the US. Many of the studies of mailing lists and newsgroups highlighted uneven participation rates in the media production which in some cases discouraged participation by others. On the PEN system in the US, a small number of users produced antagonistic content which drove others off the system. Some male newsgroup users were initially hostile to women, prompting the women to start their own newsgroup. The general disruption to the newsgroup process prompted system administrators to initiate a system of network rules of order which alienated other participants (Schmitz, 1995). Dutton

(1996) concluded that such rules of order were a necessity in online fora. Shade (1997) raised the issue of whether women-only Internet fora were a viable way for women to express their opinions free from hostile or dismissive commentary (Shade, 1997).

In summary, the analytical framework needs to include analysis of the socio-economic and structural elements that shape the production process of alternative media on the Internet. The key questions are:

*To what extent do the media forms or processes allow interaction between sender and receiver?

*Is the media production process democratic and participative and do some participants dominate?

Content

The literature review underlined the importance of alternative media content as a focus for the analytical framework and highlighted three facets for analysis.

The first facet is whether the alternative media content reflects the lived experience of the media audience. David Sholle (1995) believes that a central concern for alternative media is the extent to which they reflect the audience's lived experiences; his analysis follows on from the work of Negt and Kluge (1993[1972]), who criticised the mass media for its creation of communities of consumers by blocking experiences of everyday life. Sholle believes that alternative media could counter this process by fostering capacities for reflecting upon experience and imagining a different future. Many of the studies suggested that alternative media content on the Internet could indeed reflect the lived experiences of the audience. A primary function of the Breast Cancer List (BCL) was the exchange of members' personal views and experiences of breast cancer (Sharf, 1997). A notably successful example of online content reflecting the lived experiences of the participants was the CMSS network in Halifax, Nova Scotia, where single mothers discussed their wide array of daily worries and concerns (Dunham et al, 1998). In the Lesbian Cafe (LC), patrons were able to reflect on their lived experiences; however the content on the newsgroup contained a large degree of fantasy. Most women participating on the LC were not comfortable in real lesbian bars but liked to interact in a virtual lesbian bar, projecting a highly controlled image of themselves and their experiences (Correll, 1995). However, the studies also highlighted many challenges to a collaborative media form with content expressing the experiences of participants. On the AYA newsgroup on the APC networks, with unregulated content production, there was the

potential for one or more individuals to produce content irrelevant to the general readership, and some of the content producers "abused" the network by posting limitless ramblings about trivial topics (Stubbs, 1998). The neo-nazi groups on the Internet created a space on the Internet where neo-nazis and other racist individuals could express their opinions and describe their experiences, challenging democratic notions of social organisation (Zickmund, 1997).

The second facet for analysis is whether the alternative media content challenged dominant codes and was creative and tested out new ideas. Alberto Melucci (1996) believes that the subversive power of social movements lies in their ability to reverse the symbolic order through alternative use of symbolic codes. In this framework, alternative media could be used to alter and evade the codes imposed by mass society. Melucci also believes that social movements are characterised by submerged, latent networks, in which activities occurred that could best be described as laboratories of experience, "with experiments conducted on existing relations of power." His analysis is echoed in John Keane's conceptualisation of micro public spheres (1995) and Nancy Fraser's vision of "subaltern publics" (1992). Many examples were highlighted in the studies of using Internet media to produce alternative codes, in particular the deconstruction of official information such as mainstream news articles and official reports. This was a notable feature of the mailing lists and newsgroups used by the American militia, who also re-interpreted the US Constitution as well as media articles (Ward, 1999). On the APC networks and the Chiapas Internet fora, many postings were criticisms and deconstructions of mainstream news articles (O'Donnell, 1995). The neo-nazi groups on the Internet and the cold fusion scientists both used Web pages to create and maintain alternative information and codes. In the case of the cold fusion scientists, they had a belief and vision very different from the mainstream scientific community, and they used the Internet to create and maintain their own world vision (Mukerji and Simon, 1998). In the case of the neo-nazis, iconography reflected political repression, violence and death and silencing people of African descent, homosexuals and Jews - alternative codes and imagery well-understood by racists (Zickmund, 1997). One challenge associated with content creating new alternative codes is whether it could be understood by other participants. In the APC bulletin board set up to discuss the situation in the Yugoslav region, the network was part of a larger alternative scene in Zagreb, linking with local activist activities. Here the limits of creating alternative codes were highlighted, when a specific cultural code developed locally for discussing the war was not easily understood by outsiders (Stubbs, 1998).

The studies also highlighted many cases of content that tested out new ideas. On the Breast Cancer List, much of the content discussed alternative therapies and sharing ideas for surviving with the disease (Sharf, 1997). On the APC networks, discussion threads would continue for many months, exploring fresh angles of a situation and trying out different angles on a topic (Sachs, 1995). This occurred as well on the Chiapas Internet fora, where participants could voice opinions and receive feedback from other participants (O'Donnell, 1995). On the closed communities of the cold fusion scientists, new ideas about cold fusion that had been rejected in the public sphere were tested (Mukerji and Simon, 1998). Some women's networks excelled in being laboratories of experience, such as the Lesbian Cafe, where many patrons did not frequent real lesbian bars themselves but used the LC as a fantasy situation (Correll, 1995). However, the two studies of the APC networks raised the question of the extent to which content in alternative media fora could be creative. The authors found that APC content was characterised by a "sameness of the discourse," that the content was generally within a narrow and well-defined ideological framework and that online debates operated within a given set of assumptions (Sachs, 1995; Stubbs, 1998).

The third facet for analysis of content in alternative media on the Internet is whether the media forms or processes could organise an audience capable of criticizing and correcting the media content. Peter Waterman (1990) raised this issue in the context of internationalist media, the concern being that many international communication projects in the labour movement which have been designed and run not by workers but by university-educated intellectuals. Other studies highlighted numerous instances of the media audience correcting the content of the alternative media on the Internet. However some key difficulties in this area were also raised, namely the access restraints and barriers which prevented or discouraged participation in and correction of content about the discussion subjects themselves, for example the Chiapas activities on the Internet. Barriers to Internet access in that Mexican region meant that very few local people were able to contribute their personal perspectives to the dialogue about their situation (Everett, 1998). Similarly, the study of Amsterdam's Digital City found that people could express their opinions and experiences but that many did not actually live in Amsterdam, raising the question of representation and whether alternative content on the Internet could truly reflect the experiences of a defined social grouping. Some studies also highlighted the possibilities for participants who, rather than correcting the media content, opted out and started a new alternative media form or process, such as spinning off private email lists when the discussion on public fora was not supportive. Examples were the cold fusion scientists, who set up their own private mailing list away from the public newsgroup (Mukerji and Simon, 1998), and the PEN system, where some women set up a new public

newsgroup on women's issues (Collins-Jarvis, 1993). The "separatist" option presented a related challenge - illustrated by the example of the multiple visual representations of the real Bristol urban space (Aurigi and Graham, 1998) - of understanding which one was the true representation and how a media audience could correct many different versions of the same thing.

In summary, the analytical framework needs to raise questions that explore the relations between the content of alternative media on the Internet and the lives of participants, and highlight the complexities of the content. The key questions are:

- *Does the content reflect the lived experience of the media audience?
- *Does the content challenge the dominant codes, use alternative codes, is it creating and testing out new ideas?
- *Is the audience capable of criticising and correcting the media content?

6.2: Links with the wider political, social and global contexts

The first three elements of the analytical framework discussed above are characteristics of the alternative media forms or processes themselves; the last four elements concern the wider social, political and cultural context of the media activity: the links with political participation, social capital, the public sphere, and global activities.

Links with political participation

The link between alternative media and political participation was raised in the review of theoretical literature by a number of authors. There are two facets to this link. The first is whether the alternative media linked or promoted links with the mainstream political process; the second is the link with wider movement and organising processes. Several authors reviewed analysed the role of alternative media within social movements in the context of linking with the mainstream political process. John Downing (1995, 1984) sees alternative media as politically dissident media with the potential to impact on mainstream political debates and processes. Sreberny-Mohammadi and Mohammadi (1997, 1994) found that the production of "small" media in Iran helped to support an oppositional discourse that led to mass mobilisation. Manuel Castells (1997) suggested that social movements had different goals and that the Internet would be most useful to those with clear mainstream political goals.

The review of studies suggested that the Internet was an important tool used by social movements and groups for linking with mainstream politics but significant differences existed between social movements in this regard, with social movements and groups using the Internet in a way which reflected their general political orientation. Alternative media on the Internet with the strongest mainstream political links were produced by individuals and organisations grouped together around having a common enemy, sharing a focused mainstream political goal, and wanting to influence public opinion or the mainstream political process. Of the studies reviewed, this was seen most clearly in four cases: the Chiapas activities on the Internet (Schulz, 1998; Cleaver, 1995; O'Donnell, 1995), the American militias on the Internet (Ward, 1999), the environmental movement (Castells, 1997), and the APC networks (Sachs, 1995). Several studies highlighted a key issue regarding the links between alternative media on the Internet and mainstream politics: the Internet attracted users who were more interested and active in mainstream politics than the population at large. Although no recent studies were found, analysis of Internet users in the early and mid-1990s showed this clearly. The study by Hacker (1996) found that Internet users who downloaded documents from the White House Web site were more politically involved than most Americans, they used the system to keep informed and get closer to the mainstream political process, and one-third worked at times for political causes, issues or candidates. In the study of digital Amsterdam activities, it was suggested that those using the digital city were more politically active than the norm (Brants et. al, 1996). In the PEN system in Santa Monica (Schmitz et. al, 1995), users were distinguished by their high level of political interest and activity, compared with the Santa Monica population as a whole. The review of the PEN studies also highlighted the difficulty of using Internet fora themselves for political lobbying, with most city officials and politicians in Santa Monica steering clear of PEN.

The second facet to the analysis of the link between alternative media on the Internet and political participation is the extent to which the alternative media process or form promoted involvement in wider movement and organising activities. This aspect was also suggested by a number of authors in the literature review. Nancy Fraser (1992) highlighted the role of alternative media in sustaining and developing oppositional movements to the mainstream public sphere. John Keane (1995) discussed how alternative media helped sustain micro-public spheres of actors developing alternative discourse to the mainstream. Manuel Castells (1997) explored how the Internet could sustain and develop movements of actors organising alternatives to the mainstream, such as the American militia and the environmental movement.

Turning to the studies, many cases were found of alternative media on the Internet functioning as a vehicle for movement and organising activities, such as the APC networks, where much of the content on the newsgroups concerned left movement politics and online discussion by activists using the system (Sachs, 1995). Links with the wider movement were also a feature in the Chiapas activities on the Internet where content circulating on many of the Chiapas Internet fora was linked to activist activities and coalition building; the Internet was also used by activists to coordinate protests around the world against government intervention in Chiapas (O'Donnell, 1995). The review of studies found this also with the neo-nazi activities online, who used Internet fora - including newsgroups, Web pages, mailing lists and email - to build a wider movement (Zickmund, 1997). Research on the PEN network highlighted some use of the network for activism, particularly the activities around the "homeless" newsgroup to lobby and fundraise for improved services for homeless people in Santa Monica (Schmitz et al, 1995). On the other hand, some of the other studies highlighted cases where alternative media on the Internet were primarily support networks without significant political or movement links - such as the Breast Cancer List (Sharf, 1997), the Lesbian Cafe (Correll, 1995) and the CMSS network in Halifax, Nova Scotia, for single mothers (Dunham et al, 1998). These will be discussed shortly in the context of links with social capital.

In summary, the analytical framework needs to explore the different facets of alternative media on the Internet concerning political participation. Key questions are:

- *Do the alternative media link or promote links with the mainstream political process?
- *Do they promote involvement in wider movement and organising activities?

Links with social capital

The review of literature suggests that the analytical framework needs to include analysis of the social capital element of alternative media on the Internet. The review highlighted that social and cultural aspects of social movements were important to the understanding of the role played by alternative media within social movements. Alberto Melucci (1986, 1989) suggests that independent public spaces, similar to Keane's micro-public spheres, are important for social movements to articulate and publicise to the rest of society the themes they consider important. Alternative media in this framework help to maintain a movement by providing communication that supports alternative forms of self-understanding, friendship networks and communities. Social capital, as conceived by Bourdieu (1993[1984]) and Coleman (1994) is a resource inherent in family and

community relations which contributes to individuals and community development. Along these lines, other theorists have discussed the potential of the Internet to maintain and expand social capital networks. Drawing from the work of Coleman, Riedel et al. (1998) believe that the capacity for building social capital through Internet networks depends on trust among participants. Calhoun (1998) believes that the Internet does not go very far towards binding individuals to each other in dense networks or creating public spaces where people from different communities can work out their differences.

The review of studies suggested that the production of alternative media on the Internet was successful in building and creating social capital - helping to create and extend networks of friendship and emotional support and facilitate a sense of community, shared identity and primary relations - primarily in situations where the individuals, groups or organisations were geographically or socially isolated from others, had beliefs very marginal from the mainstream, or were in great need of emotional support. In other situations, alternative media production on the Internet was less successful in creating social capital or extending existing social capital networks. The Internet was able to link militia members previously isolated in geographically remote and isolated locations in the US into a network with similar perspectives and goals (Castells, 1997; Stern, 1996). The Breast Cancer List was successful in creating a new network of information and emotional support primarily for people stricken with this disease - linking them with each other and with health professionals, academics, and policy makers who could allay their fears and interpret complex medical information (Sharf, 1997). Neo-nazi activities and alliances used the Internet to extend their networks beyond pre-established alliances to those previously without access to neo-nazi and racist information, encouraging a thriving neo-nazi culture (Zickmund, 1996). Likewise, the cold fusion scientists were able to strengthen and expand their existing network to new members and maintain a strong sense of community through their Internet activities, to a large extent because they were so isolated in the outside world (Mukerji and Simon, 1998). The Lesbian Cafe (LC) newsgroup was successful in creating a new lesbian community for women either lacking a lesbian community in their geographical area or unable to be visible members of a lesbian community, by offering them the opportunity to be with other people like themselves (Correll, 1995). In the CMSS network, a strong support network was created by single mothers, especially those extremely isolated from other support structures. The single mothers saw themselves as an online community, and the more they accessed the network, the stronger their sense of community (Dunham et al., 1998). The review of studies also suggested that many participants of alternative content on the Internet were motivated primarily to communicate with others, particularly friends and others with whom they shared a common interest.

On the other hand, the literature review highlighted other situations where the Internet did not create or extend new social networks to the same extent as the ones described above. The evidence from the NGO Forum in Beijing was that the Internet traffic reflected networks already existing among certain women's organisations but did not extend them. Most email traffic in Beijing occurred between coalition partners, colleagues and NGOs and did not reach outside networks already existing among women's organisations, except for some Southern NGOs not having previously used the technology (Kole, 1998). In Dublin, the six community organisations on the ICCN network had little in common besides working with the same client base, and although it was expected that they would develop shared positions or lobbying activities, the computer network was not successful in achieving that goal (Ennals, 1997). Similarly, the Craigmiller network in Edinburgh was not able to encourage network development; this was attributed to the many barriers discouraging participation by members of socially excluded communities (Malina and Jankowski, 1998) but perhaps another interpretation was that the community members did not feel the need to use the Internet to maintain their relations of support.

Regarding the extent to which alternative media production on the Internet helped to build trust among the participants, three of the studies suggested that the network facilitated trust among media participants: the cold fusion scientists, the Breast Cancer List, and the CMSS network for single mothers in Halifax, Nova Scotia. On the cold fusion list, the authors believed the high volume of messages produced indicated the level of trust among the participants, and there were many examples of members offering support to one another (Mukerji and Simon, 1998). Sharf (1997) believed that the Breast Cancer List functioned as a source of emotional support for many of the participants. On the CMSS network, the authors found that both close personal friendships and antagonistic relationships were facilitated through online communications (Dunham et al, 1998). However on the Lesbian Cafe, the author suggested there were limits to the intimacy that could develop through online communications; although close personal friendships were possible through the Lesbian Cafe, she believed that these needed to be supplemented with face-to-face contact (Correll, 1995).

The third aspect of social capital is the instrumental value of alternative media by social movement organisations, the extent to which the Internet builds organisational capacity. The literature review highlighted several cases where social movement organisations were using the Internet to build organisational capacity, and also where significant organisational restraints and barriers shaped this process, such as studies by Kole (1998)

and Gittler (1999) of women's organisations at the Beijing women's conference, and Ennals' study (1997) of the Dublin Inner City Computer Network.

In summary, the analytical framework needs to direct attention of empirical study on the different aspects of the relationship between social capital and alternative media on the Internet and highlight the complexities of these relationships. The key questions are:

*Do the alternative media on the Internet help to create, extend or strengthen support networks?

*Do they help create and consolidate common identities and communities?

*Do they help build trust among the participants?

*Do they help build capacity within organisations?

Links with the public sphere(s)

The link between alternative media and the public sphere(s) was highlighted as a central focus of the literature review on theories of alternative media, suggesting that the analytical framework needs to analyse this element.

The first facet of the discussion is whether alternative media forms or processes on the Internet were linked with the mainstream media and the wider public sphere. In the literature review, this issue was raised in the context of whether one public sphere or multiple public spheres were desirable. Oskar Negt and Alexander Kluge (1993 [1972]) argue that the bourgeois public sphere described by Habermas is a mechanism for exclusion of certain social groups and suggest that there are multiple public spheres. Nancy Fraser (1992) introduces the concept that a single public sphere is not always preferable to a nexus of multiple publics. Fraser argues that in societies characterised by unequal social groups in structural relations of dominance and subordination, parity of participation in public debate is not possible, and that existing inequalities are exacerbated in a single public sphere with no alternative arenas for debate amongst the excluded. These alternative arenas revolve around alternative media. John Keane proposes a similar argument, with the spheres of alternative media conceptualised as micro-public spheres (1995). On the other hand, critics such as Lisa McLaughlin (1993) argue that alternative media conceived as separate from the mainstream fail to challenge the hegemonic structures of mainstream media. Once separate from mainstream debate, alternative media risk developing alternative dominant social relations and structures.

The review of studies of alternative media on the Internet highlighted different scenarios and relationships between media forms and processes and the public sphere. Three studies showed extensive links with the mainstream media and mainstream public sphere. The first was the Chiapas activities on the Internet. Schulz (1998), looking at the communicative praxis of the Chiapas struggle, found that the links between the mainstream media and the wider public sphere were a key aspect of the EZLN strategy. Much of the content circulating on the Internet about Chiapas was from mainstream newspapers, primarily articles from the left-leaning Mexican daily *La Jornada* which had been translated to English and widely distributed on the Internet, picked up by journalists globally, and reported widely in mainstream news outlets (O'Donnell, 1995). Also featured on the Chiapas list was discussion of mainstream news, particularly the news circulating on the list itself, and criticism of how the mainstream news fora were covering the events in Chiapas. In two other cases where mainstream media featured prominently, the information flow was inward, with the mainstream news articles used heavily as stimulants for group discussion. The first was the American militia, whose Internet media revolved around discussion of news articles, mostly from Associated Press. The other was the APC networks, whose newsgroups featured critical discussion of mainstream news articles. Sachs (1995) found that APC members believed that the information on the APC network offered left-of-centre viewpoints missing from the mainstream media. The users often harboured dislike and animosity towards both individual journalists and the mainstream press as a whole, complaining about the weakness of the editing process, the dominance of corporate interests, and commercial ownership and advertising of the mainstream news.

The second facet of the public spheres discussion is the extent to which alternative media on the Internet themselves functioned as a public sphere or alternative public spheres. As conceived by Habermas (1989 [1962]), the key elements of the public sphere are universal access, reliable sources of information, voluntary participation, rational argument, the freedom to express opinions, and the freedom to discuss matters of the state and participate outside institutional roles. Regarding universal access, the structural restraints and barriers to Internet access were discussed earlier and are included in the analytical framework in the section analysing participants of alternative media. Regarding reliable and adequate sources of information, the review of studies highlighted that this was a clear challenge for many alternative media forms or processes on the Internet. Of all the cases studied, perhaps two were better than the rest in this regard: the Internet fora for the American militia and the Chiapas Internet activities, where, as previously discussed, much of the information circulating was articles published mainstream media outlets, although rumours were also circulating heavily on the American militia fora

(Ward, 1998). In another case reviewed, the cold fusion community, the information circulating reflected only one perspective with few opportunities for outside intervention (Mukerji and Simon, 1998). In the neo-nazi Internet fora, there were postings from outsiders who questioned the racist views expressed but much of the neo-nazi activity was carried out in private Internet communications behind-the-scenes (Zickmund, 1997; O'Donnell, 1999). The studies on the APC networks and Zamir.net raised the central concern of the lack of gatekeepers and credibility of sources, with the information posted without any checks for reliability. In general, assuring reliable and adequate information was a key challenge for many alternative media forms or processes on the Internet, with untrained, unprofessional participants largely producing the content in an unstructured process.

Regarding the free exchange of ideas and private participation on alternative media forms or processes on the Internet, the review of the studies found, surprisingly, that the issue of constraints to free expression was only touched on briefly by researchers. Where free exchange of ideas and private participation was raised, it was exclusively in the context of "network rules of order," in particular the PEN research (Dutton, 1996). The issue of censorship or surveillance or fear of censorship or surveillance was also briefly mentioned in the published research¹⁸. One study raised the issue of censorship or fear of censorship: the Lesbian Cafe (LC), with the LC patrons frequently complaining of having their newsgroup postings "zapped" by the network's censors for being sexually explicit (Correll, 1995).

In summary, the analytical framework for empirical research needs to consider the public sphere element of alternative media on the Internet. In particular, the framework needs to develop the understanding that different media forms and contexts will have different relationships with the public sphere and that both the single and multiple public sphere approaches are complex and have contradictory elements.

¹⁸ The issue of censorship featured only marginally in one published study reviewed but the research reviewed did not include cases involving the countries where governments have been known to regularly censor or block Internet materials such as, for example, China (Taubman, 1998) and Kuwait (Wheeler, 1998). Regarding surveillance, it would seem that Western governments are systematically surveilling the Internet communications of their citizens. The BBC recently reported on a global surveillance operation of electronic communications by the US National Security Agency, based at a US military base at Harrogate in Britain. The surveillance network works by honing in on keywords or patterns of messages, looking for evidence of international crime and "terrorism" (Bomford, 1999).

*Do the alternative media on the Internet link with the mainstream media and the wider public sphere?

*Do they function as public sphere(s) in having reliable sources of information?

*Can the participants engage in the free exchange of ideas as private individuals?

Linking local and global

The final element to be considered by the analytical framework is the link between global and local. A number of theorists have looked at the globalisation of the Internet in the context of linking global and local actors. Some believe it is possible that the Internet can be used to create and support common identities and cultural networks among social movements on a global scale. Frederick (1993) believes that the APC Internet networks are helping to build continental and global resistance movements. Similarly, Sreberny (1998) in her analysis of "globalisation from below," believes the women's movement is using the Internet to build global networks of resistance. On the other hand, writers such as Mike Featherstone (1993) argue that increased cultural flows on global communications networks will not necessarily lead to greater tolerance but rather could encourage the strengthening of local identities. Manuel Castells (1997) believes that the process of globalisation encourages the formation of "cultural communes" which are defensive reactions to the forces of globalisation, and that alternative communications are essential to keeping these communes intact.

Among the cases studied in the literature review of alternative media on the Internet, one successful example of linking local actors globally was the Breast Cancer Mailing List (BCL), in the sense of being a place where actors could share meaningful exchanges which enriched their social capital (Sharf, 1997). The BCL linked participants around the world in a network of support and information. Aside from the US and Canada, participants came from Australia, 13 European countries, South Africa, and several countries in South America and Asia. Another successful example of linking local actors globally was the cold fusion mailing list (Mukerji and Simon, 1998) which linked cold fusion scientists committed to research and experimentation on cold fusion who needed to share ideas and information in order to realise their common interest. A third example was the neo-nazi activities on the Internet, where racist individuals around the world used Web pages, newsgroups, mailing lists and email to strengthen a growing community (Zickmund, 1997). In these cases, participants had a need for support and connection from other individuals who shared their common interest, which was marginal to the mainstream.

The APC networks were often cited as a prominent example of Internet use to link global and local concerns, with more than 30,000 activists and activist groups on the network globally. However while the APC networks were no doubt linking local actors globally, there were limits to moving that connection forward to building a global movement. The study of that particular situation was pessimistic about its potential to do that. Stubbs (1998) pointed to the use of English as the dominant language on APC as a significant barrier to linking global and local actors. The groups on the Zamir APC network had not been actively communicating since the 1980s, and the presence of the technology was not enough to make them forge meaningful relationships. Although there were instances of links forged between local and global activists, for the most part Stubbs believed the network was an example of wasted potential for linking global and local. A central issue was the local codes that had developed in the counter-culture of Zagreb in which many of the Zamir.net activists circulated. Stubbs believed that Zamir.net was most effective on the local level, where it was part of a "localised repertoire of counter hegemonic meanings." However when the local content met the wider discourse of the peace movements in Western Europe and North America, the critical edge was lost.

The Chiapas activities on the Internet were successful in linking the local concerns in Chiapas with a wider network of solidarity and support globally, and as discussed, the global movement made possible by information circulating on the Internet was successful in bearing pressure on the Mexican government to negotiate rather than wage war with the EZLN. However, concerns were raised by one author because of the lack of local voices from Chiapas on the Internet fora - the repressed people in Chiapas were not themselves participating in alternative media on the Internet about Chiapas (Everett, 1998). Everett believed that the Chiapas activities on the Internet were highly romanticised and had very little direct connection to the actual victims of repression and inequality.

In summary, the analytical framework for empirical research needs to consider the extent to which alternative media on the Internet can link local and global, develop an understanding of the complexities of that link, and highlight the contexts in which links between global and local issues and actors occur. The key questions are:

- *Do the alternative media on the Internet help link local actors globally?
- *Do they promote or support a wider global movement?
- *Do they support identity-formation or social and cultural networks amongst groups globally?

This chapter ends with a summary (Chart 1) of the analytical framework and research questions. The next chapter will discuss how the framework will be used for empirical research on Womenslink, the alternative media form on the Internet used by women's organisations in Northern Ireland and the Republic of Ireland.

6.3: Summary (chart) of analytical framework

Chart 1: Summary of analytical framework and research questions

A: Media participants, process and content
<i>1. Participants</i>
*Who are they? (socio-economic/gender/location/language/how many?) *Why not? (restraints and barriers to access)
<i>2. Production process</i>
*Form or process and direction of info flow *Democratic production?
<i>3. Content</i>
*Lived experiences of media audience reflected? *Challenges dominant codes, and creating and testing new ideas? *Correction by audience possible?
B: Links with wider context
<i>4. Political participation</i>
*Links with mainstream politics? *Links with movement and organising?
<i>5. Social capital</i>
*Support networks created, extended or strengthened? *Common identities and communities created or maintained? *Trust-building capabilities? *Organisational capacity-building?
<i>6. Public sphere(s)</i>
*Links with mainstream media? *Reliable information sources? *Individual participation and free exchange of ideas?
<i>7. Local and global</i>
*Links local and global actors? *A global movement promoted or supported? *Global social/cultural networks promoted or supported?

Part II: Empirical research

Introduction to Part II

Part I of this thesis was a review of literature published about the Internet, alternative media on the Internet, and theories of alternative media, ending with an analytical framework for the empirical research.

Part II uses the analytical framework to structure the empirical research, which investigates Internet use in Irish women's organisations, focusing on Womenslink, an Internet mailing list for Irish women's organisations. There are five chapters, beginning with the methodology chapter. Next, the findings of the empirical research are discussed in three chapters - one covers the first phase of the research, conducted as part of the DCU project, The Voluntary Sector in the Information Age, and two cover the second phase of the research, focusing on Womenslink. The final chapter discusses and makes conclusions on the research overall.

Chapter 7: Methodologies for empirical research

This chapter will begin with an overview of the methods used for the empirical research, followed by discussion of the methods in the context of the analytical framework. This will be followed by a detailed description of the specific methods and studies. For reasons of clarity, I use the first person voice in this chapter.

The empirical research had two distinct phases. The first was the DCU project, The Voluntary Sector in the Information Age (VSIA), which investigated computer and Internet use by Irish community and voluntary organisations, including women's organisations. The VSIA research began in the fall of 1995 and ended in the summer of 1997.

The second phase was research on Womenslink, an Internet discussion list for women's organisations in Northern Ireland and the border counties of the Republic of Ireland. Womenslink research began in July 1997 and ended in December 1999.

7.1: Overview of empirical methods

I conducted six studies for this thesis, in two phases:

a) VSIA research

1. A postal survey of Irish community and voluntary organisations, including 50 women's organisations, conducted in the Spring of 1996 (quantitative).
2. Interviews by telephone with staff or volunteers of 42 women's organisations conducted in the Spring of 1997 (qualitative and quantitative).
3. A focus group of women's organisations conducted in July 1997 (qualitative).

Studies 1, 2 and 3 above were conducted as part of the DCU project for which I was the principal researcher, The Voluntary Sector in the Information Age (VSIA). The VSIA project investigated computer and Internet use in the Irish community and voluntary sector from late 1995 to mid-1997 (O'Donnell, Trench and Ennals, 1998). VSIA looked at six categories of community and voluntary organisations, and the findings in this thesis are based on my separate analysis of the data collected on women's organisations.

b) Womenslink research

4. In-depth interviews conducted with 14 staff members of the seven Womenslink member organisations in Spring 1998. The interviews allowed case studies to be drawn (qualitative).
5. Participatory research including content analysis of Womenslink, an Internet mailing list, over a 2-1/2 year period from July 1997 to December 1999 (qualitative and quantitative).
6. A feedback session with Womenslink women's organisations in December 1999 (qualitative).

Studies 4, 5 and 6 above were conducted solely for this thesis. Womenslink is an Internet discussion list for women's organisations in Northern Ireland and the border counties of the Republic of Ireland which was created in 1997, with the research period ending in December 1999.

The postal and telephone surveys (1 and 2 above) looked at organisations in the Republic of Ireland; the remaining studies (3 to 6 above) involved women's organisations from both the Republic and Northern Ireland. The empirical research as a whole therefore has an all-Ireland focus.

Much of the empirical research was exploratory. The subject of the research - alternative media on the Internet - is still new and the analytical framework was developed as part of the thesis, so the empirical work was often delving into the unknown, with little advance understanding of what would be found and what methods would be needed to find something significant. In addition, the use of the Internet for alternative media production was changing during the course of the research, with some situations at the beginning of the research period having changed considerably by the end, such as the expertise of certain women's organisations with Internet use.

Women's organisations, and the women's movement, were chosen as the empirical research subject for three specific reasons. First, the VSIA postal survey of Irish community and voluntary organisations found that women's organisations had the lowest Internet use of all the organisations studied, stimulating my interest into why this was the case. Second, as part of the outreach activities of the VSIA research project, I made contact with the WRDA (Women's Resource and Development Agency), a Belfast women's organisation offering IT support as one of its services to its member organisations in Northern Ireland; the WRDA was interested to participate in further research activities as a way of stimulating awareness and invited me to become part of their IT activities. This led to the creation of the Womenslink mailing list. A third reason for the choice of women's organisations was my experience with the women's movement in Canada and interest in learning about women's movement in Ireland.

The empirical research was conducted following best-practice guidelines for social research outlined in a number of publications consulted, including Marsh (1982), Patton (1987), de Vaus (1986), Cassell and Symon (1994), and Lunt and Livingstone (1996). No significant methodological difficulties were encountered. Before discussing the analytical framework and research methodologies in detail, critiques and issues regarding the various methods will be briefly highlighted.

Catherine Marsh (1982) has outlined the main critiques of quantitative methods, primarily that quantitative surveys are positivist¹⁹. Quantitative methods have been dismissed by those who see language and meaning as the central reality of social life and by those who believe that social life cannot be explained but rather merely understood. Other critics of quantitative methods have focused on measurement problems in surveys and on the difficulties interpreting the variables used. For example, critics have charged that survey

¹⁹ Marsh also notes that no researchers claim to be "positivist" and the term is used almost exclusively by critics of this type of research.

variables cannot capture the shifting complexities of meaning that underlie social processes. Marsh acknowledges that structured questionnaires are used too readily with insufficient thought, that many are inadequately designed and piloted, and that some are inappropriate for collecting the information required. However she argues that quantitative surveys, when used appropriately, are very useful social science tools.

Moving on to qualitative methods, many authors have argued that they are central to social research. For example, Michael Quinn Patton (1990) writes that quantitative research methods based on standardised questions - such as the postal survey - "only tap the surface" of meaning for the respondents, whereas a smaller sample of respondents and open-ended interviews "add depth, detail, and meaning at a very personal level of experience" (1990:18). Qualitative methods were used to uncover the meaning of Internet and computer use for women's organisations and their staff members, and particularly, to get at the "why?" information - why these organisations were using, or not using, computer and Internet technologies. Techniques such as recorded interviews yielded, in some cases, rich layers of meaning to Internet use or non-use. Symon and Cassell (1998) note that many different approaches and philosophical stances are associated with qualitative methods. Although specific guidelines are available for conducting and analysing qualitative research, in the end a myriad of decisions about the process and interpretation of the results must be made. One potential problem area with qualitative methods is a tendency "to use data extracts which support the researcher's argument, without any proof that contrary evidence has been reviewed" (Symon and Cassell, 1998:6). However some critics have charged that it is impossible "to experience the experience of another 'neutrally,'" (Symon and Cassell, 1998:4). Critics of qualitative methods have also focused on the power imbalance between the researcher and the research subject.

One way of addressing the power imbalance between researcher and subject is to use focus groups in addition to interviews. Focus groups allow more opportunity for subjects to shape the research process. For this research, the focus group involved staff and volunteers of women's organisations discussing computers and the Internet, with the researcher facilitating the discussion, participating and observing. The approach used was a technique for complementing the findings of qualitative or quantitative methods as part of a larger research project. No claims are made that the data was representative but the findings did complement the other research methods as a source of ideas and inspiration. Lunt and Livingstone (1996) have pointed out that focus groups were originally conceived to complement other qualitative and quantitative methods and only later became widely used as stand-alone methods in consumer and audience research. A focus

group is seen a simulation of social relations rather than a collection of individuals. For this reason, focus groups are now often comprised of individuals who are familiar with each other and conducted in setting familiar to them, as was the case in this research. Focus groups often begin with a presentation of material that focuses the attention of participants on the topic, and the researcher guides the discussion, stimulating "everyday" discussions as much as possible and making decisions along the way about how best to guide the group dynamics and the content of the discussion. The primary advantage of the focus group approach, compared to interviews, is that the role of the researcher is reduced and that of the participants increased, as they discuss issues and build ideas with each other. One of the disadvantages - which applied to the focus group and feedback session conducted for this research - is that it is difficult in advance to predict the responses of the group and therefore difficult to say what the focus of the discussion will be.

Some social researchers believe that "the most truthful, reliable, complete and simple way" of getting information about peoples' thoughts, feelings and experiences is to share their experience (Waddington, 1994:107). Participatory research was used in this research primarily to help the formation of and provide support for the Womenslink mailing list, and to facilitate other research activities, such as interviews and focus groups. Some authors (Waddington, 1994; Nason and Golding, 1994) have noted some of the benefits of this research approach: it promotes the development of confidence and trust between the researcher and the respondents, it is less intrusive than other methods, it promotes more sensitivity to the variations and nuances of meaning of data collected through other methods, and it is suitable for longitudinal study because it can measure changes over time. Nason and Golding (1994) note that observation is a pervasive, natural and familiar social process and that observation might be conceived as part of the process of other research methods rather than a separate category. The participatory research was also ethnographic, in the sense that it facilitated the "act of sense making by the researcher as they focus upon the manner in which people interact and collaborate through the observable phenomena of daily life" (Nason and Golding, 1994:241).

Content analysis is a quantitative method with a long history in the social sciences, and is most associated with communication studies. The purpose of content analysis is to: "quantify salient and manifest features of a large number of texts" with the statistics "used to make broader inferences about the processes and politics of representation" (Deacon et al., 1999:116). Deacon et al. point out that the method is directive in that it gives answers to the questions posed, and it does not analyse complex meanings within texts but rather looks at aggregated meaning. As a quantitative method, content analysis could be criticised in the same way as the postal survey discussed earlier in this chapter, in

particular that it is positivist. Although quantitative methods are often considered "objective," it could be argued that the method is in fact highly subjective, placing texts within pre-determined categories that may not adequately capture their meaning. The content analysis used for this research included a qualitative discourse analysis of the Womenslink messages which complemented the quantitative data.

Conducting content and discourse analyses of Internet media raises some new ethical questions. Barbara Sharf (1999), who analysed the Breast Cancer Mailing List (BCL), believes the key ethical issues are privacy, confidentiality, informed consent, and appropriation of others' personal stories. On the BCL, individuals often left and new members joined; Sharf notes that even though she identified herself several times as a researcher studying the list, it was possible that some or many of the list participants were not aware of her activities. She believes that researchers should obtain permission from those producing Internet content before using their stories for research. She also believes that feedback from participants is an important part of the research process. The issues Sharf raises were considered during the current research. Feedback from Womenslink members was a feature of the process, both formally and informally. The staff of Womenslink member organisations were made aware of the research, and were receptive and supportive of it.

7.2: Research framework and methodological approach

The first element of the research framework is the **participants** - Irish women's organisations - with the questions being: who and how many are participating in alternative media on the Internet, in terms of their socio-economic and gender profile, their location, language and other factors; and the restraints and barriers that discourage participation in alternative media on the Internet. The VSIA research was the primary means of addressing these questions for Irish women's organisations as a whole. This included the postal survey (1996), which allowed a large scale survey to be made of women's organisations as well as other community and voluntary organisations in Ireland. The postal survey findings included statistics on the number of Irish women's organisations using the Internet, a profile of these organisations, and some of the restraints and barriers that discouraged Internet use. The telephone survey (1997) gathered additional quantitative and qualitative data and was particularly fruitful for deepening understanding of the restraints to Internet use within women's organisations. The final aspect of the VSIA research was the focus group of women's organisations (1997) which added more qualitative understanding organisational restraints to Internet use. For the Womenslink research, all the methods addressed the questions concerning

participants. This included the content analysis (1997-1999), which made quantitative findings on which organisations, and which staff members within organisations, were producing Womenslink content. The in-depth interviews (1998) and feedback session (1999) allowed Womenslink participants to discuss the restraints and barriers to producing and using alternative Internet media.

The second element of the research framework is the **production process** of the various Internet media - email, mailing lists, Web pages - involving Irish women's organisations, with the questions looking at the form or process and the extent to which the production was democratic. In the VSIA research phase, the telephone survey made quantitative findings specifically on email use and levels of other forms of Internet media produced by women's organisations. In the Womenslink research, the content analysis made significant quantitative findings on the democratic aspects of alternative media production, specifically which organisations and individuals were producing the most and the least content on Womenslink. The in-depth interviews and feedback session both contributed to the qualitative understanding of the production process.

The third element of the analytical framework is the alternative media **content**, with the questions concerning the extent to which it reflects the lived experiences of the media audience - in this case, staff and volunteers of women's organisations, whether it challenges dominant codes and is creative, and if correction by the media audience is possible. The Womenslink content analysis was the primary means of addressing the content questions, and this method made significant quantitative and qualitative findings regarding all the content questions.

The fourth element of the analytical framework is the links with **political participation**. The research questions were the links between the alternative media on the Internet and mainstream politics, and the links with the women's movement and organising. In the VSIA research phase, both the telephone survey and the focus group contributed to qualitative understanding of the extent to which the Internet was linked to political organising and perceptions of the desirability of this activity. For the Womenslink research, the content analysis was the primary means of gathering data, both quantitative and qualitative about the links between Womenslink and political participation. The in-depth interviews added qualitative information about this element.

The links with **social capital** is the fifth element of the framework. Questions include the extent to which the alternative media forms on the Internet were able to create, extend or strengthen support networks and common identities and communities, the extent to which

trust among participants was developed through participating on these media forms, and the extent to which the Internet was used for organisational capacity-building. In the VSIA phase of the research, the telephone survey and focus group gathered qualitative information on the role the Internet played in linking women's organisations. In the Womenslink research, the content analysis was the primary means of gathering data on social capital, making both quantitative and qualitative findings. The in-depth interviews gathered additional qualitative information about Womenslink and extending support networks, and the feedback session was particularly significant for gathering information on the trust-building aspects of Womenslink.

The link between alternative media on the Internet and the **public sphere** is the sixth element of the analytical framework. The research questions include the links with mainstream media and how the alternative media itself functioned as a public sphere, including: the reliability of the information sources, and whether participants could contribute as individuals and participate in a free exchange of ideas. In the VSIA phase of the research, the telephone survey contributed both quantitative and qualitative data on the extent to which women's organisations used the mainstream media and the role of the Internet in that process. For the Womenslink research, the content analysis contributed quantitative and qualitative analysis on all the research questions. The in-depth interviews contributed qualitative data on the link between women's organisations and the mainstream media. The feedback session contributed qualitative data on the extent to which Womenslink functioned as a public sphere, in particular the free exchange of ideas on the mailing list.

The final element of the analytical framework is **linking global and local**, with the research questions focused on whether the alternative media forms on the Internet link local and global actors in the women's movement and promote or support a global women's movement or social and cultural networks. In the VSIA phase of the research, the telephone survey made some qualitative and quantitative findings about Internet use and geographical sphere of operations and the focus group added qualitative findings on suggested use of the Internet for linking local and global. For the Womenslink research, the content analysis was the main source of information on local and global links, contributing quantitative data about the extent of those links on Womenslink and qualitative data on the nature of those links. The feedback session also contributed qualitative data regarding how Womenslink participants perceived the mailing list in the context of a global women's movement.

The research methods in the context of the analytical frameworks are summarised in Chart 2, below.

7.3: Summary (chart) of analytical framework and research methods

Chart 2: Summary of analytical framework and research methods

Element of analytical framework and research questions	Methods for empirical investigation (quantitative or qualitative data)
<p style="text-align: center;">1. Participants</p> <p>*Who are they? How many? (socio-economic/gender/location/language) *Why not? (restraints and barriers to access)</p>	<p>Postal survey - quant Telephone survey - quant and qual Focus group - qual Content analysis - quant In-depth interviews - qual Feedback session - qual</p>
<p style="text-align: center;">2. Production process</p> <p>*Form or process and direction of info flow *Democratic production?</p>	<p>Postal survey - quant Telephone survey - quant and qual Content analysis - quant In-depth interviews - qual Feedback session - qual</p>
<p style="text-align: center;">3. Content</p> <p>*Lived experiences of audience reflected? *Challenges dominant codes and creates new ideas? *Correction by audience possible?</p>	<p>Content analysis - quant and qual</p>
<p style="text-align: center;">4. Political participation</p> <p>*Links with mainstream politics? *Links with movement and organising?</p>	<p>Telephone survey - qual Focus group - qual Content analysis - quant and qual In-depth interviews - qual</p>
<p style="text-align: center;">5. Social capital</p> <p>*Support networks created or extended? *Common identities or communities created or maintained? *Trust-building capabilities? *Organisational capacity-building?</p>	<p>Telephone survey - qual Focus group - qual Content analysis - quant and qual In-depth interviews - qual Feedback session - qual</p>
<p style="text-align: center;">6. Public sphere(s)</p> <p>*Links with mainstream media and public sphere? *Reliable information sources? *Individual participation and free exchange of ideas?</p>	<p>Telephone survey - quant and qual Content analysis - quant and qual In-depth interviews - qual Feedback session - qual</p>
<p style="text-align: center;">7. Local and global</p> <p>*Links local and global actors? *A global movement promoted or supported? *Global social/cultural networks promoted or supported?</p>	<p>Telephone survey - quant and qual Focus group - qual Content analysis - quant and qual Feedback session - qual</p>

7.4: VSIA research: postal survey, telephone survey and focus group

Postal survey (1996)

The postal survey gathered quantitative information about organisations using the Internet and barriers and restraints to Internet use, the Internet media forms or processes they were using, and the geographical sphere of their operations with relation to Internet use.

I conducted the postal survey of Irish community and voluntary organisations while working as principal researcher on the DCU project, *The Voluntary Sector in the Information Age*. The survey was designed from October 1995 and conducted from February 1996, surveying 300 Irish community and voluntary organisations. I analysed the data for women's organisations separately for this thesis in early 1998.

When conducting the postal survey for the current research, I found clear limits to this method. It was time-consuming - and therefore costly if labour costs were considered - and the data collected, although valuable, were limited. However, the quantitative method was appropriate for generating statistics on Internet access and the profile of Internet users, and was therefore invaluable to this research. The postal survey reached many more subjects than could have been reached through more qualitative methods such as in-depth interviews. The large numbers surveyed allowed findings to be made of Internet access rates according to key variables, such as the income of an organisation and its geographical interest area. The most time-consuming aspect of the postal survey was drawing up a "master list" or sampling frame of organisations from which the random sample would be chosen. Unlike in Northern Ireland and in Britain, the Republic of Ireland has no umbrella organisation or general membership organisation for community and voluntary organisations, and therefore no central listing. In fact, different authors disagree on which organisations make up the "community and voluntary sector" and there is no consensus on how these organisations should be defined and categorised. (See Salamon and Anheier 1992a, 1992b, for one such categorisation.)

Certainly, there is no consensus on what constitutes a "women's organisation." For this research, I defined a "women's organisation" as a non-profit group or organisation primarily interested in providing services and activities for women. Through informal inquiries of people working in the women's sector, I established that approximately 2,500 women's groups and organisations existed in the Republic of Ireland, if one included the 1,000 or so guilds of the ICA (Irish Countrywomen's Association); only a small fraction of these women's organisations were members of the national umbrella body, the National Women's Council of Ireland. In Northern

Ireland, the number of women's groups and organisations has been variously reported at between 250 and 450²⁰.

For the postal survey sampling frame, names of women's organisations were drawn from more than 20 sources, including: the members of the National Women's Council of Ireland; the national women's organisations listed in the directory published by the National Social Services Board; the women's organisations listed in the 1995 IPA (Institute of Public Administration) Yearbook and Diary; and women's organisations listed as funding recipients in reports and literature published by the Department of Social Welfare, Combat Poverty Agency, the Health Boards, and the Allen Lane Foundation and other private institutions. Listings were also drawn from community sources. From all those sources, the names of 330 women's organisations were gathered for the sampling frame, including 65 of the ICA guilds²¹. From that list, a random sample of 50 organisations was made. These included a wide variety of national, regional, local and community-based women's groups and organisations from all over the Republic of Ireland.²²

A two-page, easy to fill-out, multiple choice, "tick off the box" questionnaire was developed with 16 questions related to the organisation's use of information and communication technology, factors encouraging and discouraging use, as well as basic information about the organisation, such as interest area, income, number of staff, volunteers and so on²³ (Chart 10, Appendix).

I piloted the questionnaire with a pilot group of staff members from 14 community and voluntary organisations, and then further revised it after two pilot studies of the mailout package with 20 organisations each. A key factor in the success of the postal survey was that the questions were clear and easy to understand and respond to, it did not ask for sensitive data, and it could be completed quickly - in only a couple of minutes. This was important in attracting responses from the busy staff members of the organisations studied.

²⁰ In a recent report, Robin Wilson of Democratic Dialogue (1999) cited the number of such groups at "more than 450."

²¹ At the time of the survey, the ICA did not make their complete members list available to the public or to researchers.

²² The sampling frame for the entire VSIA survey included more than 1,500 names of organisation, from which a sample of 300 was drawn.

²³ The questionnaire, part of the DCU project, The Voluntary Sector in the Information Age, was developed with Brian Trench, DCU School of Communications, and Jane Horgan, DCU School of Computer Applications.

The questionnaire was posted to the entire VSIA survey of 300 organisations (including the 50 women's organisations) in February 1996 with a cover letter describing the research project and also a stamped return envelope. A month after the initial mailout, a second posting of the questionnaire with a reminder letter and stamped return envelope was sent to groups that had not responded, and then a reminder telephone call was made two weeks after that. Where the telephone number was unlisted (common for small women's groups), I made at least one phone call to a large community organisation in the area to try to track down the number.

Among the 50 women's organisations, there were 34 completed questionnaires, 15 non-responses and one incomplete. It took three months for all these responses to trickle in. The final response rate was 68 percent, which was high for a survey of this type but lower than that for the other groups in the VSIA survey overall. Of the non-responses, many had been posted to women's groups with no listed telephone number, and it proved impossible to reach them.

In addition to the 34 women's organisations that responded, another eight from the larger VISA sample of organisations identified as having a primary interest in women's issues. The completed survey responses of these 42 women's organisations were coded and then analysed with SPSS (Statistical Package for the Social Sciences) software to determine levels of computer and Internet use by different variables, using crosstabs (tables of cross-tabulations) of variables such as income, interest area, staffing levels, and so on to identify the variables associated with high and low levels of technology use. An organisational profile of the 42 women's organisations is illustrated in Chart 6 in Chapter 8.

In summary, the postal survey method worked very well for determining access rates by women's organisations and other community and voluntary organisations, and for identifying the variables associated with restraints and barriers to Internet access. However qualitative methods were necessary to complement and expand on the quantitative data and provide a richer picture of how women's organisations were using the Internet and the restraints and barriers they faced. The postal survey was very time-consuming to conduct and the findings were rather limited outside the findings on access rates according to different variables.

Telephone survey (1997)

The telephone survey gathered quantitative and qualitative information about the women's organisations participating in the production of alternative media on the Internet, and some qualitative data on the production process, links with political participation, social capital and the public sphere, and linking local and global.

The objective of the telephone survey was to investigate computer and IT use in women's organisations, as a follow-up to the postal survey the previous year. In particular, the postal survey had indicated that women's organisations had a low rate of Internet use, and a number of questions were aimed at uncovering the reasons for this. The telephone survey questionnaire (Appendix, Chart 11) contained closed and open-ended questions about technology use and networking and communication processes.

I pre-tested the questionnaire in a small pilot study with three organisations to fine-tune the questions. At an early stage in the survey, a preliminary question was added: "What does your organisation do?" when it became clear that differences existed among the types work performed by the women's organisations interviewed, although there were also broad similarities.

I designed and conducted the telephone survey in the Spring of 1997, and analysed the data for women's organisations separately for this thesis in mid-1998. The research subjects were 42 organisations responding to the 1996 postal survey a year earlier who identified as having an interest in women's issues. I posted a letter to these organisations asking them to return a reply card if they were willing to participate in the follow-up telephone survey, and I made a follow-up phone call to those who did not reply to the letter. All the interviews were conducted over the phone. Most took place during regular working hours but some were conducted in the evenings or on weekends, according to the time availability of the respondents. Most interviews lasted between five and 15 minutes, with a few taking less than five minutes and a few lasting twenty minutes or longer. The interviews were recorded and transcribed and the transcripts reviewed for analysis and interpretation.

The response rate was 74 percent, with 31 interviews completed. It is instructive to note that the organisations which did not respond were mostly women's groups with a low annual income.

Chart 6 in Chapter 8 illustrates the profile of the responding organisations, comparing women's organisations with the environmental organisations also surveyed for the VSIA project.

Focus group (1997)

The final phase of the VSIA research was a focus group with women's organisations. It gathered qualitative data about restraints and barriers to alternative media production on the Internet, and ideas from participants about the types of Internet content that would be relevant to women's organisations, including the links with political participation, social capital and the wider world.

The focus group objective was to gather data about why and how women's organisations were using computers and the Internet, and for those not using the Internet, why they wanted to use it. The focus group was held as part of an afternoon seminar on the Internet for women's organisations that I organised with the Belfast-based Women's Resource and Development Agency (WRDA). Initially, the idea was to bring together women's organisations in both the North and South of Ireland but this never materialised with the result that few women's groups from the South were involved in the focus group, and subsequently, in the Womenslink mailing list.

There were 15 participants from 10 women's organisations at the focus group, held at the Omagh Women's Centre in July 1997. This included 11 participants from Northern Ireland and four women from the Republic of Ireland. The participating organisations were self-selecting, having responded to a brochure sent by the WRDA to organisations in the North and cross-border organisations working on women's issues, inviting them to an afternoon seminar to share ideas about using the Internet. With the exception of the focus group co-facilitator from the WRDA and one participant with a personal email address, the participants had very limited experience with the Internet. Most of the women's organisations had just set up their Internet account or were about to do so, and so the discussion centred primarily on computer use and potential use of the Internet. The focus group ended with an agreement by participants to establish a pilot group of women's organisations communicating via email - which became the Womenslink mailing list.

The process of the focus group is described in Chart 12 (Appendix). Analysis of the focus group consisted of reviewing the transcript and notes made during the seminar to look for patterns and common themes.

7.5: Womenslink research: participatory research, content analysis, in-depth interviews and feedback session

Participatory research (1997-1999)

The second phase of the empirical research consisted of participation over a 2-1/2 year period with Womenslink, an Internet mailing list created as part of the research.

The participatory research included working with the WRDA (Women's Resource and Development Agency) in Belfast in its work with women's organisations and the Internet. I set up and co-facilitated the Womenslink mailing list with the WRDA. The primary analysis of Womenslink was through content analysis, described shortly. The participatory research did not

lead to specific findings itself; rather it informed the analysis of data gathered about Womenslink and its participants through other research methods.

My association with the WRDA grew from my outreach work on the VSIA project which led to joint organisation of the focus group on women's organisations and the Internet in July 1997. That in turn led to the creation of the Womenslink mailing list on a server in DCU. In December 1997 the WRDA invited me to join its management committee, with a special brief to assist with the organisation's IT activities. At the time, the WRDA was in the first year of a three-year project funded by the Lotteries in Northern Ireland which provided support and development of ICT use by women's organisations in Northern Ireland. I participated regularly in WRDA management committee meetings for two years and stepped down from the committee in February 2000. In-between management committee meetings, I worked as required with the WRDA on several of the Agency's IT initiatives and activities. One was support work for a 1998 event for International Women's Day which included Internet training for women at Internet cafes in Northern Ireland and videoconferencing between two training sites in Enniskillen and Belfast. A second was development of a brief for consulting work on an information infrastructure for women's organisations in Northern Ireland focused on the Internet, and participation with the Belfast-based consultant engaged to do the work. One of the outcomes of that work was a successful proposal for funding for the WRDA for continued Internet training and development work with women's organisations in Northern Ireland and the border counties of the Republic.

My role with Womenslink was to perform technical management of the mailing list and to contribute messages to the list as a participant. As described in an early chapter of this thesis, a mailing list involves a software programme which automatically distributes email messages among subscribers. Womenslink was a closed mailing list; when required, I added new members (subscribers) to the list by sending a simple technical command to the DCU server supporting Womenslink. By late November 1999, after 124 weeks of operation, 500 messages had been produced on the Womenslink mailing list, including 95 messages which I produced myself. Most of my own messages were about Womenslink itself, generated in the process of adding new members to the list and checking in to make sure that messages had been received, although these administrative messages often included other content as well, and also messages on various other topics relevant to Womenslink. My own Womenslink participation was high at the beginning of the process but gradually diminished over the 124 weeks of the study period. In November 1999, I conducted a preliminary analysis of all the 500 messages produced to date and presented my findings as part of the feedback session with staff of Womenslink member organisations, as described shortly.

The participatory research also involved several structured opportunities for discussion about Womenslink with the participants. In 1997, I was asked by the WRDA to evaluate the Womenslink mailing list with a view to identifying challenges and areas for further development. The interviews for that evaluation were the 14 in-depth interviews for the current research. I produced a long and a short version of the evaluation report, with the short version circulated on Womenslink. Subsequently some discussion of Womenslink occurred on the list itself, and the WRDA used the evaluation to develop its IT workplan and inform its work with women's organisations. In 1999, as the research period was drawing to a close, the WRDA was keen to hold a Womenslink party and evaluation session, described shortly as the Womenslink feedback session.

In February 2000, with my help, the WRDA moved the Womenslink mailing list from the DCU server to a commercial server (Egroups.com). Since that time, the list has been managed completely by the WRDA and the Womenslink participants themselves. At the invitation of the WRDA, I continue to be a Womenslink member, but I have minimal participation on the list.

Content analysis (of content produced 1997-1999)

I conducted a content analysis of the entire 500 Womenslink messages produced in the 124 weeks from August 1997 to November 1999; there was no sampling involved. The analysis not only looked at the content of the messages but also compiled information about the production process and the message producers. Findings were made regarding: participants - who produced the messages and the kinds of messages they produced; the extent to which the production process was democratic and participative; the key features of the content; the links between the content and wider political participation, social capital and mainstream media/the public sphere(s); and the extent to which the content linked global and local.

To begin the analysis, I divided the 500 messages into five "Editions" of 100 messages, a structure that facilitated analysis and also captured differences over time. A feature of the list software on the DCU server running Womenslink was that each message was numbered sequentially in the message heading. Each message also indicated the date and the email address of the member organisation, and almost always, the name of the woman sending the message.

After separating the 500 messages into the five Editions, I reviewed all the messages and drew up a number of potential categories or topic areas into which they could be classified. Eventually, these were reduced to four categories to reflect the most common content of the messages: 1) about Womenslink, 2) about IT or Web sites, 3) chat and internal comments, and 4) other. Each of the 500 messages was then coded into one of these four categories.

The next step was to draw up a table for each Edition, indicating all the Womenslink member organisations, the messages they produced in each of the four categories, and the name of the staff member producing each message. Once this was finished, I was able to develop statistics for each edition, including: the number of messages produced by each organisation and each staff member, and participation rates among the members.

After compiling these statistics for each Edition, I again reviewed the messages and coded them according to new categories reflecting the analytical framework: links with political participation, links with social capital, links with the mainstream media/public sphere(s), and linking global and local. The first and last of these categories were straightforward, in that the messages could be fairly easily identified as having political content or content with a global theme. The other two categories were more of a challenge. In the end, "links with the mainstream media/public sphere(s)" was defined as content that explicitly referred to mainstream media or indicating clearly that a mainstream media source had informed the content. "Links with social capital" was the most difficult to define. I decided that this would refer to messages that referred back to previous messages, with or without a substantive response, such as the answer to a query; substantive responses were then also noted.

The content analysis worked reasonably well in generating statistics in the areas described above. I then reviewed the messages in each category and performed a basic discourse analysis, to generate more qualitative understanding from the messages. This qualitative data was complementary to the qualitative research with the Womenslink members themselves, below.

In-depth interviews (1998)

The in-depth interviews gathered qualitative information about the women participating in Womenslink, their organisations, the production process, and the relevance of the Womenslink content to themselves and their organisations. The interviews also made findings about Womenslink's links with political participation, social capital, the public sphere, and a wider global women's movement.

The in-depth interviews were conducted in 1998, about eight months after the Womenslink list was set up. The objective of the interviews was to find out: patterns of Internet access and use within these organisations, the meaning of this activity, Womenslink use, and general related information. An interview guide was drawn up with a mix of open-ended and closed questions (Chart 13, Appendix).

Womenslink had seven member organisations at the time of the interviews. The in-depth interviews were conducted in February and March 1998. In total, I conducted interviews with 14 staff members of the seven organisations - administrative workers, project workers, and coordinators. The interviews were conducted in person except for two which were conducted over the phone because the interviewees were not able to meet face-to-face. The interviews were recorded and transcribed and the transcripts analysed for key factors and common themes. Four of the organisations were then chosen for development into case studies.

Generally speaking, the in-depth interviews were effective in gathering the information required. One limitation was that they did not yield much information on the actual content of the Internet media production, although though they contextualised this activity.

One of the challenges of the interview method was my need to conduct the interviews early in the research in order to understand the context of the Internet use and alternative media production - while the analytical framework for the research was still in development. Some areas later identified as key to the analytical framework, particularly the issue of linking global and local actors, was not the focus of any questions in the interviews, although the geographical scope of the organisation was discussed. Although some of these issues were picked up later with the Womenslink organisations in the feedback session, it would have been useful to have some of this information earlier on in the research.

It was a challenge for me to understand the experiences of the women interviewed regarding Womenslink while my understanding of the conceptual issues was still in development. I addressed this challenge by reviewing the interview transcripts at several points in the research, particularly near the end of the thesis drafting stage, when I spotted some key points raised by the interviewees after having missed them on earlier readings.

Feedback session (1999)

The feedback session was instrumental in gathering qualitative data on the restraints and barriers to production and on the production process. The session was particularly useful for deepening my understanding of the link between Womenslink and political participation, social capital networks, linking global and local, and Womenslink as a public sphere.

The feedback session was held in December 1999, a few weeks after I had completed an initial content analysis of the 500 Womenslink messages. The feedback session occurred as part of a larger gathering - billed as a Womenslink party - hosted by Womenslink member, the Omagh Women's Centre. Twelve women from six Womenslink member organisations participated in the

Womenslink feedback session. In contrast with the focus group that had been held in the same location more than two years previously, the participants had much more experience with the Internet and almost all had been participating in Womenslink for at least two years.

The goal of the session was to give the participants the opportunity feedback into the Womenslink research, to discuss Womenslink issues, and to develop Womenslink groundrules. A week prior to the feedback session, I drew up and emailed a discussion guide to participants (Chart 14, Appendix). Several participants who could not attend the session emailed back their responses, which proved very useful in guiding the discussion at the session.

The feedback session began with my presentation of the initial Womenslink research findings. This was followed by semi-structured group discussion, beginning with feedback on the research findings and moving on to the research questions, which lasted approximately 50 minutes. I recorded the discussion and analysed the transcripts analysed to draw out the key issues and themes.

The next three chapters of this thesis will discuss in detail the research findings, followed by a concluding chapter in which the research methodology will be discussed along with other aspects of the overall research.

Chapter 8: VSIA research

This chapter presents the findings of the first phase of the empirical research, conducted as part of the DCU project, The Voluntary Sector in the Information Age (VSIA). The three VSIA studies were: 1) a postal survey of Irish community and voluntary organisations, including 50 women's organisations, conducted in the Spring of 1996; 2) interviews by telephone with staff or volunteers of 42 women's organisations conducted in the Spring of 1997; and 3) a focus group of women's organisations conducted in July 1997.

There are few research findings in this chapter about actual use of the Internet; when these studies were conducted in 1996 and 1997, almost none of the participating women's organisations were using it, and the few that were, were not using it to any great extent. The next two chapters, discussing findings from the Womenslink research conducted until the end of 1999, will cover use of the Internet by Womenslink member organisations.

8.1: Postal survey (1996)

This section reviews the findings of the 1996 postal survey of women's organisations in Ireland. In the context of the analytical framework, the postal survey made quantitative findings about the participants, in particular their numbers, their organisational profile, and restraints and barriers to Internet use. The postal survey also made limited findings about the production process - which Internet media forms or processes were being used by women's organisations.

Participants - and restraints and barriers to Internet use

The postal survey made significant findings about how many women's organisations were using computers and the Internet. The survey found that overall, 38 percent of women's organisations did not use computers, 58 percent used computers with no Internet connection, and five percent had a computer with an Internet connection. Thus, Internet use was a marginal activity in the women's sector in 1996; the use of computers and the Internet by women's organisations was lower than for the organisations as a whole surveyed in the VSIA research (Chart 3).

Regarding restraints and barriers to Internet use, the postal survey found that the annual income of an organisation was the most significant factor relative to their use of computers and the Internet. Among the low-income women's organisations, 64 percent had no computer, 36 percent did have a computer, and none had an Internet connection (Chart 4). By comparison, 13 percent of higher-income women's organisations had an Internet connection. Compared to other organisations, the annual income of women's organisations was also much lower, with most women's organisations bringing in less than £10,000 (Chart 3).

Many women's organisations were located outside Dublin, without their own premises, and having few paid workers. This finding points to the grassroots and community-based nature of the women's organisations surveyed. The location of a women's organisation in a rural area, rather than a town or city, was associated with low use of computers. Of the women's organisations without computers, 82 percent were located outside Dublin.

In many women's organisations, staff or volunteers reported they did not have the time to use, or learn how to use, the technology. This could also be interpreted partly as a low priority given to computers and the Internet among other forms of information exchange. In the survey, 35 percent of women's organisations reported that lack of time for training discouraged their use of computers and 42 percent reported that it discouraged their use of computer communications.

Although women's organisations had the lowest use of the Internet among the six categories in the VSIA study, there was one finding suggesting that this was not necessarily related to gender: environmental and international development organisations had the highest rates of Internet use and the survey found that most of the staff of these environmental and international development organisations were also women.

Factors reported by women's organisations as discouraging computer and Internet use included: lack of funding, lack of time for training, and lack of information. Similar rates were reported for factors discouraging use of computer communications (Chart 5). Factors encouraging the use of computer communications included the need for better communication links, for better access to information, and the need to be professional.

Chart 3: Organisational features of respondents in postal survey (1996)

Variable	Women's interest (Percent) (n=42)	All interests (Percent) (n=245)
Annual income		
Less than £10,000	58	30
£10,000 - £100,000	32	32
More than £100,000	10	38
Location		
Co. Dublin	33	54
Outside Dublin	67	46
Premises		
Own	50	71
Shared	31	15
Home office	19	14
Volunteers (unpaid workers)		
None	20	27
1-9	28	30
10 or more	52	43
Paid workers		
None	55	37
1-4	29	31
5 or more	16	32
ICT level		
No computer	38	16
Computer, no email	57	70
Computer with email	5	14
ICT equipment		
Telephone	100	100
Photocopier	67	89
Computer	62	84
Telephone answering machine	52	57
Fax machine	45	80
Laser printer	36	56
Modem	14	37
CD-ROM	10	28
Scanner	3	15

Chart 4: Income level and other features of women's organisations in 1996 (n=42)

Organisational Feature	Income p.a. less than £10,000	Income p.a. more than £10,000
Location Co. Dublin Outside Dublin	26% 74%	41% 59%
Premises Own premises Shared Home office	22% 51% 27%	82% 6% 12%
Volunteers None 1-4 5 or more	0 36% 64%	44% 19% 37%
Paid workers None 1-9 10 or more	87% 9% 4%	18% 59% 23%
ICT level No computer Computer, no email Computer with email	64% 36% 0	13% 74% 13%
ICT equipment and software Computer Photocopier Fax machine Telephone answer machine Laser printer Modem CD-ROM Scanner	36% 65% 26% 43% 22% 0 0 0	87% 82% 71% 65% 59% 35% 23% 6%
Word processing Desktop publishing Database Spreadsheet	34% 17% 13% 4%	71% 29% 41% 65%

Chart 5: Reported constraints of and encouragements for of ICTs in 1996

Constraints and Opportunities	Women's organisations (n=42)	Environment and international development organisations (n=46)
Factors discouraging use of computers		
Lack of funding	71%	72%
Lack of time for training	35%	25%
Lack of information	26%	11%
Factors discouraging use of computer communications		
Lack of funding	68%	58%
Lack of time for training	42%	36%
Lack of information	35%	17%
Factors encouraging use of computer communications		
Need for better comm. links	48%	53%
Need for better access to info	47%	53%
Need to be professional	48%	56%
Commitment of staff	16%	14%

Production process

The only finding made regarding the production process was that email was the primary use of the Internet by women's organisations. No women's organisation surveyed reported using bulletin boards (newsgroups) or mailing lists, and only a few had used the Web.

8.2: Focus group (1997)

This section reviews the findings of the focus group held in 1997 with 15 participants from 10 women's organisations in Northern Ireland and the Republic. Within the context of the analytical framework, the focus group made findings about the participants' restraints and barriers to Internet use. Most of the focus group participants had not yet used the Internet but they had many suggestions for using it in the context of political participation, social capital, and linking local and global.

Participants - restraints and barriers to computer and Internet use

Participants believed the most significant restraint was the difficulty of finding a reliable and trustworthy source of information on computers and the Internet. Participants believed their needs were not met by commercial IT support and information services. Several women described

incidents of frustrated dealings with the support lines of commercial computer sales companies, especially the long waits involved.

The focus group also made findings consistent with the postal survey, that cost was a significant restraint to computer and Internet use. At several points, participants spoke of the difficulty finding funding for computer purchases, and they exchanged information about possible sources of funding for computer equipment and training. Another restraint to computer and Internet use identified was training. The cost of training was prohibitive for many organisations. A suggested solution was to organise a group of women's organisations to share the cost of renting a training suite. A particular challenge identified was obtaining training in advanced computer skills, such as setting up computer networks in organisations, because the cost of this specialised training was prohibitive. Several participants believed that the problem was not so much the training but rather not having the time to practice what they had learned. One participant pointed out that the first difficulty was not knowing what her organisation's computer training needs were.

Political participation

The focus group participants proposed that the Internet would be useful for campaigning, lobbying, and influencing public opinion, as in the example below:

Better campaigning and support resources for injustices related to women's issues. If you wanted to gain more support, you could get more support through the network, linking with other women's groups... like if there's some injustice, some crime against a woman in Omagh, we could let other people know about it and together have a louder voice and maybe we could put it on the agenda and be heard.

Social capital

At many points, the focus group discussion reflected a strong ethos of sharing information and resources about information technology among women's organisations. This indicated social capital networks build around IT support for the staff and volunteers of these organisations. A noticeable feature was the extent to which participants believed that women's organisations could and should help each other out with their IT problems. Several ideas were proposed, including a barter system for swapping computer expertise among women's organisations. Another was developing an information package for women's organisations on computers and the Internet. A third idea was a telephone support service run by and for women's organisations.

Focus group participants discussed how their organisations could use the Internet to strengthen social capital networks. The most common suggestion for Internet use was to increase networking, as in, for example, the comment below:

To know what other women's groups were doing and to be able to network with them and share ideas and experiences, and to learn from each others' mistakes.

Participants proposed that networking on the Internet would allow women's groups to do research and organise events more efficiently and cost effectively, saving on time as well as fax, phone and postal costs. Internet networking would "break down isolation for women as individuals and women's groups and organisations." The Internet "would be a good way to get people to talk together who normally wouldn't be talking together" and allow the linking of groups with similar interests. The Internet would be a "cheaper and easier way to send information." It would increase access to a wide range of information, allowing information to be shared quickly and efficiently and encouraging the development of ideas. However some participants also expressed concern about Internet access and the possibility of some women's organisations being excluded from Internet networks.

Linking local and global

Several focus group participants believed that the Internet would be useful for international work, linking up "with women's groups internationally, bringing networking into another dimension," and communicating and exchanging ideas with other women throughout the world.

8.3: Telephone survey (1997)

This section reviews the findings of the survey conducted by telephone in early 1997 as a follow-up with 42 women's organisations responding to the postal survey a year earlier. In the context of the analytical framework, the telephone survey made findings about the participants, the production process, and links with political participation, social capital, the public sphere and linking global and local.

Participants - including restraints and barriers to participation

Looking first at the central question of who is using the Internet, the telephone survey found that 35 percent of women's organisations overall were not using computers, 39 percent were using computers without an Internet connection, and 26 percent had an email address (Chart 6). This represented a significant increase in Internet connectivity since the postal survey the previous year - up from seven percent to 26 percent with this cohort of women's groups. During the same period, the level without computers remained constant at 35 percent.

Regarding barriers and restraints to Internet use, the telephone survey made similar findings to the postal survey but added qualitative data about these barriers and restraints. The income of a women's organisation was the most significant factor relating to its use of computers and the Internet; the income factor will be discussed shortly. Other restraints and barriers identified and discussed were: rural location, organisational restraints, and time restraints.

Computers and the Internet had more of a presence in cities than in towns or villages. Computer training was often non-existent in rural areas. Travelling to computer training in nearby centres was expensive, and providers of mainstream training courses in cities were usually not set up to provide courses off-site.

The telephone survey highlighted significant differences within women's organisations regarding the numbers of staff and volunteers using the Internet - not every staff or volunteer member used computers or the Internet and some used them much more often than others. Some or volunteer members found it difficult to access the computer in the organisation with an Internet connection, for example, the response of the staff member below:

I haven't sat down and sorted it. I can assure you, I wish I could. I work pretty hard here. I would love to have the time to sit down and do it. If you had it on your desk, you'd be more willing to turn around and tune into it, you'd have it right in front of you. I wouldn't have a computer on my desk. I'd have to go out in the main office and use it.

(Women's training project, Co. Galway, Internet connection)

Lack of time to use email and the Web was reported as a restraint or barrier to Internet use by many women's organisations, as in the two examples below:

I think you don't have a chance to practice. That's the real trouble. You can go for one day to somewhere [for training], but you don't have a chance to practice in-between time, which is so vital... Say we'd have a day using email, then the problem is that I'd use it for a day then I wouldn't use it for a week or so, and then when I'd go back to it, I'd have forgotten it.

(Network of women's groups, Co. Donegal, Internet connection)

Surf the Web? When I've time, most of it is just a question of time, really.
(*Development education centre with programmes for women, Galway, Internet connection*)

It would be useful at this point to look in more detail at the cost and income restraints to Internet and computer use, because the telephone survey findings supported with earlier postal survey findings that this was the most significant factor mitigating against more widespread use of the Internet in the women's sector.

Similar to the postal survey, there were significant differences in ICT use between lower and higher-income women's organisations. For the lower-income women's organisations, Internet connectivity rose from zero to seven percent; for the higher-income women's organisations, it jumped from 13 to 46 percent (Chart 7). The connectivity gap between higher and lower-income women's organisations was thus increasing over time.

As an example of how lack of funding discouraged computer use, a woman from a small rural women's group described the difficulties they faced obtaining a computer and training:

We applied to Social Welfare two years ago for a computer and a printer but we didn't get anything. With Social Welfare, you often get 600 pounds for running courses... I had a small manual typewriter, which I gave to one of the women to do the letters, but she said she would need a computer. We tried to get her to a computer course, but she has no transport, and all the computer courses were in Letterkenny, and Letterkenny is an hour away from [name of town], so that never materialised. And then we didn't get the money for the computer either.

(*Rural women's group, Co. Donegal, no computer*)

Chart 6: Organisational features of respondents in telephone survey (1997)

Variable	Women's interest (Percent) (n=31)	Environment & international development (Percent) (n=36)
Annual income in 1996		
Less than £10,000	48	44
£10,000 - £100,000	38	31
More than £100,000	14	25
Location		
Dublin	32	68
Outside Dublin	68	32
Geographical interest		
Less than national	48	08
National	32	36
Greater than national	20	56
IT equipment in 1996		
Photocopier	77	92
Computer	65	92
Telephone answering machine	58	61
Fax machine	52	86
Laser printer	40	50
Modem	19	43
CD-ROM	10	20
Scanner	03	17
ICT level in 1996		
No computer	35	08
Computer, no email	58	75
Computer with email	07	17
ICT level in 1997		
No computer	35	05
Computer, no email	39	41
Computer with email	26	54
Number of Internet users in office in 1997		
All	25	24
More than half	13	34
Half	-	12
Less than half	50	06
One person	12	24
Information publishing in 1997		
Newsletter	37	69
Web page	0	20

Chart 7: Income level and use of ICTs by women's organisations in 1996 and 1997 (n=31)

Year and ICT level	Income p.a. less than £10,000	Income p.a. more than £10,000
1996		
No computer	64%	13%
Computer, no email	36%	74%
Computer with email	0	13%
1997		
No computer	64%	13%
Computer, no email	29%	40%
Computer with email	7%	46%

Most low-income women's organisations using computers but without an Internet connection reported that lack of funding was the reason. Similarly, many higher-income organisations using computers reported that cost was the reason they didn't have an Internet connection. One staff member of a woman's refuge said simply: "We couldn't afford it." A staff member from the highest-income organisation surveyed not using the Internet, a women's health services organisation with a budget more than £1 million, stated that the reason for not hooking up to the Internet was "more or less the cost." Likewise, for a middle-range income organisation, cost was also a factor in not using the Internet, especially when compared with more pressing priorities, as a staff member explained:

I'm aware of it. I think it would be absolutely fantastic if we did have this facility [the Internet] but I doubt it very much. We're a charitable organisation and there's not a lot of money being put into drug rehabilitation in Ireland... So we're actually struggling just to survive. We need things done like new windows put in, because the window frames are rotten, and slate on the roof, and...

(Drug treatment centre for women, Co. Dublin, computer but no Internet connection)

For the women's organisations with an Internet connection, cost - perceived or real - was a factor in their decision not to use it more often, especially the cost of the Web, as indicated below by three respondents:

I would only use it for picking up information or sending out information. But we wouldn't use it to a vast... we're a voluntary organisation and we would be thinking of cost as well.

(Women's training project, Co. Galway, Internet connection)

Because the Web is connected to the phone, we don't use it that often. It ties up the phone and it's getting a bit too expensive.. We don't know if we'll actually hold on to it or not.

(Community centre running women's programmes, Co. Cork, Internet connection)

I'm terrified of using the Web [laughs]. Because of the expense. Because the information is so interesting. I went in when I wasn't really using email last year, I used to surf. And there's just far too much that you want to read.

(International development organisation for women, Dublin, Internet connection)

As suggested in many of the above quotes, the economic factors were much more complex than a simple link between low income and low use of computer technologies. For example, the NOW (EU-funded New Opportunities for Women) women's projects, funded by EU structural funds, were required by the funders to file their quarterly financial reports by email, who pay the costs involved. However, one staff member from a NOW-funded project explained that:

It's a requirement of the NOW programme to have the Internet. Everybody has access to it but very few people use it. It would still be, maybe foreign, to a lot of people.

(Women's training project, Co. Galway, Internet connection)

In another example of the complex link between economic factors and use of the technology, the management of a women's organisation might have responded to the survey question by saying that they "can't afford" to use the Internet, when they could also have said that the Internet had a lower priority than other spending priorities in the organisation, perhaps because the technology was not seen as immediately relevant to their needs.

Production process

The telephone survey made limited but important findings regarding the production process of alternative Internet media by women's organisations. The survey found that very few women's organisations with an Internet connection were using it regularly. Email was the media form used most often. None of the women's organisations in the telephone survey had a Web page, compared to 20 percent of the environmental organisations surveyed (Chart 6). Very few were using mailing lists and none were using Internet newsgroups.

Political participation

None of the women's organisations in the telephone survey reported using the Internet for linking with mainstream politics; indeed none mentioned mainstream politics as a focus for their general activities. Regarding women's movement politics and organising, those surveyed were networking regularly with other women's organisations and with women generally.

Social capital

The telephone survey made findings regarding social capital, in particular the extent to which the Internet fit with the existing community and support networks within which women's organisations operated.

Women's organisations without computers or Internet connections were often engaged in personal development work and grassroots community development involving extensive face-to-face networking and engagement with the wider public - work for which a computer was not strictly necessary. The lengthy quote below, by a volunteer with a small rural women's group without a computer, illustrates the social capital aspects of her group's work. Her description was fairly typical of women's groups without computers in rural areas:

We have meetings once a week... in the hospital... We have no community centre, no women's centre, any luxury like that. [We do] women and health talks, quite a few series over the years about menopause and HRT, and PMT and self-development, cancer, information-giving. That's very well attended by other women than the women in the women's group.

Then we have done a year of fitness, we got the swimming pool from 9 to 11 just for women. That was very well attended... We also get a lot of women in from other areas who are very isolated because there are no resources here, there's just a swimming pool. So for them, it's a good entrance to get to know other people.

We also do regular walks. This Spring we did a self-defense course for women, from age 15 up, and there were quite a few young women, but they don't want to be part of a group.

We started a children's library, because there's no public library here... we said if we start with the children's library, maybe eventually the county council will put in a library in [name of town]. So for the past few years we've been running a children's library in the primary school, open on Saturday mornings and run by the women. There's a rota system, volunteer women from the women's group do the library. We've organised a self-awareness for children from age 8 to 12, and that was done with the women's group as well.

(Women's group in Co. Donegal, no computer)

Women's groups without computers also had a wide variety of networking and communication modes and arrangements, from very informal to formal involvement in national representative

organisations, as illustrated by the quotes below which again raised the question of the extent to which the Internet would be appropriate for their social capital activities:

We all live around, so we just phone [each other].
(ICA guild in rural Co. Sligo, no computer)

There's the Women's Council, we have a delegate on that, and on the National Economic and Social Forum, we have a member in there. In fact, in the Women's Council, there's three actually, one working on education and one in health, and there's another lady in the social [issues], so they're involved in that.
(National association of women's clubs, Dublin, no computer)

A few of the staff or volunteers from women's organisations without computers or an Internet connection expressed strong negative attitudes towards computer technologies in the context of being a barrier between the organisation and the women they were seeking to link with.

On the other hand, the survey found that women's organisations with computers also performed a wide variety of personal development and community organising requiring face-to-face interaction with the wider public; these organisations found computers to be invaluable for their networking and development work. Specific tasks from the example below include health and related services and courses, and information and referral services for which a computer had obvious value:

The women's centre... would have primarily started off to respond to women's needs in a holistic manner. Now at this stage, it offers various services. There's a family planning service, health clinic service. It offers various courses to women. There's a rape crisis service attached, and there's also a listening ear service and a longer-term counselling service, so the whole ethos behind it is very much working with women, where they're at.
(Women's centre, Co. Donegal, computer)

Women's groups and organisations had different means to network with their communities. Some published a newsletter and did regular postal mailouts to members. Several respondents spoke in positive terms about the value of producing a regular newsletter and posting it to their members, suggesting there was social capital value in this activity. Thirty-seven percent overall published a newsletter; this figure varied considerably according to the income level of an organisation. Only nine percent of women's groups without computers published a newsletter. Many passed on information through mailouts to members. Many more women's organisations with an Internet connection published a newsletter, and local dissemination of printed materials and word-of-mouth referrals were also important, as illustrated by the two examples below.

We distribute about 500 [copies of our newsletter] every month, so it's a good all around spread. That's the main way we do [our publicity]. We have posters around town as well. We do a lot of posters.

(Women's centre, Co. Kerry, Internet connection)

We have a brochure and we have open mornings. A lot of it is word of mouth, I suppose. And we advertise locally. If there was an event, we'd advertise around in the shops and whatever.

(Community centre running women's programmes, Co. Cork, Internet connection)

This small media activity suggests a local or regional social capital function and raises a question about the extent to which the Internet could replace or complement these activities.

Networking and communication with other women's organisations was important especially for those sitting on committees or working on common issues or projects with other women's groups, both on a local and national level, and sometimes on a European level. However many women's organisations did not use the Internet for networking because the women and women's organisations they worked with were not using it. One woman with a national single-parents organisation explained that:

Yes, without a doubt [would like to use the Internet]. We were talking about it last week, not in any formal way. I'd like for us to get onto it... [but] it's just not viable for us at the moment. I suppose until more organisations like ours are on it... it's one of those Catch 22 situations. In terms of sharing information, until the other people are on it, there's no point in us going on it.

(National lone parents organisation, Dublin, computer)

Public sphere

The telephone survey found that although many women's organisations used the mainstream media as part of their general publicity and information-disseminating activities, few had active ongoing links with the national media (as opposed to the local media), compared with the environment and international development organisations also surveyed as part of the VSIA project. In contrast to the environment and international development organisations surveyed, no woman's organisation exhibited a highly sophisticated awareness of using the national mainstream media to influence public opinion. However many women's groups and organisations reported strong usage of local media for information dissemination. This was particularly evident in rural areas:

"We do reports to our local papers on what's happening in the area and advertising what's involved in the area - our local paper, the *Westmeath Examiner*, and *The Topic*, both published in Mullingar. We would be well known to them for [our] various activities."

(ICA guild in Co. Westmeath, no computer)

"[We publicise our events] through the local newspapers - the *Donegal Democrat* and the *Derry People* have notices, *Dungloe Notes*, and ... then there's the parish bulletin from the church. We hand in the event to the priest and he puts it in the parish bulletin, and then posters. It's fairly well covered, although people often say 'oh, I didn't know that was on.'" (Women's group in Co. Donegal, no computer)

Linking local and global

Chart 6 illustrates that despite having similar income profiles, environment and international development organisations had a much higher use of computers, the Internet, and other ICTs than women's organisations. A significant difference between the two types of organisation was the geographical scope of their interests. Almost half (48 percent) of women's organisations operated within a local or regional area, compared with only eight percent of environmental and international development organisations. On the other hand, only 20 percent of women's organisations as a whole, but 38 percent of women's organisations with an Internet connection, operated within an international arena. In other words, the women's organisations doing international work were more likely to be using the Internet than those operating more locally. This finding was illustrated by a respondent in the telephone survey:

We'd work a lot with a group in Brussels, WIDE, Women in Development Europe. That's who I'd get now the main bulk of my emails from as well.
(Women in development organisation, Dublin, Internet connection)

One woman's organisation mentioned using the Web to find international resources for its clients:

Internet [web] has been useful in terms of getting information on other centres, particularly for clients who are going abroad.
(Rape crisis centre, Dublin, Internet connection)

Some women's organisations without an Internet connection indicated they would be interested in using the technology if they were more involved in international work, as in the example below:

I suppose if we did more of the transnational projects, either with Northern Ireland or Europe, we'd be more inclined to [get an Internet connection] but we don't... But then we might be in the future and then maybe we'd look at it again.
(National lone parents' organisation, Dublin, computer but no Internet connection)

This concludes the presentation of the findings from the VSIA research. The next two chapters will discuss the research findings from the Womenslink research. The final chapter in Part II will make overall conclusions about the findings and other aspects of the research.

Chapter 9: Womenslink research: findings of content analysis

This chapter and the next will focus on Womenslink, the Internet mailing list which linked women's organisations in Northern Ireland and the border counties of the Republic of Ireland. The research period for Womenslink was mid-1997 to end-1999. This chapter presents the findings of a content analysis of all 500 Womenslink messages produced during this 124-week period. The next chapter will discuss the findings of qualitative research with the staff members of the Womenslink member organisations who produced these messages.

As in the previous chapter, the presentation of findings will be made under the headings of the analytical framework: the participants, the production process, the content, and the wider social, political and global links.

The Womenslink content is analysed in five sections, or Editions, of 100 messages each. The Edition structure was chosen partly to facilitate analysis but also to capture differences in Womenslink production over time. The reader should note that because there are 100 messages in each Edition, the number of messages on various topics equals the percentage in each Edition.

9.1: Edition 1: August 1997 to June 1998

Edition 1 included Womenslink messages 1 to 100. The content was produced in four categories: messages mostly about Womenslink itself (28 percent); messages mostly related to IT (23 percent); internal chat and admin information for members only and brief comments on other messages (23 percent); and news, information and discussion about issues other than IT (26 percent).

Participants

At this point, there were eight Womenslink member organisations. The participation rate for Edition 1 was 100 percent - all eight Womenslink member organisations sent at least one message to Womenslink.

Production process

Edition 1 was produced in 41 weeks; in other words, it took 41 weeks for the first 100 Womenslink messages to be produced.

The first question regarding the production process is the form of media produced. All 100 messages were emails distributed to all the Womenslink members. Three of the messages in Edition 1 contained URLs for Web sites, including a new international women's magazine on the

Web; three discussed the Web site of one Womenslink member; and three discussed unsolicited email about porn Web sites. The messages with URLs and discussion of Web sites suggest some fluidity between the mailing list and the Web as Internet forms.

The second question is the extent to which the Edition 1 production process was democratic and participatory. The content analysis found differences in participation in the production process. On the level of organisations, the participation rate varied from 29 percent (29 messages) for the most active organisation to four percent (four messages) for the least active. There was an urban/periphery balance in the production of Edition 1, with four members from Belfast and four from outside producing content. The top three women's organisation members produced 50 percent of the content. On the level of individuals, 12 women produced Womenslink Edition 1; most (five) were administrative workers. The differences in individual participation rates were significant. The researcher sent the most messages of any individual - 26 percent (26 messages). The top three individuals produced 55 percent of the content.

Content

The first question about content is the extent to which it reflected the lived experiences of the audience. The 23 internal chat and admin messages indicates that the participants used Womenslink as an extension of their work roles. Ten of these 23 messages concerned arrangements for various meetings; two included additional information about previous messages. Four concerned requests and responses to sell tickets for a fundraising draw for one of the organisations; a staff member sent one joke message and the rest were various brief commentary. These messages also suggested some use of Womenslink for organisational capacity-building.

The second question is whether Edition 1 challenged dominant codes and was creative. There were several instances where Womenslink was used to develop creative ideas. For example, six messages concerned the organisation of an International Women's Day project to run women-only sessions in internet cafes in Northern Ireland.²⁴ The first message describing the idea, below, and similar messages suggest the possibility that Womenslink was being used to develop creative ideas collectively:

... An idea I had (at 4am this morning when my 1 year old decided it was getting up time) was to take over all the Internet cafes in NI for a morning so that women can try out the internet, e-mail each other etc. As far as I know there's Internet cafes in Belfast (2), Newry, Enniskillen, Derry and somewhere near Magherafelt. There's an 'Internet Woman' in the Belfast Telegraph who might give us a hand. What does anyone think? (message #17, September 17 1997)

²⁴ The project did end up going ahead at three locations in Belfast and Enniskillen.

The final question, whether the Womenslink audience had the possibility to correct Womenslink, is answered by the high number of messages (28 percent) mostly about Womenslink itself. Many of these were brief notes to indicate that Womenslink messages were being received. Others involved reflection on Womenslink as a media form. Many of the messages contained additional information on other issues. A notable feature of these messages was their friendly, chatty nature and internal references. For example:

Hi everybody. I think we're hooked up to Women'sLink as of this morning - let me know if you get this message. is there any news of the baby donkey in Fermanagh yet? Bye for now [signed]. (message #9, September 5 1997)

Political participation

In Edition 1, 12 messages made explicit reference to mainstream politics. Seven of these concerned politics in Northern Ireland. There was a pattern of discussing mainstream politics almost exclusively in the context of women's issues or a feminist perspective, with few addressing the political issues directly. For example, the message below was one of the very few messages in all the Editions indicating a clear opinion on the major political divide in Northern Ireland politics, and significantly, there were no replies to this message on Womenslink:

... Getting on to a discussion - what do you think of the referendum result? Was it a victory for the No Campaign? I was pleased that so many people decided to vote and overjoyed that 71% voted Yes. Having said that, the 29% of No voters have the right to be represented in the assembly, no matter what my personal views on Mr Paisley are. What do you think? (message #94, May 27 1998)

Other messages concerning politics were five discussing the Irish presidential race. In some messages, political comment was added to comment on another issue, for example:

Hi everyone! The [Womenslink] evaluation makes interesting reading. It's true that we don't communicate enough with other groups on Women's Link, most of the time in [name of organisation] we forget that we have this possibility... By the way, [name of woman activist] pointed out to us that it is a sin to vote Yes for the Agreement: Christians Against the Agreement tell us that: 'The Bible strongly denounces attacks on the family unit, but the Agreement aims to destroy the family by promoting the causes of sexual perversion and feminism'. So now you know what to do... (message #93, May 21 1998)

This message is significant because it refers to politics in Northern Ireland in a non-threatening way, assuming that others on the list would appreciate the feminist humour.

The second question is the extent of the links with the women's movement and organising. Edition 1 included 12 messages along these lines. One example was a notice for a conference on "reclaiming and transforming the women's movement."

Social capital

The central question regarding social capital is the extent to which Womenslink was a social capital resource and to which support networks were created, extended or strengthened. Edition 1 included 35 messages responding or referring to previous messages. Twelve more were responses to questions and other substantive information. One notable example offered a response to a question about Women's Coalition candidates, with the staff member announcing her own candidacy. This message highlighted the potential social capital value of using Womenslink for networking.

Yup, the NI Women's Coalition is running candidates in the election and I'm one of them! I'm running in Fermanagh/South Tyrone and confident of taking a seat here. So, the Women's link won't be hearing from me for a while because I'll be taking the next three weeks off to campaign. Happy days!... by the way, if anybody has any contacts in South Tyrone who might be interested in working on my team, could you let me know. We've a really strong team in Fermanagh, but my contacts in Tyrone are limited at this stage. You can e-mail me - I'll be checking my messages. (message #100, June 4 1998)²⁵

The level of substantive responses on Womenslink suggests the list had social capital value as a source of information and assistance. The 23 percent of messages about IT issues indicated in particular a social capital function of Womenslink as a support and resource for IT, particularly in the context of organisational capacity-building.

Public sphere

The first question regarding public sphere is the extent of the links with the mainstream media. Edition 1 included only two messages explicitly referring to the mainstream media. One, reproduced below (message #81) concerned the coverage in Irish newspapers of a school shooting in the US. The other, reproduced above (message #17), referred to asking women on the Belfast Telegraph to cover the women's Internet cafe event.

Another question is the extent of free exchange of ideas. There were 10 messages in Edition 1 containing discussion, of three different topics: Mary McAleese and other candidates in the Irish

²⁵ The Northern Ireland Women's Coalition is a political party with women's issues central to its platform. In the election subsequent to this message, two Women's Coalition candidates were elected to the Northern Island Assembly. The Womenslink member polled very well in Fermanagh but did not win a seat.

(Republic) presidential elections, a shooting at an American school, and the Northern Ireland Assembly. Below is an example of the discussion:

... This morning very early I was thinking of the recent murders at the school in Arkansas, and how the Irish papers covered the story. I would be very interested if anyone on womenslink has an opinion on this. The young lad who was behind the attack seemingly did it to get back at his ex-girlfriend and her friends because he was angry she broke up with him. Yet all the newspaper stories I'm reading say that the root problem is guns in America. Question: is the problem gun control or violence against women? (message #81, March 30 1998, sent by the researcher)

Hi everyone, [name of participant] asked for our thoughts on the Arkansas killings: consensus in [name of organisation] is: both! Attitudes to women and the proliferation of guns seem to us to be part of the same patriarchal system of hierarchies and brutality. But then we're good at oversimplifications. Like [name of another respondent], we were reminded of the Montreal shootings... (message #83, March 31 1998)

The above discussion is significant because it started with a reference to mainstream media coverage of a story but shifted to personal experiences and opinions without reference to any media source. The focus on personal experience when discussing issues was a feature of many Womenslink messages.

Linking global and local

Four messages in Edition 1 explicitly made the link with a wider women's movement. All four messages were forwarded on from another source, and there were no follow-up messages on Womenslink to any of the international messages, suggesting a lower interest in and more detached attitude towards these issues or perhaps an understanding that Womenslink was not the place for discussion of international issues. These messages included an online petition for a campaign to support American Airlines, under attack for their lesbian and gay friendly employment practices, and a request from an Australian woman looking for information on abortion activism in Northern Ireland.

9.2: Edition 2: June 1998 to December 1998

Edition 2 included Womenslink messages 101 to 200. Edition 2 was produced on the same four topics: content mostly about Womenslink itself (21 percent); content mostly related to IT (30 percent); internal chat and admin information for members only and brief comments on other messages (16 percent); and news, information and discussion about issues other than IT (33 percent).

Participants

At this point, there were 12 Womenslink members - the eight members from the previous Edition, plus four more organisations that joined during the period of Edition 2. The participation rate for Edition 2 was 83 percent - 10 of the 12 Womenslink member organisations sent at least one message. This was a drop from the 100 percent participation in the previous Edition.

Production process

Edition 2 was produced in 30 weeks - 11 weeks less than Edition 1.

The first question is the form of media produced. All 100 messages were emails distributed to all Womenslink members. Eight messages contained URL links and discussions of Web pages, including the new page of one Womenslink member, again suggesting some fluidity between the mailing list and Web pages.

The second question is the extent to which the Edition 2 production process was democratic and participatory. Again, the content analysis found differences in participation in the production process. On the level of organisations, the participation rate varied from 20 percent (20 messages) for the most active organisation to zero messages for the least active. The top three women's organisation members produced 50 percent of the content. On the level of individuals, 14 women produced Womenslink Edition 2, including an equal number of administrative workers and coordinators, and also project workers and collective workers. Again, the differences in individual participation rates were uneven. The researcher again sent the most messages of any individual - 31 percent (31 messages). The top three individuals produced 61 percent of the content. The uneven rates of content production were fairly similar to the previous Edition.

Content

The first question about content is the extent to which it reflected the lived experiences of the audience. There were 16 messages with internal chat and admin content, indicating indicates that the participants used Womenslink as an extension of their everyday roles. This number represented a drop from the previous Edition. Of these 16 messages, nine concerned various diverse issues and seven concerned the pregnancies and new baby of staff from Womenslink member organisations. The exchanges below are particularly revealing:

Hi everyone! I have heard rumours too that Monica McWilliams is standing in South Belfast²⁶. But the really exciting news as far as I'm concerned is that [name of Womenslink member] is about to give birth! Can you keep us posted on this? (message #102, May 30 1998)

²⁶ Monica McWilliams is a member of the Northern Ireland Women's Coalition party.

Hello Everyone. I'm not sure if the word has gone round yet but [name] had a baby boy, 7.5 lbs born on 31 May at 6:30am! (message #104, June 2 1998)

That's great news about [name]. Give her our heartiest congratulations. I hope they are well. [Name of second woman] has been in the hospital for the past month as they were afraid she would go into labour early. She has another month to go. She's in good form but a bit fed up. That's the latest from Blacklion. (message #105, June 2 1998)

Hi everyone! Congratulations to [name] on the birth of her new baby. How is she? What are they calling him? I have heard rumours too that Monica McWilliams is standing in South Belfast. (message #106, June 2 1998)

The messages above suggest a community spirit among some Womenslink members and also, in the first and last (#102 and #106), fluidity between "personal" issues and public or political issues. This personal/political link was evident in a number of Womenslink messages.

The second question is whether Edition 2 challenged dominant codes and was creative. There were fewer instances in this Edition where Womenslink was used to develop creative ideas.

The final question regarding content is whether the Womenslink audience had the possibility to correct Womenslink. Again, there were many messages (21 percent) mostly about Womenslink itself. Of the messages mostly about Womenslink, the last celebrated Womenslink itself:

We just wanted to be the ones to send the 200th message on Womens Link! love [signed with names of all women in organisation] (message #200, December 16 1998)

This message suggests that, at least for the staff member(s) that produced it, Womenslink had some social capital value. Sixteen of the messages mostly about Womenslink concerned adding the new members to the list, requests for the complete listing of members, making sure messages were being received and other somewhat technical discussion. A further four messages discussed issues around bringing in new Womenslink members, including the possibility of organisations with male staff members joining Womenslink, as below:

... I feel at the moment it may be a bit premature opening it up to groups which include men. I think we would be better served developing the link within the women's groups which are already there and the potential for others to become involved. I would be very much into debating this issue further. (message #198, December 15 1998)

There were no follow-up messages to the one above, despite the invitation to debate the issue.

Political participation

Ten messages in Edition 2 had explicit links with mainstream politics; this was a slight reduction from the previous Edition. Messages included information about or mention of the women's candidates in the forthcoming elections in Northern Ireland, public events with political speakers organised by one Womenslink member organisation, and others related to politics in Northern Ireland. Three of the messages discussed the Omagh bombing; the first was a contribution by the researcher on her feelings the morning after the event. Her message was followed by two from other staff of Womenslink member organisations, reproduced in part below:

... It's hard to feel anything but disbelief, its like you can't get your head round anything this monumentally awful. I spent most of yesterday breaking down in tears, in the kitchen, looking at the rows of headlines and frontpage horror photos in the newsagents, and thankfully the newsagent was in no better state than me. I have been thinking all w/end about [name of Womenslink member] and the others in Omagh and desperately hoping that they and their families are physically intact. [Name of another Womenslink member] from Omagh who now works [with us] had a very lucky escape having been in the town centre when the blast occurred. She is unhurt but VERY shaken and needless to say the family has lost friends in the explosion. No one in Downtown [women's building in Belfast centre] today looks like themselves, there is an air of wanting to wake up and be told it has all been a nightmare. [Name of women's centre] have been down to the City Hospital to offer blood as stocks are badly depleted from the W/end. How are all the rest of you coping out there on the link? (message #130, August 17 1998)

We don't have much to say here, except we're all very sad. It's hard to sit down and analyse the situation, and almost feels pointless. It has to be done, of course, so that maybe we can work out ways that it doesn't happen again? It's good that the women at [name of women's centre] went around to give blood, we are passing round the news in our building, so that our women follow their example. (message #131, August 17 1998)

Again, these messages indicate fluidity between personal and political, as well as the reliance on experience and feelings rather than mainstream media as a source of information. They also suggested a social capital value to Womenslink as a source of support during a time of crisis.

There were 23 messages related to the women's movement and organising, a significant rise from the previous Edition.

Social capital

The central question here is the extent to which Womenslink was a social capital resource and created, extended or strengthened support networks. Edition 2 had 49 messages responding or referring to previous messages; 11 were responses to questions and other substantive information. Of these substantive messages, four responded to various requests for IT information, two responded to the posting about the Omagh bombing. The remaining messages offered information

in response to questions on: funding a project, Women's Coalition candidates, virus hoaxes, a women's conference, and a Web page for women in Northern Ireland.

Thirty messages in Edition 2 were related to IT, again, again suggesting that Womenslink had some social capital value as an IT resource. Fifteen of these were mostly questions, replies or information about technical IT issues, such as using zip files, advanced Word features and IT training.

Public sphere

The first question is the extent of the links with the mainstream media. Edition 2 had no messages mentioning or linking with the mainstream media.

Another question regarding the public sphere is the extent to which Womenslink functioned to support the free exchange of ideas. There were only three messages containing discussion (about the Omagh bombing, above); this was a significant drop from the previous Edition.

Linking global and local

No content in Edition 2 was explicitly linked with global actors or the wider women's movement, reflecting a generally low use of Womenslink for linking local and global.

9.3: Edition 3: December 1998 to May 1999

Edition 3 included Womenslink messages 201 to 300. Edition 3 content was again produced in four categories: content mostly about Womenslink itself (13 percent); content mostly related to IT (28 percent); internal chat and admin information for members only and brief comments on other messages (11 percent); and news, information and discussion about issues other than IT (47 percent).

Participants

The 14 Womenslink members at this point included the 12 from the previous Edition, plus two more organisations that joined during the period of Edition 3. The participation rate for Edition 3 was 64 percent - nine of the 14 Womenslink member organisations sent at least one message. This included six organisations in Belfast and three outside Belfast, the start of a center/periphery imbalance that continued in subsequent Editions. The participation rate was a further drop from the previous Edition.

Production process

Edition 3 was produced over a 25-week period, down from 30 weeks for the previous Edition.

Regarding the form of media produced, the 100 messages were emails distributed to all Womenslink members. Seven of the messages contained URLs to Web sites. There was one attached screen saver (a christmas tree with flashing lights), and one Web postcard. Again this suggests the fluidity between some Womenslink messages and other forms of Internet media.

Regarding the central question about the extent to which the production process was democratic and participatory, there were the same patterns of production for Edition 3 as for previous

Editions. On the level of organisations, the participation rate varied from 30 percent (30 messages) for the most active organisation to zero messages for the least active. The top three women's organisation members produced 57 percent of the content. On the level of individuals, 16 women produced Womenslink Edition 3. Again, individual participation rates were uneven. The researcher was no longer the most prolific message sender. One woman sent 30 percent, and the top three individuals produced 54 percent of the content. A pattern had developed that was to continue into subsequent Editions, with three individuals producing more than half of the content.

Content

The first question is the extent to which the Womenslink content reflected the lived experiences of the audience. There were 11 messages in Edition 3 with internal chat and information, a further drop from the previous Edition. This included a poem, a merry Christmas wish, a recipe for a holiday drink, brief notes about times of different meetings, and one message about another staff member having a baby. There were two messages discussing experiences in women's groups and collectives.

Another question regarding content is whether Edition 3 content challenged dominant codes and was creative. There were two messages advocating complaints of the "Precious Life" (anti-abortion) group and its advertising billboards:

Some of you may or may not have seen the posters that are emerging on Belfast billboards and on City bus by Precious Life. We have had some women contacting us saying how offensive they are. If you would like to complain about these you can either: contact David Allen (who display the posters) by telephoning [number] or Citybus (who are also displaying the posters) by telephoning [number] or contact Precious Life on [number] or contact [name] of the Family Planning Association who brought this to our attention and give her your support. (message #259, March 11 1999)

It would probably be also useful to contact the Advertising Standards Agency (sorry, don't have the contact number to hand), as is this the only body which can order these posters to be removed. (message #260, March 12 1999)

This exchange above is an example of using Womenslink to challenge dominant codes in the public sphere.

The final content question is whether the Womenslink audience had the possibility to correct Womenslink. There were 13 messages about Womenslink itself, a drop from the previous Editions.

Political participation

Edition 3 contained 10 messages directly linked to mainstream politics; this was a similar level to previous Editions. Also similar to previous Editions was that these messages concerned women's issues or were written with a feminist perspective. An example is a message listing the spokesperson on women's issues for each of the political parties in Northern Ireland.

There were 24 messages linked with the women's movement and organising, including events organised by Womenslink members, messages about a conference on the future of the women's sector, the participation of women's organisations in the Civic Forum, and a Web site about the activities of women activists in Scotland. This number represented a slight increase on the previous Editions.

Social capital

Turning to links with social capital, Edition 3 contained 25 messages responding or referring to previous messages, including five responses to questions and other substantive information. These five included one commentary on women's groups and organisations and four offering information in response to questions on: where to buy a cheap computer, net addiction, where to complain about advertising, and an IT problem.

Again there was a high amount of content related to IT - 28 messages mostly related to IT. One message, below, about computer training illustrates the friendly and helpful nature of many of these IT messages, again suggesting the social capital value of Womenslink as an IT information resource:

Hi Women's Linkers... The government are funding another round of Millennium Bug Buster training. These are various courses aimed at making sure you are Year 2000 compliant. Some of the courses relate specifically to computers whereas the "Assess and Manage" helps you to assess the rest of your office equipment eg fax, alarm system etc. The good news is that they are free. The ones I have details about are run by Elite Training Services (behind M&S in Belfast). You can ring them on [phone number] for an information pack. The last time these courses were run you had to pay up front and then claim back from the T&EA, this time you don't have to pay up front which makes it a whole lot easier. [Name of Womenslink member] is going to the "Assess and Manage" one next week and I am going to do the PC one so we'll pass on as much info as we can. (message #282, April 28 1999)

There were an additional nine messages with information on funding for women's organisations, and again, many messages were characterised by their friendly, helpful nature, such as the following:

Hi everyone, Just to clarify the NIVT capital funding which is still available under measure 4.6 - the maximum available is £5,000. Also all (I think) local District P&R partnerships have an allocation of money which will be targeted at cross partnership projects. This may offer an opportunity for women's organisations across NI to get our act together and put a bid in. If anyone is interested let me know. We expect District Partnerships to announce this measure in February, though it may differ from area to area. You should check it out with your local Project Officer. (message #220, January 1 1999)

Edition 3 saw the appearance of anonymous content for the first time - a staff member sent four messages without signing her name, although the name of her organisation was evident in the message return address. Unsigned messages were a feature also in future Editions, suggesting a more impersonal relationship to Womenslink on the part of these content producers.

Public sphere

Only one message in Edition 3 was clearly linked to the mainstream media, #281 quoted below referring to the lack of media coverage of a Kosovo appeal.

Another question regarding the public sphere is the extent to which Womenslink functioned to support the free exchange of ideas. There were only two messages with opinions on current issues, a further drop from the previous Edition.

Linking global and local

Five messages in Edition 3 were explicitly linked to wider international issues; this represented an increase from the previous Edition. The five messages included two about a Kosovo appeal, including the message below:

Hi everyone, Just to let you know that we have received over 300 bags and boxes of clothes, blankets and toiletries in one week!!! The response has been amazing. The Good Shepherd Foundation for Needy Children sent 8 trucks to Albania last Saturday - but got no media coverage. There are collection points in Belfast too, if anyone wants details let us know. (message #281, April 19 1999)

This message illustrated that some Womenslink member organisations were involved in international solidarity issues, even though discussion of these issues was minimal on Womenslink. The other messages linking with global concerns included a question about refugees in Sri Lanka that arose from reading a newsletter circulated on Womenslink, and two Internet-linked events about global feminism. There was no response to these latter messages.

9.4: Edition 4: May 1999 to August 1999

Edition 4 included Womenslink messages 301 to 400. Edition 4 content was again produced in four categories: mostly about Womenslink itself (29 percent); mostly related to IT (26 percent); internal chat and admin information for members only and brief comments on other messages (14 percent); and news, information and discussion about issues other than IT (30 percent).

Participants

There were 18 Womenslink members at this point - the 14 members from the previous Edition, plus three more organisations and one private consultant that joined during the period of Edition 4. The participation rate for Edition 4 was 56 percent - 10 of the 18 Womenslink member organisations sent at least one message. This included six Belfast organisations and four outside Belfast. This represented a further drop in the participation rate from the previous Edition.

By this time, the Womenslink members had developed a policy for new members to the list. Any women's organisation in Northern Ireland or the border counties of the Republic that was using email was welcome to join the list. The process was that a Womenslink member sent a message to the Womenslink list asking if the proposed women's organisation or individual consultant could join the list. During a period of about a week, other Womenslink members could post their responses. Occasionally members sent a request for more information about the organisation. No potential Womenslink member was ever turned down by current members and the feedback was invariably friendly and supportive. After the organisation was subscribed and a welcome message sent, other Womenslink member organisations would then also send welcome messages to the new member, which often included additional information such as forthcoming events.

The first private consultant joined Womenslink during Edition 4. Prior to joining, she was a regular contributor to Womenslink as a project worker with a Womenslink member organisation. The new development of adding individuals to the list suggested that Womenslink could be a resource for women in the women's movement who were in transition, and that Womenslink could include content produced by non-affiliated individuals.

Production process

Edition 4 was produced over a 16-week period, down from 25 weeks for the previous Edition.

The first question about the production process is the form of media produced. All 100 Womenslink messages were emails distributed to each member. Eight of the messages contained URLs to Web sites, including an alternative comics site, a UK site of health information, five messages about the alien screen saver at the University of Berkely site, and the message below:

Hi. A mad Canadian friend of mine sent me this site. You can actually take a picture of yourself using your computer monitor. Your monitor can discern small electrical impulses and

detect bright and dark areas very close to the screen (1-2 feet). This is still a beta site, and the image is blurred, but it works !!! You won't believe this one !! So if you have a few minutes to spare or want a distraction from all that paperwork click on the web-site and follow the instructions. (message #367, August 19 1999)

This message is an indication that Womenslink could be used as a diversion from "women's issues." This and other "diversionary-type" messages with URLs to Web pages perhaps indicated a less "serious" attitude to the Web on the part of participants than to the Womenslink email messages.

The central question about production is the extent to which the process was democratic and participatory. Again, the same patterns of uneven production persisted for Edition 4. On the level of organisations, the participation rate varied from 26 percent (26 messages) for the most active organisation to zero messages for the least active. The top three women's organisation members produced 55 percent of the content. On the level of individuals, 12 women produced Womenslink Edition 4. Most were coordinators. Again, the differences in individual participation rates were uneven. One woman sent 26 percent (26 messages). The top three individuals produced 57 percent of the content. Three individuals produced one message each and the rest produced two or more messages each.

Content

The first question regarding content is the extent to which it reflected the lived experiences of the audience. In contrast to the previous Editions, there were few references to the participants' personal experiences. There were 14 chatty and internal messages covered various topics, brief feedback on previous messages, and some congratulations for a Womenslink regular contributor moving to a new job at another Womenslink member organisation.

Another question concerning content is the extent to which it challenged dominant codes and was creative. There were few examples of this kind of content in Edition 4.

The final content question is whether the Womenslink audience had the possibility to correct Womenslink. There were 29 messages mostly about Womenslink in Edition 4, a significant rise from the previous Edition. Twenty of these messages concerned new members on the list.

Political participation

In total, Edition 4 included 10 messages linked with mainstream politics, a similar number to previous Editions. Five of these messages concerned government policy issues, with three advocating involvement by Womenslink members.

There were 22 messages concerned with the women's movement and organising. These included ten messages supporting protests and actions. Three concerned support for the Brook Advisory Centre (pregnancy counselling) in Belfast which was experiencing a permanent picket by anti-abortion protesters, including message #368 reproduced shortly.

Social capital

The central question concerning social capital is the extent to which Womenslink itself was a social capital resource or supported, developed or extended networks of community and support. Edition 4 contained 37 messages responding or referring to previous messages, including five offering responses to questions or other substantive information. The substantive messages offered information in response to questions on: an anti-abortion protest, information on a Web page about aliens, relief funds for Turkey, where to register a Web site, and an IT query. Again, Edition 4 contained a high number of messages (26) mostly related to IT, suggesting that support and information on IT issues was a central social capital function of Womenslink.

There were seven messages on Edition 4 suggesting that Womenslink members saw themselves as part of a unique community. These messages were discussion and positive responses to a suggestion by the co-facilitator of Womenslink at the WRDA to have a Womenslink party (she posted the first and last messages below):

Hi Women's Linkers. If Women's Link had a party would any of you come? (Serious question!) (message #324, June 28 1999)

Hi [name]. Of course. I never miss the opportunity for a good knees up! Just as long as it coincides with work so I can have some time off! Why? (message #326, June 28 1999)

Hi everyone. A party! - Definitely - I think it would be a great way for us all to meet up and finally put faces to the names. If you need a hand sorting anything out [name], give me a shout ... okay! (message #328, June 28 1999)

All the way from West Cavan to Belfast for a party - it better be good!! I'd love to come - will someone give me a bed for the night? Is it going to be a dressy-up party? (message #329, June 29, 1999)

Why don't we all go to West Cavan and party there - the pubs stay open longer!! (message #332, June 29 1999)

Does anyone have a flatbed scanner which could scan an A3 colour poster?? The WomensLink Party doesn't have to be in Belfast ... any ideas?? (message #335, July 2 1999)

These messages, indicating a desire among some members to meet face-to-face in addition to the online exchanges, suggested also that Womenslink had some social capital value for some participants.

On the other hand, Edition 4 also had eight anonymous messages without the sender signing her name, although the name of her organisation was evident in the message return address. This was the highest number of unsigned messages in any Edition and may indicate some members did not feel the same attachment to Womenslink as other members.

Public sphere

A central question regarding the public sphere is the extent of the links between Womenslink and the mainstream media. Edition 4 included only two messages linking with the mainstream media. One was a press release, issued by a Womenslink member organisation, indicating that they were also disseminating the information to the mainstream media. The other message concerned support for the Brook Advisory Clinic in Belfast, describing how to make a statement to the media on this particular issue:

The Ulster Pregnancy Advisory association has been forced to close due to vandalism which happened over the 12th (I think). Precious Life are claiming this as a 'major victory for direct action.' Bernie Smith of Precious Life further states they will pursue other organisations (one can assume the FPA and Brook in particular) to save babies from being murdered etc etc. Brook are currently suffering an increase in the size of the picket outside their building. Precious life have circulated letters outing and condemning its Director to her neighbours. The Belfast Telegraph are asking for comment. Brook suggest making the following points: Women have a right to access information so that they can make informed choices. Any action which denies women this right is to be regretted. Furthermore, actions which are intimidating to women and women's groups are to be deplored. in this instance it would seem Bernie Smith is claiming acts of intimidation as a victory. We find this abhorrent. The contact at the Belfast Telegraph is [name and phone number]. (message #348, August 6 1999)

The above message was unique in all the Editions in its suggestion to use the mainstream media to make a statement to the wider public.

A second question about the public sphere is the extent to which Womenslink functioned to support the free exchange of ideas. There were no messages with discussions on current issues, a further drop from the previous Edition.

Linking global and local

Seven messages in Edition 4 were linked to global issues. These included two copies of a petition supporting women in Afghanistan and a message supporting the action, an emergency appeal for

Medica Kosovo, information about the relief fund for Turkey, and a message urging support for a petition to cancel Third World debt. The final message concerned a campaign about the Vatican's UN seat:

Did you all read the article in Sybil last month about the Vatican - apparently they have a seat at the UN which they use to veto all sorts of sensible things. There is a world wide campaign going on to get them out ... "Why should an entity that is ... 100 square acres of office space and tourist attraction in the middle of Rome with a citizenry that excludes women and children have a place at a table where governments set policies affecting ... women and children" quote from the article. For more details and how to join the campaign contact Panos Institute [phone and Web address] (message #339, July 5 1999)

Significantly, this message was one of the few in which the Womenslink contributor personally indicated her interest in and support for a wider global campaign.

9.5: Edition 5: August 1999 to November 1999

The final Womenslink Edition, Edition 5, included messages 401 to 500. In Edition 5, content was again produced in four categories: messages mostly about Womenslink itself (17 percent); messages mostly related to IT (25 percent); internal chat and admin information for members only and brief comments on other messages (23 percent); and news, information and discussion about issues other than IT (35 percent).

Participants

Womenslink had 21 members at this point - the 18 from the previous Edition plus two more organisations and one more private consultant that joined during the period of Edition 5. The participation rate for Edition 5 was 76 percent - 16 of the 21 Womenslink member organisations sent at least one message. This represents an increase in the participation rate of the previous Edition.

Production process

Edition 5 was produced over a 12-week period, down from 16 weeks for the previous Edition.

Regarding the form of the media produced, all 100 messages were emails distributed to all Womenslink members. Five messages had URLs sites of potential interest to Womenslink members, including the Hunger Site, US Foundations, a voluntary sector link page, and EU and UN reports on women. Again, the URL links suggest fluidity between the mailing list and the Web. Three more messages had other IT media forms attached, including two Web postcards sent to Womenslink, one from a regular contributor while on a study trip in the US, and an attached

multimedia cartoon and music file for the Drop the Debt campaign. These latter messages indicate some creative use of ICTs.

As before, there were significant differences in participation. On the level of organisations, the participation rate varied from 28 percent (28 messages) for the most active organisation to zero messages for the least active. The top three women's organisation members produced 51 percent of the content. On the level of individuals, 20 women produced Womenslink Edition 5, and again the differences in individual participation rates were uneven. Most (six) of the content producers were organisation coordinators, with the participation of administrative workers dropping to half of this (three).

One woman sent 28 percent (28 messages). This contributor had moved at the start of Edition 5 to a Womenslink member organisation previously having a low contribution rate. Upon taking up her new post, she immediately raised the Womenslink contributions of her new organisation; however the contributions of her previous organisation dropped to zero - none of the staff members left in the organisation knew how to use the Internet. This highlights the significance of staff changes to the organisational profile of Womenslink contributors and also the significance of individuals, rather than organisations, in the Womenslink production process. The top three individuals produced 51 percent of the content.

Content

The first question about content is the extent to which it reflected the lived experiences of the audience. Edition 5 was notable in that there was little discussion of members' experiences aside from IT issues. There were 23 internal, chat and brief response messages which indicated some use of Womenslink as an extension of the daily lives of members.

A second content question is the extent to which it challenged dominant codes and was creative. There were several messages in these categories, including messages questioning British government politics in Northern Ireland, and creative messages involving multimedia, as identified above.

The final content question is the extent to which the participants could correct the media. Of the 17 messages mostly related to Womenslink itself, five concerned organisation of the Womenslink party, which eventually took place in December 1999. Five messages concerned the expansion of Womenslink to women's organisations in the border counties in the South. A further five were generated in the process of bringing the new members to Womenslink, and the final two messages were technical in nature. The consistently high level of content about Womenslink on the list itself indicates that participants played an active role in directing and shaping the

Womenslink process and perhaps also suggests the intrinsic value of Womenslink as something more than simply a collection of messages exchanged.

Political participation

Edition 5 contained only four messages overall explicitly linked with mainstream politics, a considerable drop from previous Editions. As in previous Editions, the messages all concerned women's issues or were written from a feminist perspective. These included several messages concerning the departure of the Northern Ireland Secretary, Mo Mowlam, from Northern Ireland politics:

re. Mo departing - I am sorry to see her go. I think what ever about her political take on things she brought a lot of energy and commitment with her - and tried pretty hard to sort out a very difficult and complex issue. A woman of integrity I think ... unusual in British politicians (well, okay, in all politicians!!!) As for her replacement I know little about him other than he would apparently be too dodgy to 'let back into politics' in Britain so they are kind of re-launching or road testing him out here - does not say a lot about the importance they attach to the peace process... (message #444 October 12 1999)

I was surprised that she went and certainly the women's and voluntary sector will be all the more poorer for it. She obviously felt that her staying on at this stage was not going to progress the peace process further (I can't imagine she'd go without a fight unless she herself wanted it)... In terms of Peter taking over - quite a shrewd move on Tony's part - he wanted him back in and this was one position where no-one in Westminster would kick up a stink about... However he has a reputation for being imaginative in his thinking and possessing a great intellect which will follow on well from Mo. Anyhow the politicians over there have been spin doctoring for years (how else are they still getting elected in year after year and still getting paid £40,000 without having to actually govern?!) - maybe they're about to meet their match. (message #446, October 14 1999)

The above exchange on mainstream politics in Northern Ireland was becoming increasingly rare on Womenslink.

Edition 5 contained 17 messages linked with the women's movement and organising, including information on forthcoming events and submission deadlines, a meeting to discuss the lack of gender mainstreaming in Northern Ireland policies, craft fairs held by the Belfast Workshops Collective and the Multicultural Resource Centre, an exhibit by the Northern Ireland Women's Aid Federation, a London conference on IT, women, and social exclusion, a women's education conference, a women's cultural evening, a Banulacht conference in Dublin, and the deadline for submissions to an Equality Commission document.

Social capital

The central social capital question is the extent to which Womenslink was a social capital resource or supported and extended support and community networks. Edition 5 contained 46 messages referring or responding to previous messages, including 12 responses to questions and other substantive information. Of the latter, three messages were discussion of various issues, two

contained information on a hoax chain letter circulated on Womenslink, and four were information on IT queries raised. The remaining messages offered information in response to questions on: where to buy a cheap computer, references for mini-buses, and where to find a cattery.

Again in Edition 5, there were a high number - 25 messages - mostly related to concerned IT troubleshooting. Some messages are reproduced below, along with one "joke" response. The exchanges again highlight the value of Womenslink as an IT resource and the friendly nature of that resource.

Hi everyone, do any of you know why when opening a word document a warning comes up 'corrupt file'. How did it happen and can it be fixed? I look forward to hearing from some of you computer wizz kids! (message #460, October 26 1999)

Hi [name], a corrupt file occurs when that file has knowingly accepted large amounts of money in return for favours, positions of power or insider information. If the corrupt file originated from the South it usually relates to property deals or beef scams²⁷, beyond that I don't know... (message #461, October 26 1999)

Hi [name]. I'm not sure I can add anything above and beyond what [name] has said. It could have happened if you had it opened across the network and someone closed down their computer while some-one else was accessing it - if you know what I mean. As for fixing it - have you tried opening it and saving it as something else? Do you have a back up copy of it? Sorry I can't be more helpful - maybe someone else might have a brighter idea. (message #469, October 27 1999)

Thanks for your help. I have one more problem, on my computer I still can't get into network neighbourhood to take a back-up! Even after my computer is switched on first and then the others - what should I do? (message #472, October 27 1999)

Are you logging onto - ie typing your password into the Microsoft Networking dialogue box when it comes up? If you're still having probs give me a ring. (message #476, October 28 1999)

Public sphere

No messages in Edition 5 were explicitly linked with the mainstream media, although several, such as the above discussion about Mo Mowlam, indicated the message producers were informed by the mainstream media.

Regarding the extent to which Womenslink functioned to support the free exchange of ideas, there were four discussion messages, including the ones above about Mo Mowlam. This

²⁷ At the time the message was written there were a number of ongoing investigations and tribunals into potential political wrongdoing in the South (the Republic) of Ireland.

represents an increase from the previous Edition but is still down considerably from the levels of discussion in the earlier Editions.

Linking global and local

Edition 5 had nine messages linked with wider global issues, including a Banulacht conference, messages discussing the situation of Mary Daly at Boston College, a brief report from a staff member in the US on a study visit mentioning community economic development projects in New Jersey, the information about the Beijing+5 activities to end violence against women globally, the campaign supporting women in Indonesia, the multimedia file from the Drop the Debt campaign, the UN Hunger site on the Web, and a message containing a forwarded letter from a student in Ohio looking for information on women's organisations in Northern Ireland.

The findings presented in this chapter will be further analysed with discussion of the research overall in Chapter 11.

Chapter 10: Womenslink research: findings of in-depth interviews and feedback session

The previous chapter presented the findings from the content analysis of Womenslink. This chapter will present the findings of the in-depth interviews and feedback session with staff of Womenslink member organisations. As discussed in the methodology chapter, the interviews were conducted in early 1998, about seven months after Womenslink had started. The feedback session was held in December 1999, at the end of the research period.

This chapter will present the findings as four case studies of Womenslink member organisations. Although there were differences among the organisations regarding their Internet use, the experiences of these four organisations represent the range of all seven Womenslink organisations studied. The case studies were developed from the interviews with staff members and analysis of their Womenslink participation to the end of the study period.

It is important to point out that the four organisations in the case studies were not typical of Irish women's organisations, although they were typical of Womenslink member organisations. All had three or more paid workers and were among the highest-income and most professionalised women's organisations in Northern Ireland and the border counties of the Republic. Two were located in an urban area. Most were women's networks providing support services to grassroots women's groups. The pseudonyms chosen for these four organisations - the Women's Tri-County Network, the Women's Urban Network, the Women's Political Network, and the Women's Rural Network - describe fairly accurately the central function of each.

The findings in each case study are presented in the context of the analytical framework, focusing on the organisations' use of alternative media on the Internet, in particular, email, the Web, and Internet mailing lists, including the Womenslink mailing list.

10.1: Case study of the Women's Tri-County Network

The Women's Tri-County Network provides support and services to grassroots women's groups and childcare groups in three rural counties. The organisation's three staff members - the administrative worker and two development workers - were interviewed in 1998. By the end of the study period in December 1999, two of those three workers had left the organisation and had been replaced.

Participants - and barriers to participation

All three staff members used computers and the Internet. The organisation had two PCs for the three staff members; the administrative worker had her own computer on her desk, and the two

development workers shared a new computer placed on a table wheeled in and out of each others' office.

The administrative worker used the Internet the most. She found the Internet "a bit intimidating at first" but later found it simple. Sometimes problems with the Internet connection occurred and help was hard to come by: "you could be waiting half an hour or more to talk to somebody; it's not worth it. I haven't got the time to talk to anybody."

The first development worker was fairly new to computers, only beginning to use them for her current job. She had been taking computer classes but had trouble finding the time to practice what she had learned. She used the Internet at lunchtime or outside working hours.

The second development worker explained that not having full access to the Internet-linked computer was not a problem because it was not "a crucial part of our working life," but that if the shared computer had an Internet connection, she would probably use it more often. She used the Internet at lunchtime or outside working hours. She could not understand why the Internet had garnered so much attention, stating that:

I just think it's strange that everybody's talking about email and the Internet - to be honest, it really figures way down low on our list of priorities. I'd open my post way quicker than my email. Which makes me wonder whether I'm using it to its full potential, because every other sector seems to think it's just the biz.

Production process

Email was the organisation's primary use of the Internet. The administrative worker usually accessed the email twice a day, in the morning and afternoon, printing out any incoming emails and passing them on to the appropriate staff member. The organisation received six emails in an average week, mostly from their ISP. The administrative worker sent about one email per week, usually to a Belfast organisation providing support services for women's organisations, preferring to do this by email because it was quicker than by telephone. The development workers each sent and received about one email a week. They both liked to send and receive personal email. They wanted to receive more email from other women's organisations - information about events and what other groups were doing. One commented that it was "rare enough" to get "quality information." They both sent emails when the message was not urgent, and used the phone when it were.

The Tri-County Network did not have a Web page. The administrative worker was not quite sure how the Web worked but wanted to learn. She once tried to search for information on the suffragette movement:

I put in the surname Pankhurst and I just got a load of names of Americans. I probably wasn't doing it properly. It didn't work, and I didn't have the time. You could be there all day. I would definitely like to know how to use it more efficiently.

One of the development workers had used the Web but, unless she had "a few hours to spare to sit down and be patient with it," she found it very frustrating waiting for the files to upload and "you're exhausted by the time you do get to something that is relevant." The other development worker was giving a talk on Down's Syndrome in a couple of weeks and had planned to search the Web for information but had not yet found the time. This low use of the Web was typical of almost all the women's organisations surveyed.

Of the four organisations examined in the case studies, the Women's Tri-County Network was the least active contributor to Womenslink. Over the 124 weeks of the study, the Women's Tri-County Network contributed 13 messages, three percent of the total content. The administrative worker made seven contributions, one development worker made five, and a new development worker made the final contribution.

Social capital

Networking with other women's organisations was a priority for the Women's Tri-County Network but the Internet played almost no part in that activity. None of the women's groups they worked with in the three counties was connected to the Internet, or had a computer, although members of some groups might have had a personal computer at home. Yet most women's groups they worked with were "mad to do computer training." The Women's Tri-County Network published a newsletter once every three or four months, sent to their mailing list of women's groups, childcare groups, aid organisations, "and anybody who wants one" - they distributed about 300 newsletters in all. They also sent out postal mailouts twice a month, one to childcare groups and one to women's groups.

The administrative worker suggested that her organisation might hesitate to use Womenslink to share information for competitive reasons, because she did not know all the other women's organisations on Womenslink:

If I didn't know them, it would depend on what you were emailing. If it were something you didn't want everyone to know about, a new initiative you were working on and it was still in the pipeline, you'd have to be careful.

Public sphere

One of the development workers was also cautious about sharing information on Womenslink, but for a different reason - she didn't feel comfortable sharing her personal opinions with strangers:

I feel a bit insecure about unleashing my opinions across these organisations I half-knew and others I knew well and some I didn't really know. Whereas if there was a seminar coming up, I'd have no problem just mailing it off.

In this case, she made the distinction between sharing information, and sharing opinions, which she was more hesitant to do. She was also unsure of the norms around Womenslink:

I thought twice about sending things, I wondered if it was appropriate. Whereas, if I'm having a seminar, I have my mailing list and I know who I want it to go to. One or two times I might have sent funny things to Womenslink and I didn't get any feedback and I wondered if it wasn't the right thing to do, that maybe it's a serious thing. So I think the norms around it aren't set.

On the other hand, the second development worker said that she enjoyed reading the personal opinions on topical events occurring on Womenslink, such as the campaign for the presidency of Ireland and its candidates, including Mary McAleese:

It was interesting to hear people's point of view about Mary McAleese; that was very interesting, it was topical, and everyone had their points of view. It gives you a good perspective on how people feel about things.

This comment highlighted the value of the discussion on Womenslink for some of its readers, suggesting that it was not necessary to contribute to the discussion to derive benefit from Womenslink.

10.2: Case study of the Women's Urban Network

The Women's Urban Network is the organisational centre of a network of 24 community-based women's groups and centres in a large urban area. Of the three staff members, the administrative worker and the coordinator were interviewed in early 1998. By the end of the study in December 1999, there had been two staff changes.

Participants - and barriers to participation

The organisation's three staff members all used computers and the Internet. They all had PCs on their desks but Internet access was through only one computer in an unused office freely accessed by staff.

The coordinator used the Internet the most. Occasionally, problems with the connection occurred, such as a busy line with the ISP, which discouraged her from using it.

The administrative worker "rarely" used the Internet, partly because her computer did not have an Internet connection. She explained that:

It would be a hassle to have to communicate with a group only by email because my computer is next door and doesn't have a connection; but I'm planning to swap soon. My computer is too slow for the Internet. Now I'd have to type it on one machine and then come in and start on another.

Production process

Email was the organisation's primary use of the Internet. All the incoming emails were for the coordinator. In an average week, the coordinator received about 20 emails. Half of these she deleted without reading; they were sent by an Internet news service on Israel she was subscribed to. She sent about three emails a week, primarily to political contacts and friends. She preferred to use email at the end of the working day while alone in the office:

I still feel like it's a personal thing, opening your mail and correspondence. That's a quiet time for me, and I can sit and think about how I want to reply to people, have a conversation with them.

The Women's Urban Network did not have a Web page and rarely used the Web. The coordinator explained that:

[We] played with it one day, and we got so far, not very far, and there seemed to be so much there, and we didn't know how to directly access things, we had to wade through a lot of junk before getting to anything.

The administrative worker believed the Web was easy to use but also that it took a great deal of time to find relevant information. These experiences with the Web were typical of the staff interviewed.

Regarding Womenslink, the Women's Urban Network was not an active producer of Womenslink messages, although it was more active than the other organisation discussed previously. Over the 124 weeks of the study, they contributed 21 messages to Womenslink, four percent of the total Womenslink content. The coordinator was the most active poster, contributing 11 messages to Womenslink. The administrative worker contributed four. She said the technical aspects confused her: she did not understand why a Womenslink message was returned to her after she sent it, not knowing if the others had received it. She added that she was not contributing messages to Womenslink about the organisation's forthcoming events because the organisation did not use a scanner and it would have been too time-consuming to retype information from posters and brochures.

Social capital

Networking with other women's organisations was a priority activity for the Women's Urban Network. The Internet played a minimal role in their local networking activities but was central to their international activities, described shortly. The organisation did not publish a newsletter but sent regular monthly mailouts to its members. They also had an information mailing list with the names of another 70 individuals and organisations.

The Women's Urban Network was very active in women's movement politics and organising. The coordinator was in regular contact with the coordinators at most other Womenslink organisations, and she was involved in joint projects with two of the organisations. However she did not use Womenslink or email to share information with them, preferring to have direct telephone or face-to-face contact. The coordinator believed that Womenslink could be a good way to publicise events they organised in Belfast but wondered how relevant the information would be to the organisations on Womenslink outside Belfast. On the other hand, she believed that if Womenslink could be extended more widely, it would be possible to link up with women's organisations on an all-Ireland basis and even internationally.

The administrative worker said one reason for her low use of Womenslink was that she did not know many of the other staff members on the list. On the other hand, the coordinator believed it was possible to get to know Womenslink members through exchanging email and messages with Womenslink members:

At first, I thought email was less intimate than the telephone because you couldn't hear someone's voice. But now I find you can have intimacy, humour. You can get to know somebody by the way they write a message to you, you can get an insight into their personality, and in some ways that's more fun because you're figuring it out as you go along, getting a sense of them. There are people you can't talk to on the phone - because you can't afford to or they wouldn't be available - that you can reach by email.

Her comment was a contrast to the staff member in the previous organisation who did not see Womenslink as a means of developing intimacy with unfamiliar correspondents.

Public sphere

The coordinator discussed the possibility for having a free exchange of ideas on Womenslink. She recalled a Womenslink message asking for information about groups active in the abortion issue, noting that her own organisation was perhaps the only one among Womenslink members with a policy on abortion, and that it might be difficult to the others to put their opinions online. She added that:

Abortion is such a contentious issue, such a difficult emotive issue for many women's organisations and women individually. The email may be the perfect medium for discussing it. It allows you to be one step removed. A lot of the things that people want to say around it, particularly women who have real problems in dealing with right to choice. Sometimes, they feel very unconfident and intimidated about saying what they think. I think the email might be a way of giving them anonymity, so that you could have a conversation, a dialogue that would be possibly less emotive. Because people would have to think before they write something. Then they see it in front of them and deciding if that's how they want it to go, so they're constantly digesting and processing it.

Her perspective contrasted with that of the staff member in the previous organisation who did not see herself contributing to discussions on Womenslink without knowing all the other members well.

Linking global and local

The coordinator explained that her organisation acquired an Internet connection to facilitate communications with women's organisations on their international project. She was the only staff member interviewed who used the Internet extensively to maintain international contacts:

It made sense for us, because we were involved in the Women and Bridge Building [project], and it was really difficult to talk to Israel and Bosnia. Phones in Bosnia, you can forget it for a start, and the time difference and everything else. So that was one thing that kicked me into thinking about the email. Plus I have a friend in New York who's a journalist who gets loads of information who was saying that if only we had email there would be loads of info she could give us. She had been on my case for a year.

I talk to the Israelis on it, friends in the US, sometimes people in Dublin. Another contact in Brussels and one in Switzerland... the other cross-border project we have, for the [cross-border project], our coordinator is based in Dublin, and she uses the email constantly. She sends all the minutes of the meetings, all the documentation through the email, she's very good. It's so much easier.

On the other hand, the coordinator was not sure about the potential of the Internet for making international links with people and organisations she did not know. She had subscribed to a mailing list news service about Israel and did not have a positive experience overall, being overwhelmed with the volume of email received:

They give you practically hourly messages about what's going on in the Middle East... I don't even read them. It's too much. It's good and interesting stuff, and I was able to pass on the info to a woman doing training who was going out to Israel...

10.3: Case study of the Women's Political Network

The Women's Political Network is a political education and training project working with 11 women's centres across Northern Ireland. Of the organisation's seven staff members, two - the administrative worker and one part-time project worker - were interviewed for this study in early 1998.

Participants - and barriers to participation

The organisation had seven staff members and three computers; most staff members did not use computers regularly. The administrator and the part-time project worker interviewed were the only ones using the Internet. Only the administrative worker's computer had an Internet connection.

The administrative worker used the Internet the most. She believed that it was not a problem that the organisation's only Internet-linked computer was on her desk, because "the rest don't really want to know about it." On the other hand, the project worker said that Internet access was sometimes a problem when the administrative worker was on the computer.

The administrative worker was extremely conscious of the costs of the Internet for her organisation, which was using the Internet on a trial basis before assessing it. She said that cost was the major barrier to using it more often:

I have an Internet log sheet that says the date it went in, what it went in for, and the time spent on it, because the cost is high, even if a local call. So it's a concern... with the email now, it's another form of expenditure. We were asked to try to keep the fax/email bill to a minimum. So it's the cost involved. Email is expensive if we didn't budget for it. If phone costs have gone from 50 pounds to 150, and we haven't budgeted for it, then it is a problem.

Production process

Email was the organisation's primary use of the Internet. The administrative worker logged on to the ISP twice a day to check the email. Normally the organisation received two or three email messages a day, usually for herself or the coordinator, "but it hasn't reached the stage where people email us saying 'hello can we have info on your project'." The administrative worker would print out the emails and hand them to the coordinator rather than calling the other woman to come look at her computer screen. She sent about five or six emails a week and said she enjoyed using email:

I love when I log in the morning and have messages waiting. It's better than getting a fax. It's still new, and not everyone has it yet... it's like children with a new toy... it's not formal, it's chit chat, informal. Our coordinator gave me one this morning, it was very formal, like sending a letter. I wouldn't put dear such and such; some people don't even use capitals or such, I like that, it's more friendly.

Her comment also suggested some social capital value of email for maintaining friendly relations. The administrative worker wanted to send emails more often but found that most organisations she communicated with either did not have email or did not make their email address readily available. The project worker occasionally received email from friends and contacts abroad and also sent email occasionally: "I sent one email [the past week] but got it back - something wrong with the email address."

The Women's Political Network was the only Womenslink organisation with a Web page; the administrative worker was not sure of its value:

We actually have a Web site on Compuserve and I don't remember the address. I put the Web page on, but we haven't had any emails from people, so I'm not sure whether it was attractive enough for them.

She found the Web and email about the same in terms of usefulness. Unlike the other staff members interviewed, she used the Web fairly often to search for information for the organisation. The project worker had also used the Web; her experience was more typical:

It's very long-winded. By the time you go to try to find anything that you don't have the address for, it can take forever. I wouldn't be so keen on it unless I was looking for something specifically. As far as browsing goes, you could spend three or four hours browsing.

The Women's Political Network was a steady contributor to Womenslink, with the administrative worker producing all the Womenslink messages for the organisation. By the end of the 124-week

study period, she had written 45 messages, or nine percent of the total Womenslink content. However she believed that Womenslink was not being used to its full potential because it was easy to forget about the list when it was not being used regularly.

Political participation

Given that the organisations primary focus is political education for women, they use the Internet for political work. They found it particularly useful for gathering position papers from the various political parties in Northern Ireland. The administrative worker noted that the political parties are very Internet-oriented and will direct information-seekers to their respective Web sites.

Social capital

The Women's Political Network believed that networking with other women's organisations was a priority but the Internet played a very small part in this activity. The project worker said the most of the women's groups she worked did not use computers or did not have staff literate enough with IT to produce a Womenslink message. The Women's Political Network did not publish a newsletter but posted monthly mailouts to a mailing list of more than 250 names.

The administrative worker said that Womenslink was "very useful" for letting the other groups know what they were up to. Once she had a number of tickets to sell for a raffle and sold quite a few after sending a message to Womenslink. Her experience suggests social capital value in the Womenslink network.

The project worker, who did not contribute to Womenslink, said she did not know the rural women's organisations on Womenslink because her own organisation was urban-based. Again, this highlighted the issue of needing to be familiar with members before contributing to Womenslink.

Linking global and local

The project worker was working with a group in the former Yugoslavia and used email for exchanging administrative information such as minutes of a meeting. She said that:

It's very handy and so much cheaper than phone calls. I do like personal messages, especially from my friends in the former Yugoslavia. They'll be writing about business but then they'll write something on it like have a nice day, which is nice to receive over the computer.

Her comments highlighted the usefulness of email for global networking with groups with which she was familiar.

10.4: Case study of the Women's Rural Network

The Women's Rural Network is an organisation providing support and services to 17 grassroots women's groups in their rural county. Of the three staff, the organisation's administrative worker and coordinator were interviewed for this study in early 1998. By the end of the study in December 1999, two of those three staff members had left and been replaced.

At the time of the interview, the Women's Rural Network was part of a special programme subsidising the cost of computers and the Internet - they received a free computer and Internet connection, and were reimbursed for the phone cost of their time online. Despite the subsidy, however, they were not frequent Internet users. This was to change later in the research period when a new coordinator came on board.

Participants - and barriers to participation

At the time of the interview, all three staff members - the original coordinator, administrative worker and project worker - had computers; only the coordinator's computer had the Internet connection.

The administrative worker said she found the Internet "fascinating" but she and the project worker had difficulty accessing it when the coordinator was using her computer:

You don't like to go and interrupt her and say you want to use it.... If I had the access, I would be using it more often... I haven't gone into the Internet, email the past week. When it was on my own computer, I would tend to use it more but since it's on [the coordinator's computer] I don't want to intrude on her space, because she's very busy.

Production process

Email was the organisation's primary use of the Internet. On average the organisation received about seven or eight emails a week. When an email message arrived for the administrative worker or project worker, the coordinator would let them know verbally that it was there. She did not print out the message because "printing them out would defeat the object." The administrative worker believed email was a "marvellous" way to organise meetings of a support group of administrative workers she was part of. The coordinator sent on average three emails a week and saw email as "like any other facility in the office," to be used when needed, especially for leaving messages for people difficult to reach by phone. She was not in the office every day and did not check the email every day she was in. Like another coordinator interviewed earlier, she usually checked her email after working hours:

I always check the email before I go in the evening, whereas I always check the post when I come in in the morning. It's because it's about changing your way of work and looking at things, and I've always had phone calls and mail in front of me when I came in but I haven't myself trained to check the email as well as checking the actual mail. So it's about changing your mindset and your way of working as well. The email is an afterthought... I haven't been in the office since last week, so I haven't checked the email. You're getting me at a bad week. We've had so many crises this week.

The Women's Rural Network did not have a Web page. The administrative worker had used the Web for searches in a very limited way - "It wouldn't normally be part of something I would do," she said. The coordinator also had limited use of the Web and believed that her time constraints prevent her from using it more often:

[The Web] is one of the luxuries I haven't been able to use. It's a time issue, I would like to use it more. Having said that, having used it, having tried to access stuff a couple of times, I found it frustrating to use in terms of getting the specific information that I need. There's limited stuff available on rural women, and I just spent so much time actually trying to get the stuff on the Internet... because time is the most important resource that we have... It ends up leaving you frustrated with the technology. I know the problem isn't with the technology or the Internet, I know it's with my not knowing how to get the most out of it.

Their experiences with the Web were typical of staff in most women's organisations surveyed.

Of the four organisations in the case studies, the Women's Rural Network was the most active contributor overall to Womenslink; however, most messages from the organisation were produced in the last 12 weeks of the 124-week study period, when the new coordinator came on board. In total, the organisation produced 50 Womenslink messages, 10 percent of the total Womenslink messages. The administrative worker did not use Womenslink although she knew all the administrative workers on Womenslink. She said that if Womenslink were to become more active, it would mostly affect the coordinator.

Social capital

Networking with other women's organisations was a priority for the Women's Rural Network but the Internet played a very small part in that activity. None of the their member women's groups had an Internet connection, because of the lack of funding, explained the administrative worker:

Most of them wouldn't use computers and are operating out of someone's home. The majority of the letters coming in to put notices in our newsletter would have been written by hand, which leads me to believe they don't have computers... The groups wouldn't have their own offices. They'd be running out of a church hall or a community centre. So in that case, they wouldn't have a computer because it wouldn't be safe. Their funding tends to go on tutor costs, heating and lighting.

The Women's Rural Network was actively supporting the development of computer and Internet skills among women in their county. They owned a suite of eight laptop computers let out around the county to different women's groups who used them for training. This service was very popular, booked out a year in advance for the third year running. The organisation was also planning to call in some of the women to teach them on the Internet.

The organisation sent a newsletter periodically to more than 550 women and women's groups in the county. They also did a monthly mailout advertising the events and activities of their own organisation and other women's organisations in their network. The coordinator believed that Womenslink might be a good way to develop links with other women's organisations that were closer geographically than those in Belfast. She noted that the Women's Rural Network had closer links with Belfast, where the networks were centralised. Even though she was not an active Womenslink user, she was "very anxious" that Womenslink should continue, adding that:

I think its potential will only be realised gradually as we become more used to using it as a tool as opposed to picking up the phone. But I think all of us have a lot of changing our ways of thinking and our ways of accessing information and getting feedback from people. I would like to see it continuing and expanding.

Public sphere

The coordinator believed that online discussions on topical issues were a primary benefit of Womenslink. She said that she:

... loved when the Womenslink was set up first, the discussion about the presidential elections. I loved those debates because it's getting different perspectives. I like those more than the business/administrative [messages] because it's food for thought.

Her comment again highlights the value of Womenslink exchanges for readers, that one can derive value simply by reading messages. Her comments also suggests that Womenslink may have a value in being a "diversion" from administrative work.

Linking global and local

The coordinator mostly used email to keep in touch with friends and contacts abroad: "Places that I've lived before, they send me emails just to keep me up to speed on what's going on." As well as highlighting the value of email for maintaining international relationships, he comments also suggest the social capital value of this activity.

10.5: Feedback from Womenslink members (1999)

The goal of the Womenslink feedback session, held in December 1999, was to discuss Womenslink issues and develop some draft Womenslink groundrules - the need for groundrules having been raised by Womenslink member organisations previously. Prior to the feedback session, the discussion guide was emailed to participants, and two members who could not attend the feedback session responded by email. Two key issues for them were trust levels and discussion of political issues. The email response of one participant is below:

Q2. Building trust, relationships - Does WomensLink in any way(s) help to build trust and relationships with other WomensLink members?

A: No, not the way it currently operates. I don't feel as if I know whom I'm communicating with, and consequently am slow to be open on the network. I see this as a key issue which needs to be addressed. (And I think tomorrow's meeting will help address it...)

Q3. Political activities, organising - Does WomensLink in any way(s) help the political organising activities of your organisation?

A: I am surprised at the complete lack of discussion on the network about the recent HUGE political changes we have been experiencing... if we don't discuss these kinds of issues - or at least refer to them I wonder at the potential for women'slink to be a useful communication tool for women to discuss political matters of any kind... (I think its probably linked to 2 above, and also to a culture of not openly discussing politics ...)

The issues she raised in her email were central to understanding Womenslink and became the basis of key discussions at the feedback session. Twelve women from six Womenslink member organisations participated in the feedback session.

Participants - and barriers to participation

Several participants expressed surprise that the Womenslink participation rate was reported to be 80 percent of member organisations overall; they said it seemed much lower and they were aware that some Womenslink member organisations had never contributed to the list. Some participants believed there would be more contributions to Womenslink if everyone knew each other personally. Others believed that each Womenslink participant knew at least three or four other organisations on the list and that this shouldn't be a barrier.

Several participants said that they did not have time to participate in Womenslink because they were too busy with other work. They also believed that their participation would increase if the computer on their own desk were connected to the Internet rather than a central computer they sometimes had difficulty accessing. The organisations without a separate line for the modem/fax

also found it difficult to find time when the phone line was free to access the Internet, or were discouraged by other staff from tying up the phone line for Internet use.

Production process

Several participants raised technical questions, such as how to read the Web postcards circulating on Womenslink. It was obvious that some were not able to access the Web pages linked by URLs to some Womenslink messages.

One participant said she didn't believe Womenslink was used effectively because not enough member organisations were contributing information. She believed that too much of the information flow was one-way, and that in order to make Womenslink "equitable," members would have to be encouraged to send out information, "particularly as funding is going to get more competitive, and to come together around policy." Other participants said the fact that only a few Womenslink member organisations sent most of the messages was contributing to the "clique effect."

The session participants identified a need for "groundrules" for participation on Womenslink. During the session, a draft list of groundrules for Womenslink member organisations was drawn up and agreed by participants; these were in effect guidelines for the production of Womenslink by its members. They are reproduced below²⁸:

1. Womenslink works well when members contribute information regularly - so it's each member's responsibility to send messages to Womenslink about items of interest.
2. As well as exchanging information, we can make Womenslink a safe place for open discussion and debate - so take a risk and say what you think (but no racist, sexist or sectarian messages!).
3. Always sign your messages.
4. Only Womenslink members should send messages to Womenslink. Please do not include the Womenslink address in bulk emails as this can lead to outsiders using the Womenslink address by accident.
5. Follow good Netiquette: don't send "chain e-mail" to Womenslink, don't send messages about computer viruses to Womenslink (contact Patricia at WRDA if you are concerned about a

²⁸ This listing of groundrules was subsequently circulated by the WRDA on Womenslink for feedback from other members, but there was no feedback.

computer virus), don't attach big files to Womenslink messages, and send text-only files whenever possible.

6. Remember that you can also email individual Womenslink members directly, if your message concerns only one other Womenslink member.

7. Remember that some Womenslink members are more comfortable with email or have easier email access than others.

8. Make an effort to attend the Womenslink gatherings and get to know other members.

9. If you decide to stop being a Womenslink member - temporarily or permanently - you can unsubscribe by sending an email to linkup@wrda.net. You will always be welcome back!

Social capital

Participants were asked whether being on Womenslink helped build trust with other Womenslink member organisations.

One participant who personally knew everyone on Womenslink and saw most of them fairly regularly said that she couldn't say whether Womenslink helped to build trust, although it might add to it. Another said she would not use the word "trust" in that context - she trusted everybody on Womenslink but her reason for using the list had little to do with trust; she was primarily interested in exchanging information useful for her work. She believed it was necessary to meet someone face-to-face before trust could develop, and then from there it would be possible to use email to keep the relationship going. Another participant also believed that "trust" did not come into her activity with Womenslink; she would know some of the staff at other Womenslink member organisations and that was something separate, and she would be informal or chatty with them rather than the ones she didn't know. Her primary interest in Womenslink was circulating a message and receiving an immediate response from a number of other member organisations, "where if you do it through the post, that takes ages." A participant from a new Womenslink organisation who had not used it yet said she saw Womenslink "a bit like writing to pen friends. You may not meet them now but somewhere along the line you will meet them and think oh, that's the person. I see it a bit like pen-friending." A long-time participant on Womenslink believed that Womenslink "does strengthen relationships we already have. I'm not the world's greatest responder. It's a great way to keep in touch with the rural groups as well." Another regular Womenslink contributor believed that Womenslink was useful for sustaining relationships. As well, she would seek out staff of Womenslink member organisations she had never met if she went to their organisation for other reasons, to make a personal connection.

Public sphere

The question was raised why there was a low level of discussion on Womenslink of political issues in Northern Ireland, particularly in the previous two weeks when the new Northern Ireland Assembly was being established.

Participants then described a key issue related to Womenslink as a public sphere: they said it was difficult or even impossible for a staff member of a women's organisation to express an opinion publicly or on Womenslink about any contentious issue, especially Northern Ireland issues, because her personal opinion would be perceived as her organisation's opinion. All the participants agreed that it was very difficult to discuss politics in Northern Ireland on Womenslink. They described a culture and environment in which discussion of political issues was avoided in public or with people they did not know, and although many staff using Womenslink would know some others on the list, they would not know everyone.

Several participants said that "people have a fear historically of where the information goes," and that email was not necessarily safe because of "the fact that it can be printed up with your name on it." One participant said: "You don't want to write something up that may seem a bit nationalistic because it might insult or offend, particularly if it's taken out of context." Another added: "You can be targeted for your opinion around here, it's the culture of the place. You're not free to make an opinion."

A further question posed to the group was if it were possible to have political discussions on Womenslink, and the participants agreed that it was possible, only very difficult. One suggested that the discussions could be more around policy rather than politics, and that now that the new Northern Assembly had been established, it might be easier in the future to talk about these issues on Womenslink.

Linking global and local

The question was raised whether Womenslink made them feel part of a larger, global women's movement.

One participant who was a heavy Internet user said that it was more the Internet rather than Womenslink that made her feel part of a larger movement because she spent time looking at Web pages of women's organisations in the US and elsewhere. None of the other participants believed that either Womenslink or the Internet made them feel part of a larger women's movement, although several thought it had the potential to do so. One participant described her experience of being subscribed without her knowledge to an Internet mailing list which linked women's

organisations in rural Australia. She unsubscribed from the list after a month, at which point she was deleting all the messages without reading them because "it's not directly in our line of interest." She knew other Northern Ireland women's organisations that had also been subscribed without their knowledge to the same Australian mailing list and had turned to her for help in unsubscribing.

The findings from this chapter be discussed in the next, final, chapter in the context of the overall findings of the research.

Chapter 11: Discussion and conclusions

This chapter brings together the various strands of Part II in the context of the analytical framework. The discussion under each element of the framework includes the original research questions, analysis of the findings, the links with the theoretical issues and previous research in this area, and the usefulness of the methods and triangulation of methods. In light of this discussion, revisions to the analytical framework are made where relevant along with suggested methods for future research.

The last section of this chapter, 11.8, makes some final conclusions about the overall research and the analytical framework. As discussed throughout this thesis, the framework generates a range of research tools for exploring the structural, social, political and cultural factors involved in the production and use of alternative media on the Internet.

11.1: The participants

The first element of the analytical framework was the participants. Analysis focused on the socio-economic and structural elements that shaped the profile of participants of the alternative media forms and processes on the Internet. The research questions were:

*Who participates in the alternative media production, in terms of their socio-economic status, gender, geographical location, language and other factors?

*What are the restraints and barriers to accessing the technology?

The research findings about women's organisations in Ireland and alternative media on the Internet were primarily at the level of organisation. The VSIA research found that only a minority of Irish women's organisations were using the Internet in 1996 and 1997, when the early surveys were conducted. However, by the latter stages of the Womenslink research, there were many more women's organisations with an Internet connection. Barriers and restraints to Internet access were identified on two levels: the organisation, and within the organisation. On the level of organisation, the significant barriers to obtaining an Internet connection were: the cost of the technology combined with a low organisational income; the lack of sympathetic computer and Internet-related information and support, especially in rural areas; the lack of affordable training in rural areas; and a lack of knowledge on the part of the organisations about training and computer system requirements. While there was no necessary link between low income and "low-tech" or high-income and "high-tech," it was clear that structural restraints and barriers were pervasive in shaping which women's organisations were using the Internet. The outcome was that the higher-income, best-resourced, more highly-professionalised, and urban women's

organisations were using the Internet more than other women's organisations. The early survey research found that these divisions between the "high-tech" and the "low-tech" women's organisations were increasing over time.

Within women's organisations, barriers and restraints to using the technology included: lack of time for training and to practice using the Internet; having only one Internet-linked computer in the organisation that was not easily accessed by staff; having to share the modem line and the voice telephone line; technical problems accessing the ISP; high staff turnover rates; and the difficulty of obtaining training or information about advanced computer needs, such as LAN networks within the organisation. The outcome was that within organisations, there were significant differences among staff and volunteers regarding ability to use the Internet. There was also some fluidity between Internet users and non-users or less frequent users, in that in some of the organisations, incoming email was printed out for or read out to others and emails were sent for and Web searches performed for other staff members who did not use the Internet. The research did not shed much light on the reasons for the differences between staff members regarding their use of the Internet. For example, it was not clear why the administrative workers using Womenslink reduced their participation on Womenslink while the organisation coordinators increased their participation during the same period. Was it a question of Womenslink being perceived as more important in the organisation and therefore of more direct interest to the coordinators? One of the shortcomings of the research methods used was that the data collected about the staff members during the in-depth interviews included only their job title and not their socio-economic background, information which might have led to a deeper understanding of why participation rates with alternative media on the Internet varied significantly among staff members.

The findings complement earlier research on Internet use in women's organisations, especially Kole (1998) and Gittler (1999) which found unequal access to the Internet among women's organisations on a global level. Specifically, the current research established that these inequalities exist on a national level in Ireland. The findings corroborated those of previous research and communications theory that Internet access is highly uneven (Golding, 1994; Murdock, 1986; McChesney, 1995; Schiller, 1998). In particular, the findings highlighted the need for future research to focus on the organisational issues involved in access to technologies to produce alternative media on the Internet. Perhaps future studies could include a review of literature on IT use in commercial organisations, which may have some similarities to social movement organisations.

The situation of unequal access to the Internet in the women's sector in Ireland does present an obvious challenge to the production of alternative media on the Internet, which aims to be as

grassroots as possible. Among other things, it could lead to a situation where the voices and perspectives of the best-resourced women's organisations are increasingly represented in alternative media forms and processes on the Internet, with the grassroots women's groups, especially those in rural areas, increasingly marginalised. In terms of the theoretical issues raised in earlier chapters, the findings support Lisa McLaughlin's (1993) concern that alternative media processes may also be exclusionary and that media practices which are exclusively "alternative" may fail to address the hegemonic structures of the mainstream public sphere.

The research findings highlighted the need to revise the analytical framework to include consideration of the organisational factors involved in shaping the profile of participants. The research questions in the analytical framework could be revised as follows (revisions in bold):

1. Participants:

*Who participates in the alternative media production, in terms of their socio-economic status, gender, geographical location, language and other factors?

*What are the restraints and barriers to access, **by individuals, by organisations, and within organisations?**

Looking back at the research methods used, each did have its weaknesses but together they formed a good solid approach to gathering data on participants. The strength of the postal survey was the quantitative data on levels of access by organisations; this method was unique in its ability to gather large-scale data of this kind and its obvious weakness was the lack of qualitative data gathered. The telephone survey was useful for gathering both quantitative and qualitative data about Internet access and use by and within organisations but was limited in its qualitative possibilities, largely because the researcher needed a higher level of trust with the respondents to gather more in-depth qualitative data; obviously it was difficult to develop this trust level in a once-off phone call. The participatory approach was very useful when combined with other methods. The quantitative aspect of the content analysis was successful for data on the levels of participation in Womenslink by individuals and organisations over time. The focus group and feedback session were good for qualitative data on restraints and barriers within organisations, and the in-depth interviews were able to gather data on individual factors. As noted above, one deficiency of the data was the lack of socio-economic background data on individuals; this kind of data could be gathered in future research by in-depth interviews in a situation of trust developed through a participatory approach. These methodological approaches are summarised in Chart 9 (Appendix).

11.2: The production process

The second element of the analytical framework was the production process, focusing on analysis of the socio-economic and structural elements that shaped the production process of alternative media on the Internet. The research investigated:

*The media form or process and the extent to which it allowed interaction between sender and receiver

*Whether the media production was democratic and participative or rather if some participants dominated the process

There were considerable differences among the media forms and processes on the Internet regarding their levels of use and interactivity. The research looked at four different alternative media forms or processes on the Internet.

Email (one-to-one communication)

The VSIA research found that email was by far the most common media form or process produced on the Internet by Irish women's organisations. In 1996 it was virtually the only use of the Internet by women's organisations, and in 1997, email was still the most common use of the Internet. The 1997 survey found that most women's organisations were not using email on a regular basis. The timing and frequency of email production varied among the Womenslink member organisations, with some making this a daily activity and others using it less frequently. Within the Womenslink member organisation, email use varied widely among the staff members, with some producing and receiving emails much more often than others. There was some fluidity users and non-users of email; some staff members sent emails on behalf of others and printed out or called out incoming email messages for others. It was a common practice for staff members to use their organisation's email to communicate with friends, especially those in other countries, outside working hours; for some this was their primary use of email. During work hours, email was produced primarily for administrative uses, especially to reach people and organisations difficult to reach by phone. In summary, email was the most useful and most often-produced media form or process on the Internet for women's organisations; however the research uncovered little about the production and use of email beyond basic patterns of use.

Looking back at the review of published studies, some had found that email was a social backstage for communications away from the public eye. The empirical research did not include a content analysis of private email that would have led to more in-depth findings about the production of this media form; this would be a useful focus for previous research. The research did find that a primary use of email was to keep in touch with friends, particularly those abroad,

suggesting that email may have a specific social and social capital function in the women's movement, particularly in the context of linking social actors globally.

The Web

The research found that the Web was the second most common media form or process on the Internet used by Irish women's organisations; however they used it much less often than email. To the extent that they used the Web, women's organisations used it much more often for viewing or downloading information than for publishing information. In 1996, only a few women's organisations surveyed had used the Web as an information source. A few more of those surveyed in 1997 survey had used it for that purpose but none had published a Web page. Among the Womenslink member organisations, only one had published a Web page by 1998; the staff member who produced and monitored it questioned whether it was of much value to the organisation. Of all the Womenslink staff members surveyed, only one reported that the Web was useful as an information source. The others found it time-consuming, confusing and even overwhelming, and the quality of information was not satisfactory for them. In summary, the use of the Web as an information source was growing among Irish women's organisations but there were very low rates of Web publishing in this sector. The research did not analyse the production processes of Web pages produced by women's organisations; very little is known about this process. It would be useful in future research to look at whether the use of the Web will have increased by women's organisations, especially as a site for publishing information. The findings of the current research suggest that the Web will continue to be a marginal media form in this sector.

Internet mailing lists

The research found that mailing lists were the third most common alternative media form or process produced on the Internet by Irish women's organisations although they were hardly used. The 1996 survey found that no women's organisations were using mailing lists. The 1997 survey found that a few were using mailing lists. Among Womenslink member organisations, only one had an experience of mailing lists aside from Womenslink; that experience was negative, with the subscriber feeling overwhelmed by messages which were of little value to the organisation. In summary, Internet mailing lists in general had low rates of use in the women's sector, and Womenslink needs to be placed in this context. It would also be useful for future research to investigate whether the use of mailing lists has increased by women's organisations; because they are based on email messages, they may prove to be much more popular than the Web as a means of information exchange.

Newsgroups

The research found that newsgroups were the least commonly-produced media form or process on the Internet by Irish women's organisations. The 1996 survey found that no women's organisations were using newsgroups, and the finding was the same in the 1997 survey. The research did not look at the production processes of newsgroups by women's organisations.

Womenslink

Turning to the production process of Womenslink, there were a number of findings. One was the fluidity between Womenslink messages and other media forms on the Internet, when for example Womenslink messages contained URLs to Web pages or attached files with multimedia content. Of the entire 500 Womenslink messages, 31 contained URLs to Web sites, or six percent of content overall. There were also five Womenslink messages with attached multimedia content, or one percent of content overall. In future research in this area it would be useful to investigate if this fluidity among media forms on the Internet is increasing, and also the extent to which the participants are accessing the URLs and the attached multimedia forms. At the Womenslink feedback session, several participants said they did not know how to access these URLs and attachments.

A significant finding about the Womenslink production process was that as the number of participants grew on Womenslink, and the numbers of messages increased, the participation rates dropped: from 100 percent down to 56 percent, although participation rose to 76 percent at the end of the study period. The qualitative research with Womenslink participants found that the production process became less participatory as the participants were less familiar with each other; this will be discussed further shortly.

Regarding the extent to which the production process was democratic, it was clear from the start of Womenslink that some participants were producing much more content than others and that pattern continued throughout the research period. The top three organisations produced about 50 percent of the Womenslink messages, and the top three individuals produced 50 percent or more of the content. At the end of the research period, the Belfast-based organisations produced more than the organisations outside Belfast, and the organisation coordinators produced more than the administrative workers. The research findings regarding the unequal Womenslink production levels among participants are in line with findings of previous that some participants will dominate the production on collaborative media fora. This of course raises the question about the extent to which Womenslink and similar Internet mailing lists can be "alternative" in the sense of

supporting more democratic and participatory production processes than those in mainstream media forms.

It was significant that at the feedback session the general feeling was that Womenslink participation rates were low. In particular, some members believed that others were not sending in enough information and that this lowered the value of Womenslink for everyone. Womenslink participants spoke of a Womenslink "clique" producing messages and the need to break that image. The feedback session included development of groundrules for Womenslink that included responsibilities of participants to send information to the list. While it is possible that this situation corroborates Dutton's (1996) conclusion that rules of order are necessary on participatory media fora, the research did not investigate the extent to which the Womenslink groundrules were subsequently respected by the participants. It would be useful to know if, for example, the Womenslink groundrules were able to raise the levels of trust among participants and the social capital value of the list or whether the groundrules were simply ignored.

The research findings point to several areas where the analytical framework could be revised for future research in this area: the first is the interaction between the media forms, with the idea being that in the future there may be more fluidity between email and Web pages and that this may encourage new kinds of relations between the media producers and their audiences. The second area is the rules of production for alternative media on the Internet.

The analytical framework could be strengthened in another area that was not explored by the research: ownership of the production technology. In the case of Womenslink, the owner was Dublin City University and the researcher; it would perhaps have been useful to examine the implications of this ownership and the influence of the owner(s) on the Womenslink production process. For research on Web pages, the owner of the production technology would be a more central concern, because participation in the production of Web pages is much less interactive than for the collaborative media forms like mailing lists, with the technology owner having considerable control over the process. For this reason it should be reflected in the analytical framework. The revised question areas are below and included in Chart 8 (Appendix).

2. Production process

*The media form or process and the extent to which it allows interaction between sender and receiver

***The extent of fluidity or interaction among media forms**

*Whether the media production is democratic and participative or rather if some participants dominate the process

***Whether rules of production are agreed and respected by participants**

***Ownership of the technology and owner's influence on production**

***The changes in production practices over time**

Looking back at the research methods used, each did have its strengths and weaknesses and the triangulation of data was effective in producing a fairly thorough picture of the production process of Womenslink. It would have been useful to have had much more data on the production of email, given that this was the most frequently-produced media form by women's organisations. Email use could be investigated in more depth in future studies through in-depth interviews and content analysis; obviously there would be significant privacy concerns to address. Chart 9 (Appendix) includes a summary of the suggested methods and areas for future research on production processes of alternative media on the Internet.

11.3: The content

The third element of the analytical framework was the media content, with the questions highlighting the links between content and the experiences of the participants. The research questions were:

*Does the content reflect the lived experience of the media audience?

*Does the content challenge the dominant codes, create and use alternative codes; is it creating and testing out new ideas?

*Is the audience capable of criticising and correcting the media content?

All the research findings on content concerned Womenslink content, obtained through the content analysis. The first question was the extent to which the Womenslink content reflected the lived experiences of the audience, with the analysis measuring this partly by the number of "chat, administrative and internal" messages circulating on Womenslink. While the content did contain a significant number of these messages, they steadily decreased over time, rising again with the last Edition. As well, the number of messages referring to the personal experiences of Womenslink participants decreased over time, with none produced in the last Edition studied. In the context of the theoretical concerns about alternative media content, the Womenslink research did meet the challenge posed by David Sholle (1995) that content should reflect the lived experience of the audience. However this type of content did decrease on Womenslink, suggesting a further link between the rise in the number of participants and the decrease of content reflecting lived experiences, similar to the link between the rise in the number of participants and the drop in participation levels. Again, this raises the question about the extent to

which mailing lists like Womenslink function as "alternative" media forms as the number of participants grows.

Turning to the second question, the analysis found examples of Womenslink content challenging dominant codes and testing new ideas, in particular collaborative creation and testing of new ideas. Again, however, this type of content became less frequent over time. This finding can be situated in the context of theories of social movements - by Alberto Melucci (1996), Nancy Fraser (1992) and Manuel Castells (1997) - in which alternative media could be a site where social movement actors test out new ideas and challenge dominant codes. The research found that although it is possible for collaborative media forms on the Internet to have this function for social movement actors, this situation is complex and may also be linked to the number of participants and the extent to which they are already familiar with each other.

The final question, whether the Womenslink audience had the possibility to correct Womenslink, is answered in the affirmative by the high number of messages mostly about Womenslink itself, some of which involved reflection about Womenslink as a media form, and taking an active role in shaping Womenslink. However the analysis also highlighted the difficulty of making group decisions about changes to Womenslink; at several points in the study period, participants sent messages asking for feedback on suggested changes to Womenslink which did not draw any response. Subsequently a list of Womenslink groundrules was drawn up at the feedback session at the end of the research period, but it was not clear whether participants would respect the groundrules or whether new participants would take them on board. This aspect of the analysis reflected the concern of Peter Waterman (1990) that the alternative media process should organise an audience capable of criticising and correcting the media, and the perspective of Dutton (1996) that rules of order were necessary for collaborative Internet media, but it also highlighted again the difficulty of collectively developing critical reflection and rules and enforcing these rules.

In light of these findings, the analytical framework could be strengthened slightly for future research in this area by adding a question about changes in the content over time. The revised list of questions, below, is included in Chart 8 (Appendix).

3. Content

*Does the content reflect the lived experience of the media audience?

*Does the content challenge dominant codes, use alternative codes, create and test new ideas?

*Is the audience capable of criticising and correcting the media content?

***Do these aspects of the content change over time?**

Regarding the methods used for empirical research on alternative media content on the Internet, the content analysis performed for the research was a good approach, although it would be useful in the future to further the thinking on how to identify creativity and "alternative codes" in media content. This analysis could be usefully triangulated with in-depth interviews and focus groups/feedback sessions to ask questions directly to participants about the extent to which the content reflected their lives and was creative and so on. These suggested approaches are shown in Chart 9 (Appendix).

11.4: Links with political participation

The fourth element of the analytical framework was its links with political participation. The research explored:

*Whether alternative media linked or promoted links with the mainstream political process

*Whether they promoted involvement in wider movement and organising activities

In Chapter 2, Herman and McChesney (1997) concluded their review of Internet developments by suggesting that during the 1990s, many Internet users grew disillusioned with the Internet as a site for alternative politics and culture. However they also pointed to one significant feature of the Internet: its potential for supporting alternative media on the Internet for political organising. This was the starting point of the investigation of alternative media on the Internet.

The first question is whether the alternative media linked or promoted links with the mainstream political process. The VSIA research found that none of the women's organisations surveyed in 1997 reported using the Internet for linking with mainstream politics; indeed none mentioned mainstream politics as a focus for their general activities. However, in the focus group the same year, participants proposed that the Internet would be useful for lobbying and influencing public opinion. The Womenslink research made a number of findings in this area. Looking first at the content analysis, 46 messages, or nine percent of content overall, had links to mainstream politics, with the levels of this kind of content staying fairly consistent over time. Much of this content concerned politics and policies in Northern Ireland and other content included mainstream politics in the Republic and the Third World. The content on Northern Ireland was often presented within a feminist perspective or focused on women's issues, such as content about the Northern Ireland Women's Coalition and the participation of women's organisations in the Civic Forum. Content on Northern Ireland was also often presented in a distanced way, with few personal opinions on the issues raised, or occasionally in a humorous way.

Significantly, participants at the Womenslink feedback session said it was difficult to discuss mainstream political issues on Womenslink. They described living in a culture in which key political issues - such as positions on the Good Friday Agreement - could not be easily discussed in public fora. This finding suggested the limits for Womenslink as a vehicle for linking with mainstream politics in Northern Ireland. On the other hand, the interviews with staff of the Womenslink member organisations found that their work did not focus on mainstream politics or lobbying. This situation echoed Manuel Castells (1997) suggestion that social movements had different goals and that the Internet would be most useful to those with clear mainstream political goals. The review of published studies suggested that social movements and groups used the Internet in a way which reflected their general political orientation. Alternative media on the Internet with the strongest mainstream political links were produced by individuals and organisations grouped together around having a common enemy, sharing a focused mainstream political goal, and wanting to influence public opinion or the mainstream political process. The Womenslink organisations, in comparison, did not have this focus on mainstream politics and it follows therefore that they did not use Womenslink extensively to link with mainstream politics.

The second issue is whether the alternative media process on the Internet promoted involvement in wider movement and community organising activities. Looking first at the VSIA research, the surveys of Irish women's organisations found that they were involved in a wide variety of networking and organising activities with women and other women's organisations, and that the Internet played no part or a very small part in these activities. The interviews with staff of Womenslink member organisations made similar findings. The Internet played almost no part in the movement and organising activities of the Women's Tri-County Network, primarily because none of their member groups used computers or the Internet; their primary communication vehicle was a regular newsletter and postal mailouts. Similarly, the staff of the Women's Rural Network organisation were not using the Internet actively for organising and women's movement activities with their members because none of them were online. Although the organisation was using email and Womenslink to network with other women's organisations and networks, this represented only a small part of their overall activities in this area. The coordinator of the Women's Urban Network was using the Internet to link with other women's organisations working on an international and a cross-border project, but she preferred face-to-face communications with more local contacts. Again, the Internet played a small part in their overall movement and organising work.

On the other hand, the content analysis of Womenslink found that the mailing list was used extensively to exchange information on the women's movement and organising around women's issues. It was difficult to say whether this production was merely a faint reflection of the larger organising and networking activities of the Womenslink member organisations, or rather

represented a new and significant addition to these activities, given that Womenslink played small part in the overall networking and organising activities of the Womenslink member organisations. In total, 97 messages - 19 percent of overall content - contained information or commentary on women's movement and organising activities. Some of this content was the feminist perspective of mainstream political issues described above. Most was information about events and issues in the women's movement in Northern Ireland, including, for example, conferences on the women's movement, public meetings and events, job postings in the women's sector, content supporting protests and actions, women's policy issues, arts and cultural events, and so on. Some content was about international women's movement activities; this will be discussed later in this chapter.

In light of the research findings, the analytical framework could be modified by removing the two general questions about the political links and asking instead a more direct question about the link between the alternative media on the Internet and the political activities of the participants, as follows:

4. Links with political participation:

***To what extent do the alternative media on the Internet reflect, complement or extend the political orientation, activities and goals of the participants?**

Looking at the methods used to gather data on the links with political participation, the content analysis was the most useful, with the data triangulated with the findings from the telephone survey and in-depth interviews. However, the survey and interviews did not ask enough questions about the political orientation and goals of the women's organisations; this would have been very useful information in retrospect. More data on this topic could be gathered in future qualitative studies. The methodological approaches for future research are summarised in Chart 9 (Appendix).

11.5: Links with social capital

Links with social capital was the fifth element of the analytical framework. The research looked at the different aspects of the relationship between social capital and alternative media on the Internet. Questions addressed:

- *Whether alternative media on the Internet helped to create, extend or strengthen support networks
- *Whether they helped create and consolidate common identities and communities
- *If they helped build trust among the participants
- *If they helped to build organisational capacity

The issue of social capital was central to this research primarily because of the link between alternative media and a social or cultural analysis of social movements but also because of the larger questions about the value of online communities. Chapter 3 discussed how new social movement theory was concerned not only with their political aspects but also with the cultural, identity, or social network aspects. Alberto Melucci (1989, 1996) was the theorist identified with analysing the social and symbolic expressions of social movements, suggesting that the Internet was primarily important for its role in maintaining the social relations of movement actors, particularly networks of friendship, support and common identity. Jan Fernback (1997) argued that individual identity is formed partly through contribution to the greater collective and that identity-formation in cyberspace could be linked to the structure of social relations that constitute the use of online communications, in particular the development of group norms for this activity. Critics of Internet communities stressed the importance of social capital for Internet communities, arguing that Internet public spaces needed to be based on a sense of collective identity, solidarity and destiny and grounded in real issues and real relationships. A central concern was the ability of Internet networks to facilitate relations of trust (Riedel et al., 1998).

The first issue is whether alternative media forms or processes on the Internet helped to create, extend or strengthen support networks. Looking first at the VSIA research, the telephone survey found that support work and developing support networks were primary functions of women's organisations and that the Internet played a very small role in these activities. The focus group found an ethos of sharing information and resources and a desire to use the Internet to further these activities. The interviews with staff of Womenslink member organisations found again that the Internet and the Womenslink mailing list played a small part in their overall support and networking activities. At the Womenslink feedback session, there was no consensus that Womenslink helped to strengthen support networks although one participant believed it did and another thought it was useful for sustaining relationships. However, Womenslink may have

extended support networks when it opened up to former staff of Womenslink member organisations and to independent consultants working in the women's sector - suggesting that the mailing list was linking a wider net of women involved in movement politics than women's organisations alone.

The second, related issue in this discussion was whether alternative media forms or processes on the Internet helped to create and consolidate common identities and communities. Again, the VSIA telephone survey of Irish women's organisations found that many women's organisations were very involved in community-building activities, both on a local level and among women's groups and organisations, but the Internet played a small part overall in these activities. There was some social capital value involved in producing and disseminating small media - such as newsletters and postal mailouts, and participating in local media activities such as contributing to parish bulletins and putting posters in local shops - and it was not obvious that complementing or replacing this local activity with Internet activities would provide the same community-building function. Future research could explore the relationships between these activities in more detail. The interviews with staff members of Womenslink organisations found that many used email to maintain relations of community and friendship with friends and work contacts, particularly those abroad. Maintaining friendship networks through email exchange was perhaps the most important function of the Internet in these organisations. Regarding identity-formation on the Womenslink list, several staff members highlighted the benefits acquired through reading messages on Womenslink, particularly personal opinions on topical issues. Again, however, there were constraints to these personal discussions on Womenslink, particularly as the list grew to include new members unknown to others.

The content analysis of Womenslink found a high level of content linked to previous messages. Overall, 87 messages - 17 percent of the content overall - was internal chat and administrative details, including news about staff members, "fun" messages, and various related messages such as poems, recipes, and jokes. The friendly nature of these messages and others on Womenslink highlighted the community-building function of Womenslink. However the Womenslink feedback session found that at least one Womenslink participant was put off by such messages and believed they contributed to the clique-effect on the list; it was certainly possible that others on the list had a similar response to this content. It was suggested at the feedback session that the way to break the clique-effect was for Womenslink participants to meet more often face-to-face; this raised questions as to the extent to which the list could build common identities among participants without physical contact. On the other hand, the high number of messages relating to women's movement organising, discussed above, also suggested that Womenslink served at some level to reinforce identities as movement actors.

The third, related, issue in this discussion of the social capital value of alternative media on the Internet is the extent to which they helped to build trust among the participants. One negative indicator from the content analysis of Womenslink was the appearance of unsigned messages in Edition 3, that grew in number for subsequent Editions, which perhaps served to discourage trust-building among members. The feedback from staff of Womenslink member organisations suggested that the word "trust" was not an appropriate description for the relationship among Womenslink members but rather that trust was something developed through face-to-face interaction, and that once established, it could possibly be maintained through computer communications.

The final question is the extent to which the Internet was able to build organisational capacity for women's organisations. The VSIA research found that many women's organisations wanted to use the Internet to build organisational capacity in the areas of: better communication links, better access to information and being more professional. However very few were using the Internet at the time. At the focus group, participants discussed how they could use the Internet to strengthen the capacity of their organisations through increased efficiency and cost effectiveness. The Womenslink research found some evidence of organisational capacity-building through Internet use although for most organisations the Internet was marginal to their operations. There was one specific area where Womenslink did offer support to its members grounded in real organisational needs - help and information about information technology. The content analysis of Womenslink found that 132 messages - 26 percent of Womenslink content - contained information and commentary related to IT. This included information about computer troubleshooting and support, training opportunities, various activities supporting the development of IT skills for women, discussion and links to Web sites of interest to staff members, as well as circulation and discussion of hoax virus messages. One obvious reason for this level of content around IT was that the women who used Womenslink often had the highest level of IT skills in their respective organisations, and so it made sense that they would use Womenslink as a way of accessing this collective expertise.

The research findings suggest the analytical framework could be strengthened slightly to explore more directly the relationship between alternative media on the Internet and existing networks and relations of support, and also the variety of participants' perceptions of the social capital aspects of the alternative media on the Internet. The revised list of questions, below, is also included in Chart 8 (Appendix).

5. Links with social capital:

***To what extent do the alternative media on the Internet reflect, complement or extend existing networks and relations of support?**

*To what extent do **participants believe that** they help create and consolidate common identities and communities?

*Do they help build trust among participants?

*Do they help build organisational capacity?

The research methods used to investigate the social capital aspects of the Internet were adequate but more rigorous examination of these aspects would have been useful. Future research could include participatory involvement, combined with: content analysis, for quantitative and qualitative data on content linked with common identities, relations of support, trust-building and organisational capacity-building; focus groups, feedback sessions and in-depth interviews for qualitative data on existing social capital networks and relations and perceptions of social capital aspects of Internet use. Chart 9 (Appendix) includes a summary of these methods.

11.6: Links with the public sphere(s)

The sixth element of the framework was links with the public sphere(s). The framework attempted to develop an understanding of the relationships between alternative media forms on the Internet and the wider public sphere, and also examine the complexities of alternative media forms and processes on the Internet as public spheres in themselves. The questions looked at:

*Whether alternative media forms or processes on the Internet were linked with the mainstream media and the wider public sphere

*Whether they operated with reliable sources of information

*If the participants could participate as private individuals and freely exchange ideas

In Chapter 3 it was noted that many authors had linked alternative media and the public sphere, with David Sholle (1995) defining alternative media as the practices standing in opposition to the mainstream media in terms of its structuring of access to the public sphere. Discussion in that chapter focused on a theoretical division which had developed in response to Habermas (1989[1962]) around whether the public sphere as described by Habermas was ever a singular public sphere or whether there were multiple public spheres, and further, if a singular public sphere were desirable in a social structure characterised by dominant social relations. Nancy Fraser (1992), with her "subaltern publics," and John Keane (1995), with his "micro-public spheres" developed the idea that democracy could exist within a framework of multiple public spheres. On the other hand, Lisa McLaughlin (1993, 1995) and Nicholas Garnham (1992) believed a single unified public sphere was necessary for democracy to function. Both Lisa McLaughlin (1993, 1995) and David Sholle (1995) believed that in order to have a transformative role, alternative media had to engage with the world of popular culture and politics, and in

particular, the mainstream media. This raised the question of the extent to which alternative media on the Internet were linked to the mainstream media in the wider public sphere, to ensure that the alternative views were heard within a wider audience.

The first issue in this discussion is whether alternative media forms or processes on the Internet were linked with the mainstream media and the wider public sphere. Looking at the VSIA research, the telephone survey of Irish women's organisations found that, especially in rural areas, they had extensive links with local media - such as regional newspapers - for information dissemination and that the Internet played no part in this interaction with the local media. Only a small number of local women's groups and organisations were publishing newsletters, suggesting that these local media outlets were satisfactory avenues for disseminating information. On the other hand, more of the women's organisations with an Internet connection also published newsletters, suggesting that the mainstream media was not an adequate outlet for their information-dissemination activities. The telephone survey also found that women's organisations generally had much less experience interacting with the mainstream media, whereas many environmental and international development organisations were adept at "using" the mainstream media to further their aims and views.

In the interviews with staff of Womenslink member organisations, none mentioned press releases as a means of disseminating information about their activities, although one press release was later circulated on Womenslink, indicating that at least one of the Womenslink member organisation used the mainstream media to publicise its activities. The only other link with the mainstream media that arose from the interviews was that the coordinator of one organisation used the Internet to exchange emails with a friend who was also a journalist in New York. The Womenslink content analysis found that very little content - only five messages, or one percent of Womenslink content overall - was clearly linked to the mainstream media. This included the press release mentioned above, two messages criticising mainstream media coverage, and two messages advocating contacting sympathetic women journalists on the Belfast Telegraph. This low level of discussion of mainstream media issues was in contrast to other situations described in the published studies, where some stood out for their extensive links with the mainstream media. As well, a noticeable feature of many of the messages on Womenslink, particularly the opinions exchanged, was that very little appeared to be informed by the mainstream media, with the writers preferring instead to focus on their personal experiences of the issue.

The public sphere discussion is also related to the wider issue, discussed earlier, of the low numbers of women's organisations with an Internet connection. The research found that there was strategic activity on the part of some women's organisations aimed at increasing the access of women and women's organisations to computers and the Internet, especially in rural areas. This

kind of activity could be understood as an attempt by the women's sector to widen access to the Internet and the public sphere on the Internet to other women and women's organisations and thus increase the audience for their alternative messages.

The other aspect of the public sphere discussion is how alternative media on the Internet functioned as a public sphere or an alternative public sphere. Habermas's vision of the public sphere was something that may never have existed in reality, as many critics have pointed out, but it serves as a normative description of an ideal sphere in liberal democracies. Chapter 3 described the central idea of the public sphere as opinion-formation. Three essential elements of a public sphere are: having access to adequate and reliable information sources; discussion and free exchange of ideas; and participating as private individuals, voluntarily and outside of institutional roles.

The Womenslink content analysis found that sources of information on Womenslink were generally reliable. Most of the content was information about issues of interest to participants, posted by the organisations themselves. In many cases, such as forthcoming events, the organisations knew personally about these events. Another feature of Womenslink was being able to correct erroneous information, which happened occasionally on the list, where the original message sender or another participant corrected the original information. However on Womenslink, staff believed there was not enough information circulating, so ensuring an adequate supply of information was a challenge for the mailing list.

The restraints to participation and free exchange of ideas have been highlighted as a major finding of the empirical research on Womenslink. The content analysis of Womenslink found that discussion on the list on topical issues diminished as the Womenslink membership grew, with the content becoming increasingly impersonal and detached. The interviews with staff of Womenslink member organisations found that in three of the four organisations in the case studies, staff were inhibited from sending messages to Womenslink because they did not know the other staff members on the mailing list. At the Womenslink feedback session, participants described feeling not free to express their personal opinions because their opinion would be perceived as the position of the organisation they worked for. All the staff members at the Womenslink feedback session agreed that it was difficult or impossible for a women's organisation staff member to express an opinion publicly on any contentious issue on Womenslink or other public fora because it would be perceived as an expression from her organisation. Staff believed that because email was a written format, it could be widely distributed and possibly be used out of context in the future. This issue was also raised in the interviews with staff of Womenslink member organisations, where the coordinator of the Women's Urban Network organisation said she hoped Womenslink could be used for discussion

on issues such as abortion but also noted that her organisation was the only Womenslink member with a policy position on abortion. On the other hand, the Womenslink list in the latter Editions began to take on new members who were independent consultants and not affiliated with any organisation; presumably these members did not face the institutional barriers to participation experienced by staff members.

Findings from the Womenslink feedback session highlighted the central question of whether it were possible to discuss issues on the mailing list that were not discussed in the outside world. Participants described a culture of secrecy and silence in Northern Ireland which inhibited discussion of political issues among people unknown to each other. All the staff of Womenslink member organisations agreed it was difficult to discuss such issues on Womenslink because, not knowing all the other members on the list, they were not sure how their opinion would be received. Staff members believed that "people have a fear historically of where the information goes," that information taken out of context could insult or offend, that people were "targeted for your opinion around here," and that they were not free to make an opinion. These comments highlight that Womenslink was perceived as a public forum, with associated restraints to free expression.

In light of the research findings, there are two areas that could be strengthened in the analytical framework. One is looking at possible temporal changes in the media form or process in the context of public sphere concerns. In the case of Womenslink, its expansion to include new members over time had an adverse affect on the quality of the discussion and its potential as a space for free exchange of ideas; it would be useful to look out for similar situations in future research in this area. The second is deeper understanding of the existing links with the mainstream media and the public sphere and the extent to which the Internet reflected and expanded those links. It may well be that alternative media forms or processes on the Internet merely reflect existing relations with the mainstream media and the public sphere rather than extend them.

A third potential area of concern for future research is the possible effects of commercial influences on alternative media forms or processes on the Internet. Womenslink was buffered from commercial concerns during the research period because it was produced on a university server and there were no costs involved to any participants. As described in the methodology chapter, when the research period ended, Womenslink was moved to a commercial server (Egroups.com). In exchange for providing free mailing list facilities for Womenslink, this commercial server sends out advertisements as part of every Womenslink message produced and distributed. It would be useful to find out if and how this commercialisation of the Womenslink public sphere modified the communications on the list. The revised list of question areas follows:

6. Links with the public sphere:

***The extent to which the alternative media on the Internet reflect, complement or extend the mainstream media and public sphere activities and goals of the participants**

*Whether they operated with reliable sources of information

*If the participants could participate as private individuals and freely exchange ideas

***If the public sphere aspects change over time**

***What are the influences of commercial forces**

Looking back at the research methods used to gather data about the public sphere element - the telephone survey, content analysis, in-depth interviews and feedback session - the triangulation of data was fairly effective, with some methods more useful than others. In particular, the participatory approach combined with the feedback session was very helpful in that it allowed the session participants to speak openly about issues which they couldn't speak about on Womenslink. In that context, the telephone survey was probably the least useful for encouraging frank discussion because of the limited opportunities for the respondent to build trust with the researcher. Suggested methods for future research are: participatory approach, combined with content analysis, for quantitative and qualitative analysis of 1) reliability of information, 2) level and quality of information and discussion on different issues, and in-depth interviews and feedback session for qualitative data on links with and opinions about the mainstream media and the alternative media on the Internet as a venue for open discussion. These suggested approaches are listed in Chart 9 (Appendix).

11.7: Linking global and local

The seventh and final element of the analytical framework was the ability of the alternative media form or process on the Internet was to link global and local. The research looked at:

*Whether alternative media forms or processes on the Internet helped to link local actors globally

*If they promoted or supported a wider global movement

*Whether they supported identity-formation or social and cultural networks amongst social groups globally

Globalisation was a theme running throughout the research. Chapter 2 discussed the growth of global telecommunication networks and the Internet, and Chapter 3 looked at theories of globalisation relevant to alternative media and social movements on the Internet. Manuel Castells (1997) believed that globalisation and "informationalization" were disenfranchising societies, with globalising forces encouraging both social atomisation and also pro-reactive social

movements. Tomlinson (1997) believed that the Internet was collapsing physical distance and bringing subordinate cultures into direct proximity with dominant cultures, thereby collapsing myths of "the Other." Mike Featherstone (1993) argued that a range of different responses were possible to globalisation. Annabelle Sreberny (1998) believed that the Internet could help to build global "networks of networks" of women's organisations.

Looking first at the VSIA research, the surveys of Irish women's organisations found that most women's groups were not involved in international work and most were operating within a local area. This contrasted with the VSIA findings for environmental and international development groups, who were more globally oriented and were using the Internet to link with their global contacts. More of the women's organisations with international operations had an Internet connection and were using it for this work, and other women's organisations without the Internet said they would consider acquiring a connection if they ever became involved in international work. The findings did not suggest that women's organisations would begin to make global links after acquiring an Internet connection, if they did not already have international operations. However, one example was found of a locally-based rape crisis centre using the Web to find information about rape crisis organisations abroad for its clients.

The interviews with staff of Womenslink member organisations found that many staff members were using email to keep in touch with friends or contacts abroad, and for some this was their primary use of the Internet. However with one exception, the organisations were not using the Internet to make global connections with other women's organisations because their sphere of operations was local or regional rather than global. The exception was the Urban Women's Network, which was working on an international project and had acquired an Internet connection to facilitate this work.

The research highlighted the difficulty of linking local actors globally using the Internet. The Urban Women's Network had subscribed to an Internet mailing list offering a news service about Israel but had been overwhelmed with messages and did not read them. At the Womenslink feedback session, a participant from another Womenslink member organisation described being subscribed without her knowledge to a mailing list linking women's organisations in rural Australia. She unsubscribed from the list after getting to the point of deleting all the messages without reading them, because "it's not directly in our line of interest," and she knew of other Northern Ireland women's organisations who had also been subscribed and unsubscribed for the same reason. These experiences point to the difficulty of linking local actors globally, when the local contexts or codes are unfamiliar to the other.

On the Womenslink list itself, 25 messages - five percent of Womenslink content overall - were linked to wider global issues or linked local actors globally, and six other six messages concerned International Women's Day activities but in a local context. All 25 messages will be described here: seven concerned global issues - including two about a Dublin conference on global women's networks, two concerning global feminism events on the Internet, one about the Beijing+5 activities to end violence against women globally, one announcing a new international women's magazine on the Internet, and one containing a URL link to the UN Hunger Site on the Web - all of which were emails originally from another source forwarded to Womenslink by staff members; five of the 25 concerned the US, including two messages discussing Mary Daly at Boston College, one information request from a student in Ohio, a message and Web postcard from a Womenslink regular on a study trip to the US, and a forwarded online petition about an American lesbian and gay campaign; three of the 25 included an online petition in support of women in Afghanistan; two messages were about the Kosovo appeal, including one from a Womenslink member organisation which had organised a local collection; two messages concerned the Third World Drop the Debt campaign; one concerned women in Indonesia; one raised the issue of the Vatican at the UN; one mentioned a relief fund for Turkey; one asked a question about refugees in Sri Lanka; and finally, one was a forwarded information request from a woman in Australia.

It was difficult to determine the extent to which the messages above - representing all the messages with global links produced on Womenslink over the 124 weeks of the research period - were significant in the context of supporting a wider women's movement or promoting the formation of common identities among women or feminists on a global scale. Most of the messages above were forwarded from another source, although in some cases the Womenslink member forwarding the message included additional commentary. At the Womenslink feedback session, with one exception, none of the participants believed that either Womenslink or the Internet made them feel part of a larger women's movement, although several thought it had the potential to do so. The exception was one staff member who used the Internet often and said that the Web, rather than Womenslink, made her feel part of a larger movement because she spent time looking at Web pages of women's organisations in the US and elsewhere.

The findings point to a situation where the alternative media on the Internet reflected rather than extended the global activities of Irish women's organisations. In this vein, the analytical framework could be strengthened by removing the three rather general questions and including instead one question more focused on the relations between alternative media on the Internet and existing links and relations with global issues and actors. The framework question would be:

7. Global:

***To what extent do the alternative media on the Internet reflect, complement or extend existing global networks and relations of support?**

Looking back at the research methods - the telephone survey, focus group, content analysis and feedback session - all worked well and the triangulation of data was effective. The one weakness was that the questions asked by the researcher in qualitative methods did not focus nearly enough on the global aspects of the work of women's organisations and thus there was not enough data on this topic. Future research could focus much more directly on the global issues, using similar methods and triangulation, as shown in Chart 9 (Appendix).

11.8: Conclusions about the research

At this stage it may be helpful to highlight the primary achievements of this thesis. I explored theories of alternative media on the Internet by drawing on a range of theoretical literatures - particularly in the areas of the public sphere, social movements and globalisation. Parallel to this theoretical exploration, I reviewed a significant body of published research on Internet use by social movements and groups in global, national, and local contexts. From this review and analysis, I developed an original conceptual framework for analysing alternative media on the Internet and designed a range of methodological approaches to empirically develop the research issues. I conducted empirical research on women's organisations and the Internet in Ireland over a four-year period.

The analytical framework, which was strengthened in light of the findings of the empirical research, generates a range of research tools for future research on alternative media on the Internet. My work is significant because there have been few previous attempts to systematically devise an operational framework for research on alternative media. For this reason it may be helpful to consider the extent to which the framework may be useful for future research on alternative media on the Internet as well as other forms of alternative media - such as alternative print and radio forms.

This concluding section will begin with observations about the Internet and alternative media in the context of both the public sphere and social movements, and end with suggestions for future research and reflections on the analytical framework.

Conclusions about alternative media on the Internet, the public sphere and social movements

A central theoretical question is the link between alternative media on the Internet and the public sphere. The research suggests that the Internet cannot be conceptualised as one public sphere because the structural restraints and barriers to access are too significant - on a global, regional, national, local and organisational level. The Internet is a space where multiple public spheres exist simultaneously. Some of the published studies highlighted that it is possible to link these multiple public spheres on the Internet with the mainstream media and thus introduce their messages to a wider public. However the research found that Irish women's organisations were not using the Internet to link with mainstream politics and the mainstream media; this reflected their own general political orientation. The link between Womenslink and the mainstream media was very weak. The Womenslink member organisations used the Internet for women's movement politics and organising. In this sense, the research findings corroborated Manuel Castell's (1997) insistence on the difference between social movements and their political aims, and his analysis could be furthered by suggesting that the differing political aims of social movements will be reflected in the kinds of Internet media they produce and the purpose of this production.

The ideal public sphere is a space in which participants freely exchange ideas. Using this measure, Womenslink did not fare well as a public sphere. Womenslink participants were constrained by their institutional affiliation. The participants believed that their email messages sent to Womenslink were seen as official statements from their organisations, and this inhibited a more discursive and open forum. The perceived culture of silence on political issues in the North was a significant factor restraining content production on Womenslink on these issues, with staff of Womenslink member organisations agreeing that it was difficult if not impossible to discuss these issues on Womenslink or indeed in any public arena. This raises the question about the extent to which alternative media on the Internet will be able to operate effectively in places where armed conflict is taking place or where political or social repression is a daily reality.

The Womenslink experience highlights the challenge of extending alternative media on the Internet to participants unknown to each other. The discussion of topical issues decreased on Womenslink as the membership of the list grew, with the information exchanged becoming more impersonal and less discursive. Staff of Womenslink member organisations said they enjoyed the Womenslink discussions but acknowledged the difficulty of expressing an opinion without knowing the other members and not knowing how their opinion would be perceived. None believed that Womenslink made them feel part of a wider, global women's movement, despite the presence of some content with global links circulating on the mailing list. This raises the obvious question of whether "small" media on the Internet will ever become large enough to work in a global context.

Womenslink was successful for the most part in reflecting the lived experiences of the women and women's organisations participating in the production, using alternative codes and challenging dominant codes, creating and testing out new ideas, and organising an audience capable of criticising and correcting the media. In alternative media theory (Sholle, 1995), these aspects are important because they could signify an alternative to the mainstream media's commodification of audiences. However, there were tensions and contradictions in this alternative process. Content reflecting lived experiences, and creating and testing out new ideas, declined on Womenslink as the number of participants increased. It remains an open question whether collaborative media forms on the Internet can remain "alternative" media for a large number of participants. It is also difficult to see how rules of order and group decisions to modify these media forms will be respected and enforced.

Regarding the links between alternative media on the Internet and social capital, the empirical research found that Womenslink was potentially useful as an IT resource, a place where staff on the mailing list could share concerns, common problems and information about computers and the Internet as well as share IT resources. Email was an important social capital resource for many staff in Womenslink member organisations who used it to maintain links of friendship and solidarity links with contacts abroad. However women's organisations were not using the Internet to extend their local social capital networks because face-to-face communications were much preferred when possible.

The Internet offers many different options to social movement actors for structuring relations of media production and audiences. For example, social movements can produce: email to communicate privately, out of the public eye; closed mailing lists to create a sense of solidarity and community, although interactions would also reflect social and structural relations in the physical world; public newsgroups that would be less cohesive as a community but could introduce their cause to a wider audience; and Web pages to produce "official" information presenting a solid, stable face of the organisation or movement to the wider public. Using the terminology discussed in the theoretical overview, it could be said that some Internet communities resemble what John Keane (1995) called micro-public spheres, where symbolic meanings are defined and redefined; what Nancy Fraser (1992) termed subaltern publics, spaces of withdrawal and regroupment; what Alberto Melucci (1996) visualised as independent public spaces where social movements could articulate and publicise to the rest of society the themes they considered important - and also what Manuel Castells (1997) termed "cultural communes," defensive communities of retreat from the outside world. However, the division between public and private Internet spheres, or open and closed Internet communities, is not always clear. Womenslink, a closed mailing list, was seen as a public forum by the staff members using it, and

was governed by the same rules of public interaction as in the physical world. One-to-one email is perhaps the only private, closed community on the Internet.

The research found that when producing these alternative media forms and processes on the Internet, some participants were much more dominant in the production process than others, and their participation was shaped by social and structural relations. In some cases - including some Web pages with a one-way flow of information - the extent to which these media were "alternative" could be questioned. Lisa McLaughlin's (1995) raised the point that counter-public activity and alternative media were not necessarily emancipatory but rather could be based on repressing others. This research found no evidence to counter the analysis of Winston (1998) and Spears and Lea (1994) that Internet technologies, like other communications technologies, reflect and reproduce the social relations of the users.

Future research and the analytical framework

The analytical framework proved useful for empirical research on alternative media on the Internet, particularly the mailing list form and Womenslink, and earlier in this chapter we discussed how the framework could be strengthened in several key areas. This final section will consider how useful the revised framework (Chart 8, Appendix) may be for future research on alternative media on the Internet and also for research on traditional alternative media forms; the forms considered as examples are alternative print media (such as alternative newspapers and magazines) and alternative radio (including community radio).

The need for more research on the email media form has been highlighted at several points in this thesis. An area ripe for exploration is email production and use by social movement organisations and the non-affiliated actors and groups at the peripheries of social movements. The research found that email was by far the most frequently produced alternative media form or process on the Internet in the context of social movements but we still know very little about how and why it is produced and the circumstances surrounding its production. One of the difficulties with studying email is that it is usually private and so researching this activity raises ethical issues as well as privacy concerns. Looking at the methods and the framework for such a study, a content analysis of email would be useful but also perhaps a social network analysis, along the lines suggested by Garton et. al. (1999), which would look at patterns of relations between and among people, organisations and groups. Such a study could also focus on how email messages are reworked by the content producers, for example when emails are forwarded on to a third party with added commentary and critiques. A study, or series of studies, of email use in social movements would be valuable for understanding how email is used behind-the-scenes to perhaps strengthen loose alliances of social actors and groups within social movements.

One limit of the analytical framework is that it focuses much more on the production of alternative media on the Internet than its consumption. A focus on consumption issues would be invaluable for future research on email but also on the Web media form. A research project on consumption of alternative media on the Internet would require an additional review of a range of literature from cultural studies, particularly in the area of how meanings are made by the individuals reading and experiencing the range of messages, visual images and multimedia content on Internet fora. Several of the terms and concepts in the current research could be expanded in this direction. The first is "lurkers" who read messages on newsgroups or mailing lists but do not produce messages themselves. The word "lurker" itself could use a re-think, with its pejorative connotation - lying in wait with threatening intent - being a wholly inadequate way of conceptualising the act of reading messages on public Internet fora. In her study of the Lesbian Cafe (LC), Correll (1995) suggested a more positive understanding of lurkers. She described

them as LC users who spent much time observing the interaction before making the leap to posting themselves, and she noted that they had a humble conversational style and deferred to the regulars. Correll also described other types, such as "newbies" and "bashers" who had different styles and had different relations to the other participants on the newsgroup. It would be useful to develop a fuller understanding of these different types of Internet fora "personalities" in the context of media consumption, to understand how messages are interpreted and why some "personalities" are more prone to being active producers rather than active consumers. Many issues involved in this process in the area of psychology were beyond the scope of the current research, such as the relationship between one's self and a computer screen²⁹.

A related concept was discussed in several of the published studies, including Correll (1995) and Mukerji and Simon (1998), that of "frontstage" and "backstage" modes of group interaction, with members moving between a frontstage performance area and backstage rehearsal area³⁰. Simon and Mukerji suggested that the mailing list process was a backstage area for the cold fusion scientists, and the cold fusion newsgroup, a frontstage. Similarly, Correll believed that the LC newsgroup was a frontstage and email between the users the backstage. However the empirical research on Womenslink found that the mailing list had both backstage and frontstage attributes, for example the chatty commentary associated with backstage relations and the restraints to offering personal opinions on the frontstage. Perhaps development of the concepts of "personalities" described above would be useful to understanding how participants perceive different media forms or processes on the Internet and why and how some personalities feel more free than others in their interactions on Internet media. However, while more exploration of the individual and small group aspects of alternative media on the Internet would be useful, it is important not to lose sight of the wider social, political and cultural context of this activity. Keeping focused on both the micro and the macro levels of analysis of small media on the Internet will develop a richer analysis of the range of processes and relations that shape these media and the social movements in which they are produced and consumed.

Looking at the analytical framework in the context of future research on alternative print media and alternative radio, it is evident that questions of media consumption would be more central to the investigation. For alternative print media in particular, the various ways that the media form is re-used and re-worked by audiences could be primary concerns. The analytical framework would be useful here in particular regarding links with the wider context, for example, by following the trail of particular print editions to see how they linked with political participation, complemented

²⁹ An interesting work in this area is Sherry Turkle (1996), *Life on the Screen: Identity in the Age of the Internet*. London: Phoenix.

³⁰ These concepts were developed by Erving Goffman (1959, 1963).

or extended social capital networks, contributed to discussions and opinion formation in the mainstream public sphere, and so on.

For both alternative print and radio forms, it is likely that questions of ownership and the influence of commercial forces would also feature as central concerns. The analytical framework includes these aspects but the research would also have to include investigation of funding and sustainability issues. Again, such a project would need to include a literature review in these areas because the current research did not look at these issues.

A final area for future research that could be conducted on Internet media forms as well as alternative print and alternative radio forms, is the social relations within the organisation producing the alternative media. All the Womenslink member organisations in the case studies had fairly traditional organisational structures for their workers, for example with administrative workers doing the core communications and information work - answering the telephone and checking the email, making phone calls and sending email on behalf of the organisation, and so on; the project workers responsible for their particular area of work, such as childcare issues or women's group development; and the coordinators overseeing the operations and linking with other coordinators for higher-level exchanges of information. There are many other organisational forms involved in the production of alternative media - such as feminist collectives and workers' co-operatives, as well as less loosely structured groupings that come together temporarily for specific media projects and for specific communication objectives. It will add greatly to our current stock of knowledge to study the production of alternative media in the context of a wide range of these organisational and social movement structures, to attempt an understanding of how organisational and bureaucratic processes and relations shape the production of alternative media forms and processes, both on and off the Internet.

Bibliography

- Aikens, Scott G. (1998) "A Personal History of Minnesota Electronic Democracy, 1994," *Journal of Government Information* 25(1), 1-9.
- Alam, Shahidul (1996) "On-line lifeline," *New Internationalist* December, 14-15.
- Anderson, R. H. et al. (1995), *Universal access to e-mail: Feasibility and societal implications*. Rand Report MR-650-MF. Santa Monica, CA: RAND Corporation.
- Anderson, Susan E. and Bruce M. Gansneder (1995) "Using Electronic Mail Surveys and Computer-Monitored Data for Studying Computer-Mediated Communication Systems," *Social Science Computer Review* 13(1), 33-46.
- Aurigi, Alessandro and Stephen Graham (1998), "The 'crisis' in the urban public realm," in *Cyberspace Divide: Equality, agency and policy in the information society*, B. D. Loader, ed. London: Routledge, 57-80.
- Balka, Ellen and Laurel Doucette (1994) "The Accessibility of Computers to Organizations Serving Women in the Province of Newfoundland: Preliminary Study Results," *Arachnet Electronic Journal on Virtual Culture* 2(3), 1-155.
- Barber, Benjamin R. (1984), *Strong Democracy: Participatory Politics for a New Age*. Berkeley: University of California.
- Bate, Barbara (1988), "Themes and Perspectives in Women's Talk," in *Women Communicating: Studies of Women's Talk*, B. Bate and A. Taylor, eds. Norwood, NJ: Ablex, 303-314.
- BBC Online (1999a) "Hippies declare web war on WTO," *BBC Online* 30 November.
- (1999b) "Online activists plan global protest," *BBC Online* 26 November.
- (1999c) "Web is Shrinking," *BBC Online* 25 August.
- Bimber, Bruce (1998) "The Internet and Political Mobilization: Research Note on the 1996 Election Season," *Social Science Computer Review* 16(4), 391-401.
- Bomford, Andrew (1999) "Global spy network revealed," *BBC Online* 2 November.
- Bourdieu, Pierre (1993), *Sociology in Question [1984]*. London: Sage.
- Boyle, A. et al. (1993) "The Use of Information Technology in the Voluntary Sector," *International Journal of Information Management* 13, 94-112.
- Brants, Kees, Martine Huizenga, and Reineke van Meerten (1996) "The new canals of Amsterdam: an exercise in local electronic democracy," *Media, Culture and Society* 18, 233-247.
- Bruck, Peter A. and Marc Raboy (1989), "The Challenge of Democratic Communication," in *Communication for and Against Democracy*, M. Raboy and P. A. Bruck, eds. Montreal: Black Rose, 3-16.

- Buechler, Steven M. (1995) "New Social Movement Theories," *Sociological Quarterly* 36(3), 441-464.
- Burt, Eleanor and John Taylor (1999), *Information and Communication Technologies - Reshaping the Voluntary Sector*. Glasgow: Caledonian University.
- Bury, Rhiannon (1998) "Waiting to X-Hale: A Study of Gender and Community on an All-Female X-Files Electronic Mailing List," *Convergence* 4(3), 59-83.
- Butalia, Urvashi (1993), "Women and alternative media (India)," in *Alternative Media: Linking Global and Local*, P. Lewis, ed. Paris: UNESCO, 51-60.
- Byerly, Carolyn M. (1997), "News, consciousness, and social participation: the role of women's feature service in world news," in *Media in a Global Context: A Reader*, A. Sreberny-Mohammadi et al., eds. London: Arnold, 248-268.
- Calabrese, Andrew and Mark Borchert (1996) "Prospects for electronic democracy in the United States: rethinking communication and social policy," *Media, Culture and Society* 18, 249-268.
- Calhoun, Craig (1998) "Community without Propinquity Revisited: Communications Technology and the Transformation of the Urban Public Sphere," *Sociological Inquiry* 68(3), 373-397.
- Cassell, Catherine (1990), "Access to Technology: The Use of I.T. in the Community," in *Technology in Human Communication*, N. Williams and P. Hartley, eds. London: Pinter, 165-179.
- Cassell, Catherine and Gillian Symon (1994), "Qualitative Research in Work Contexts," in *Qualitative Methods in Organizational Research*, C. Cassell and G. Symon, eds. London: SAGE, 1-13.
- Castells, Manuel (1998), *End of Millennium*. Oxford: Blackwell.
- (1997), *The Power of Identity*. Oxford: Blackwell.
- (1996), *The Rise of the Network Society*. Oxford: Blackwell.
- (1989), *The Informational City: Information Technology, Economic Restructuring and the Urban-Regional Process*. Oxford: Blackwell.
- Cleaver, Harry (1994) "The Chiapas Uprising and the Future of Class Struggle in the New World Order," *RIFF-RAFF (Padova, Italy)* February.
- Coleman, James S. (1994), *Foundations of Social Theory*. Cambridge, Mass: Harvard.
- Collins-Jarvis, Lori A. (1993) "Gender Representation in an Electronic City Hall: Female Adoption of Santa Monica's PEN System," *Journal of Broadcasting and Electronic Media* Winter, 49-65.

- Community Development Foundation (1992), *Press Enter: Information technology in the community and voluntary sector*. London: Community Development Foundation.
- Connell, Ian (1996) "Cyberspace: The Continuation of Political Education by Other Means," *Javnost - The Public* 3(1), 87-102.
- Connolly, Linda (1996) "The Women's Movement in Ireland, 1970-1995: A Social Movements Analysis," *Irish Journal of Feminist Studies* 1(1), 43-77.
- Correll, Shelley (1995) "The Ethnography of an Electronic Bar: The Lesbian Cafe," *Journal of Contemporary Ethnography* 24(3), 270-298.
- Curtis, Liz (1994), *The Cause of Ireland - From the United Irishmen to Partition*. Belfast: Beyond the Pale.
- Deacon, David (1996) "The Voluntary Sector in a Changing Communication Environment," *European Journal of Communication* 11(2), 173-199.
- Deacon, David and Peter Golding (1991) "The voluntary sector in the 'information society': a study in division and uncertainty," *Voluntas* 2(2), 69-88.
- Deacon, David et al., eds. (1999), *Researching Communications*. London: Arnold.
- van Dijk, Jan (1993) "Communication Networks and Modernization," *Communication Research* 20(3), 384-407.
- Downing, John (1995), "Alternative Media and the Boston Tea Party," in *Questioning the Media: A Critical Introduction*, J. Downing, A. Mohammadi, and A. Sreberny-Mohammadi, eds. London: SAGE, 238-252.
- (1984), *Radical Media: The Political Experience of Alternative Communication*. Boston: South End Press.
- Ducatel, K. and P. Halfpenny (1993) "Telematics for the community? An electronic village hall for East Manchester," *Environment and Planning C: Government and Policy* 11, 367-379.
- Dunham, Philip J. et al. (1998) "Computer-Mediated Social Support: Single Mothers as a Model System," *American Journal of Community Psychology* 26(2), 281-306.
- Dutton, William H. (1996) "Network rules of order: regulating speech in public electronic fora," *Media, Culture and Society* 18, 269-290.
- Ennals, Kate (1997) "On-line in the Irish Community Sector," *Local Economy* 12(1), 72-77.
- Everett, Margaret (1998) "Latin America On-Line: The Internet, Development, and Democratization," *Human Organization* 57(4), 385-393.
- Eyerman, Ron and Andrew Jamison (1991), *Social Movements: A Cognitive Approach*. University Park: Pennsylvania State University Press.

- Falk, Richard (1996) "An Inquiry into the Political Economy of World Order," *New Political Economy* 1(1), 13-26.
- Featherstone, Mike (1993), "Global and local cultures," in *Mapping the Futures: Local cultures, global change*, J. Bird et al., eds. London: Routledge, 169-187.
- Fernback, Jan (1997), "The Individual within the Collective: Virtual Ideology and the Realization of Collective Principles," in *Virtual Culture*, S. Jones, ed. London: Sage, 36-54.
- Fraser, Nancy (1992), "Rethinking the Public Sphere: A Contribution to the Critique of Actually Existing Democracy," in *Habermas and the Public Sphere*, C. Calhoun, ed. Cambridge: MIT, 109-142.
- Frederick, Howard (1993), "Computer Networks and the Emergence of Global Civil Society," in *Global Networks: Computers and International Communication*, L. M. Harasim, ed. Cambridge, Massachusetts: MIT Press, 283-295.
- (1992) "Computer Communications in Cross-Border Coalition Building: North American NGO Networking Against NAFTA," *Gazette* 50, 217-241.
- Friedland, Lewis A. (1996) "Electronic democracy and the new citizenship," *Media, Culture and Society* 18, 185-212.
- Frissen, Valerie (1992) "Trapped in electronic cages? Gender and new information technologies in the public and private domain: an overview of research," *Media, Culture and Society* 14(4), 31-49.
- Gallimore, Alec (1997) "The Manchester Community Information Network," *The Electronic Library* 15(4), 297-298.
- Garnham, Nicholas (1992), "The Media and the Public Sphere," in *Habermas and the Public Sphere*, C. Calhoun, ed. London: MIT Press, 359-376.
- Garton, Laura, Caroline Haythornthwaite, and Barry Wellman (1999), "Studying On-Line Social Networks," in *Doing Internet Research*, S. Jones, ed. London: Sage, 75-105.
- Gaskin, Pauline, Kevin Harris, and Joan Patterson (1993), *Information Technology in the Community and Voluntary Sector: A Selected Bibliography*. London: Community Development Foundation.
- Giddens, Anthony (1990), *The Consequences of Modernity*. Cambridge: Polity.
- Gittler, Alice Mastrangelo (1999), "Mapping Women's Global Communications and Networking," in *Women@Internet: Creating new cultures in cyberspace*, W. Harcourt, ed. London: Zed Books, 91-101.
- Glusker, Susannah (1998) "Women Networking for Peace and Survival in Chiapas: Militants, Celebrities, Academics, Survivors, and the Stiletto Heel Brigade," *Sex Roles* 39(7/8), 539-557.
- Goffman, Erving (1963), *Behaviour in Public Places*. Glencoe: Free Press.

- (1959), *Presentation of Self in Everyday Life*. Garden City, NY: Doubleday.
- Golding, Peter (1998), "Worldwide wedge: Division and contradiction in the global information infrastructure," in *Electronic Empires*, D. K. Thussu, ed. London: Arnold, 135-148.
- (1994) "The communications paradox: Inequality at the national and international levels," *Media Development* 1994/4, 7-9.
- Graham, Stephen (1994) "Using Information and Communications Technology for Community Development (Review Article)," *Community Development Journal* 29(1), 90-94.
- Habermas, Jürgen (1992), "Further Reflections on the Public Sphere," in *Habermas and the Public Sphere*, C. Calhoun, ed. Cambridge: MIT, 421-461.
- (1989), *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society [1962]*. Cambridge: Polity.
- Hacker, Kenneth L. (1996) "Missing links in the evolution of electronic democratization," *Media, Culture and Society* 18, 213-232.
- Hallam, Emma and I. R. Murray (1998) "World Wide Web Community Networks and the Voluntary Sector," *The Electronic Library* 16(3), 183-189.
- Harcourt, Wendy, ed. (1999), *Women@Internet: Creating new cultures in cyberspace*. London: Zed Books.
- Hart, Jeffrey A., Robert R. Reed, and François Bar (1992) "The building of the Internet: Implications for the future of broadband networks," *Telecommunications Policy* November, 666-689.
- Harvey, David (1993), "From space to place and back again: Reflections on the condition of postmodernity," in *Mapping the Futures: Local cultures, global change*, J. Bird et al., eds. London: Routledge, 3-29.
- Herman, Edward S. and Robert W. McChesney (1997), *The Global Media: The New Missionaries of Global Capitalism*. London: Cassell.
- Holub, Robert C. (1991), *Jürgen Habermas: Critic in the Public Sphere*. London: Routledge.
- Information Society Commission (1999), *Ireland's Progress as an Information Society: 1999 Research into General Public Attitudes towards Information and Communications Technology*. Dublin: Information Society Commission.
- INSINC (1997), *The Net Result: Social Inclusion in the Information Society*. London: IBM.
- James, Michael L., Edward C. Wotring, and Edward J. Forrest (1995) "An Exploratory Study of the Perceived Benefits of Electronic Bulletin Board Use and Their Impact on Other Communication Activities," *Journal of Broadcasting and Electronic Media* 39(1), 30-50.

- Jansen, Sue Curry (1989) "Gender and the Information Society: A Socially Structured Silence," *Journal of Communication* 39(3), 196-215.
- Jones, Andrea (1990), "Use of New Information & Communication Technologies: U.K. Pressure Groups and the Developing World," Report for the British Library Research & Development Department.
- Jones, Steven, ed. (1999), *Doing Internet Research: Critical Issues and Methods for Examining the Net*. London: Sage.
- (1997), *Virtual Culture: Identity and Community in Cybersociety*. London: Sage.
- Jones, Steven G. (1995), "Understanding Community in the Information Age," in *Cyber Society: Computer-Mediated Communication and Community*, S. G. Jones, ed. London: Sage, 10-35.
- Keane, John (1995) "Structural Transformations of the Public Sphere," *Communication Review* 1(1), 1-22.
- Kiesler, Sara, Jane Siegel, and Timothy W. McGuire (1988), "Social Psychological Aspects of Computer-Mediated Communication," in *Computer-Supported Cooperative Work, I*, Grief, ed. San Mateo, CA: Morgan Kaufman, 657-682.
- Klein, Hans K. (1999) "Tocqueville in Cyberspace: Using the Internet for Citizen Associations," *The Information Society* 15, 213-220.
- Klotz, Robert and Anna Broome (1998) "Discussion of Women's Issues in the 1996 Internet Campaign," *Women & Politics* 19(4), 67-86.
- Koivisto, Juha and Esa Valiveronen (1996) "The Resurgence of the Critical Theories of the Public Sphere," *Journal of Communication Inquiry* 20(2), 18-36.
- Kole, Ellen S. (1998) "Myths and Realities in Internet Discourse: Using Computer Networks for Data Collection and the Beijing World Conference on Women," *Gazette* 60(4), 343-360.
- Kramarae, Cheris and Jana Kramer (1995) "Legal snarls for women in cyberspace," *Internet Research* 5(2), 14-24.
- Laudon, Kenneth C. (1977), *Communications Technology and Democratic Participation*. New York: Praeger.
- Leach, Bernard et al. (1990), *The Manchester Host Computer Feasibility Study, Final Report*. Manchester: Centre for Employment Research.
- Lengel, Laura (1998) "Access to the Internet in East Central and South-Eastern Europe: New Technologies and New Women's Voices," *Convergence* 4(2), 38-55.
- Lewis, Peter, ed. (1993a), *Alternative Media: Linking Global and Local. Reports and Papers on Mass Communication*, 107. Paris: UNESCO.

- (1993b), "Computer-mediated communication worldwide," in *Alternative Media: Linking Global and Local*, P. Lewis, ed. *Reports and Papers on Mass Communication*, 107. Paris: UNESCO, 117-126.
- Lovink, Geert and Patrice Riemens (2000), "Amsterdam Public Digital Culture 2000: On the Contradictions Among the User Profiles," Paper presented at the Global CN 2000 First Global Congress on Community Networking, Barcelona, November 2-4. Available at: www.nettime.org/nettime.w3archive/2000008/msg00128.html.
- Lunt, Peter and Sonia Livingstone (1996) "Rethinking the Focus Group in Media and Communications Research," *Journal of Communication* 46(2), 79-98.
- Malina, Anna and Nicholas W. Jankowski (1998) "Community-Building in Cyberspace," *Javnost - The Public* 5(2), 35-48.
- Markus, M. Lynne (1987) "Toward a "Critical Mass" Theory of Interactive Media," *Communication Research* 14(5), 491-511.
- Marsh, Catherine (1982), *The Survey Method: The Contribution of Surveys to Sociological Explanation*. London: George Allen & Unwin.
- Marvin, Carolyn (1987), "Information and History," in *The Ideology of the Information Age*, J. D. Slack and F. Fejes, eds. Norwood, NJ: Ablex, 49-62.
- McChesney, Robert W. (1996) "The Internet and U.S. Communication Policy-Making in Historical and Critical Perspective," *Journal of Communication* 46(1), 98-124.
- McLaughlin, Lisa (1995) "From Excess to Access: Feminist Political Agency in the Public Sphere," *Javnost - The Public* 2(4), 37-50.
- (1993) "Feminism, the public sphere, media and democracy (Review essay)," *Media, Culture and Society* 15, 599-620.
- McLaughlin, Margaret L., Kerry K. Osborne, and Christine B. Smith (1995), "Standards of Conduct on Usenet," in *Cyber Society: Computer-Mediated Communication and Community*, S. G. Jones, ed. London: SAGE, 90-111.
- McQuail, Denis (1987), *Mass Communication Theory: An Introduction*, 2nd ed. London: SAGE Publications Ltd.
- Melucci, Alberto (1996), *Challenging codes: Collective action in the information age*. Cambridge: Cambridge University.
- (1989), *Nomads of the Present*. London: Radius.
- Morris, Merrill and Christine Ogan (1996) "The Internet as Mass Medium," *Journal of Communication* 46(1), 39-50.
- Mukerji, Chandra and Bart Simon (1998) "Out of the Limelight: Discredited Communities and Informal Communication on the Internet," *Sociological Inquiry* 68(2), 258-273.

- Murdock, Graham (1986), "Poor connections: income inequality and the 'information society'," in *Excluding the Poor*, P. Golding, ed. London: Child Poverty Action Group, 70-83.
- Murdock, Graham and Peter Golding (1989) "Information Poverty and Political Inequality: Citizenship in the Age of Privatized Communications," *Journal of Communication* 39(3), 180-195.
- Murphy, Brian Martin (1994) "Addressing crises through new channels in the post-New World Information & Communication Order era," *The Journal of International Communication* 1(1), 88-111.
- Nason, Joe and David Golding (1994), "Approaching Observation," in *Qualitative Methods and Analysis in Organizational Research: A Practical Guide*, G. Symon and C. Cassell, eds. London: Sage, 234-249.
- Negt, Oskar and Alexander Kluge (1993 [1972]), *Public sphere and experience: Toward an analysis of the bourgeois and proletarian public sphere*. Minneapolis: University of Minnesota.
- Novotny, Patrick (1998) "The World Wide Web and Multimedia in the 1996 Presidential Election," *Social Science Computer Review* 16(2), 169-184.
- O'Donnell, Susan (1999) "Fear and loathing in cyberspace," *The Irish Times* June 14, 8.
- (1995) "Solidarity on the Internet: A Study of Electronic Mailing Lists," unpublished MA Thesis, University of Wales Cardiff.
- O'Donnell, Susan and Guillermo Delgado (1995) "Using the Internet to Develop the Indigenous Nations of the Americas," *Media Development* 1995/3.
- O'Donnell, Susan, Brian Trench, and Kate Ennals (1998), *Weak Connections: Final Report of the Research Project The Voluntary Sector in the Information Age*. Dublin: Dublin City University School of Communications.
- Parks, Malcolm R. and Kory Floyd (1996) "Making Friends in Cyberspace," *Journal of Communication* 46(1), 80-97.
- Patton, Michael Quinn (1990), *Qualitative Evaluation and Research Methods*, Second ed. London: Sage.
- (1987), *How to Use Qualitative Methods in Evaluation*. London: SAGE.
- Peckham, Michael (1998) "New Dimensions of Social Movement/Counter-movement Interaction: The Case of Scientology and its Internet Critics," *Canadian Journal of Sociology* 23(4), 317-347.
- Plant, Nick (1992), "Community Computing in Avon - Taking Stock: A Survey and Report," Faculty of Computer Studies and Mathematics, Bristol Polytechnic.
- Rafaeli, Sheizaf and Robert J. LaRose (1993) "Electronic Bulletin Boards and 'Public Goods' Explanations of Collaborative Mass Media," *Communication Research* 20(2), 277-297.

- Rakow, Lana F. (1988), "Women and the Telephone: The Gendering of a Communications Technology," in *Technology and Women's Voices*, C. Kramarae, ed. New York and London: Routledge & Kegan Paul, 207-228.
- RAND Corporation (1995), *Computers and Connectivity: Current Trends*. Santa Monica, CA: RAND Corporation.
- Rheingold, Howard (1993), *The Virtual Community: Finding Connection in a Computerized World*. London: Secker & Warburg.
- Riedel, Eric et al. (1998) "Electronic Communities: Assessing Equality of Access in a Rural Minnesota Community," *Social Science Computer Review* 16(4), 370-390.
- Robertson, Roland (1992), *Globalization: Social Theory and Global Culture*. London: Sage.
- Rogers, Catherine and Gabriel Jacobs (1998) "Un palais des glaces: images du féminisme français sur Internet," *Nouvelles Questiones Féministes* 19(1), 65-83.
- Rogers, Everett M., Lori Collins-Jarvis, and Joseph Schmitz (1994) "The PEN Project in Santa Monica: Interactive Communication, Equality, and Political Action," *Journal of the American Society for Information Science* 45(6), 401-410.
- Rubinyi, Robert M. (1989) "Computers and Community: The Organizational Impact," *Journal of Communication* 39(3), 110-123.
- Rupp, Leila J. (1997), *Worlds of Women: The Making of an International Women's Movement*. Princeton, New Jersey: Princeton University.
- Sachs, Hiram (1995) "Computer networks and the formation of public opinion: an ethnographic study," *Media, Culture and Society* 17, 81-89.
- Salamon, Lester M. and Helmut K. Anheier (1992a) "In search of the non-profit sector II: The question of definitions," *Voluntas* 31(2), 125-151.
- (1992b) "Toward and Understanding of the International Nonprofit Sector: The Johns Hopkins Comparative Nonprofit Sector Project," *Nonprofit Management & Leadership* 2(3), 311-324.
- Sallin, Suzanne (1994), "The Association for Progressive Communications: A Cooperative Effort to meet the Information Needs of Non-Governmental Organizations," Case Study Prepared for the Harvard-CIESIN Project on Global Environmental Change Information Policy.
- Saunders, Carol S., Daniel Robey, and Kelly A. Vaverek (1994) "The Persistence of Status Differentials in Computer Conferencing," *Human Communication Research* 20(4), 443-472.
- Schiller, Dan and RosaLinda Fregoso (1991) "A private view of the digital world," *Telecommunications Policy* June, 195-208.

- Schiller, Herbert I. (1998), "Striving for communication dominance: A half-century review," in *Electronic Empires*, D. K. Thussu, ed. London: Arnold, 17-26.
- Schmitz, Joseph et al. (1995) "The Public Electronic Network (PEN) and the Homeless in Santa Monica," *Journal of Applied Communication Research* 23, 26-43.
- Schneider, Steven M. (1996) "Creating a Democratic Public Sphere Through Political Discussion: A Case Study of Abortion Conversation on the Internet," *Social Science Computer Review* 14(4), 373-393.
- Schulz, Markus S. (1998) "Collective Action Across Borders: Opportunity Structures, Network Capacities, and Communicative Praxis in the Age of Advanced Globalization," *Sociological Perspectives* 41(3), 587-616.
- Scott, Alan (1990), *Ideology and the New Social Movements*. London: Routledge.
- Shade, Leslie Regan (1998) "A Gendered Perspective on Access to the Information Infrastructure," *The Information Society* 14, 33-44.
- (1997) "The Santa Rosa Case: Women-Only Forums on the Internet and the First Amendment," *Journal of Information Ethics* Fall, 48-63.
- Shaffir, W. B. and R. A. Stebbins, eds. (1991), *Experiencing Fieldwork: An Inside View of Qualitative Research*. London: Sage.
- Sharf, Barbara F. (1999), "Beyond Netiquette: The Ethics of Doing Naturalistic Discourse Research on the Internet," in *Doing Internet Research*, S. Jones, ed. London: Sage, 243-256.
- (1997) "Communicating Breast Cancer On-Line: Support and Empowerment on the Internet," *Women & Health* 26(1), 65-85.
- Sholle, David (1995) "Access Through Activism: Extending the Ideas of Negt and Kluge to American Alternative Media Practices," *Javnost - The Public* 2(4), 21-35.
- Smith, Judy and Ellen Balka (1988), "Chatting on a Feminist Computer Network," in *Technology and Women's Voices*, C. Kramarae, ed. New York: Routledge & Kegan Paul, 82-97.
- Smyth, Ailbhe (1993), "The Women's Movement in the Republic of Ireland 1970-1990," in *Irish Women's Studies Reader*, A. Smyth, ed. Dublin: Attic Press, 245-269.
- de Sola Poole, Ithiel (1983), *Technologies of Freedom*. Cambridge, MA and London: Harvard University Press.
- Soley, Lawrence C. and John S. Nichols (1987), *Clandestine Radio Broadcasting: A Study of Revolutionary and Counterrevolutionary Electronic Communication*. New York: Praeger.
- Sparks, Colin (1998), "Is there a global public sphere?," in *Electronic Empires*, D. K. Thussu, ed. London: Arnold, 108-124.

- (1994), "Civil Society and Information Society as Guarantors of Progress," in *Information Society and Civil Society: Contemporary Perspectives on the Changing World Order*, S. Splichal, A. Calabrese, and C. Sparks, eds. West Lafayette, Indiana: Purdue University, 21-49.
- Spears, Russell and Martin Lea (1994) "Panacea or Panopticon? The Hidden Power in Computer-Mediated Communication," *Communication Research* 21(4), 427-459.
- Sreberny, Annabelle (1998), "Feminist internationalism: Imagining and building global civil society," in *Electronic Empires*, D. K. Thussu, ed. London: Arnold, 208-222.
- Sreberny-Mohammadi, Annabelle and Ali Mohammadi (1997), "Small media and revolutionary change: a new model," in *Media in a Global Context: A Reader*, A. Sreberny-Mohammadi et al., eds. London: Arnold, 220-235.
- (1994), *Small Media, Big Revolution: Communication, Culture and the Iranian Revolution*. London: University of Minnesota.
- Stallabrass, Julian (1995) "Empowering Technology: The Exploration of Cyberspace," *New Left Review* 211, 3-32.
- Stern, Kenneth S. (1996), *A Force upon the Plain: the American Militia Movement and the Politics of Hate*. New York: Simon and Schuster.
- Stoll, Clifford (1995), *Silicon snake oil*. New York: Doubleday.
- Stubbs, Paul (1998) "Conflict and Co-Operation in the Virtual Community: Email and the Wars of the Yugoslav Succession," *Sociological Research Online* 3(3), 1-15.
- Symon, Gillian and Catherine Cassell (1998), "Reflections on the Use of Qualitative Methods," in *Qualitative Methods and Analysis in Organisational Research: A Practical Guide*, G. Symon and C. Cassell, eds. London: Sage, 1-9.
- Taillon, Ruth (1992), *Grant-aided or taken for granted? A study of women's voluntary organisations in Northern Ireland*. Belfast: Women's Support Network.
- Tamania Mars Collective (1993), "Journals for and emerging women's movement (Morocco)," in *Alternative Media: Linking Global and Local*, P. Lewis, ed. Paris: UNESCO, 61-72.
- Taubman, Geoffry (1998) "A Not-So World Wide Web: The Internet, China, and the Challenges to Nondemocratic Rule," *Political Communication* 15, 255-272.
- Tober, Bruce (1995) "E-mail aggression," *New Statesman & Society* 5 May, 27-29.
- Tomlinson, John (1997), "Cultural Globalisation and Cultural Imperialism," in *International Communication and Globalisation*, A. Mohammadi, ed. London: Sage, 170-190.
- Touraine, Alain (1985) "An Introduction to the Study of Social Movements," *Social Research* 52(4), 749-787.

- (1981), *The voice and the eye: An analysis of social movements*. Cambridge: Cambridge University.
- Trench, Brian and Susan O'Donnell (1997) "The Internet and Democratic Participation: Uses of ICTs by Voluntary and Community Organisations in Ireland," *The Economic and Social Review* 28(3), 213-235.
- Urey, Gwen (1995), "Telecommunications and Global Capitalism," in *Telecommunications Politics: Ownership and Control of the Information Highway in Developing Countries*, B. Mody, J. Babur, and J. D. Straubhaar, eds. Mahway, NJ: Lawrence Erlbaum, 53-83.
- U.S. Department of Commerce (1999), *Falling Through the Net: Defining the Digital Divide: A Report on the Telecommunications and Information Technology Gap in America*. Washington: National Telecommunications and Information Administration, U.S. Department of Commerce. Available on the Web site: www.ntia.doc.gov.
- Varley, Pamela (1991) "Electronic Democracy," *Technology Review* 94(8), 43-51.
- de Vaus, D. A. (1986), *Surveys in Social Research*. Boston: George Allen & Unwin.
- Virnoche, Mary E. (1998) "The Seamless Web and Communications Equity: The Shaping of a Community Network," *Science, Technology & Human Values* 23(2), 199-220.
- Waddington, David (1994), "Participant Observation," in *Qualitative Methods in Organizational Research: A Practical Guide*, C. Cassell and G. Symon, eds. London: Sage, 107-122.
- Wapner, Paul (1995) "Politics Beyond the State: Environmental Activism and World Civic Politics," *World Politics* 47(3), 311-340.
- (1994) "Environmental Activism and Global Civil Society," *Dissent* 41(3), 389-393.
- Ward, Kevin (1999) "The Militia Movement and the Internet," *Student Research Papers - Sociology and the Internet Course* Spring, 1-10. Published by Rutgers University: www.camden.rutgers.edu/~wood/445papers.html.
- Ward, Margaret (1991), "The women's movement in the North of Ireland: Twenty years on," in *Ireland's Histories: Aspects of State, Society and Ideologies*, S. Hutton and P. Stewart, eds. London: Routledge, 149-163.
- Waterman, Peter (1990) "Reconceptualizing the democratization of international communication," *International Social Science Journal* 123 (February), 77-91.
- Webster, Frank (1998) "Book Review: The Power of Identity and End of Millennium," *British Journal of Sociology* 49(4), 671-672.
- (1995), *Theories of the Information Society*. London: Routledge.
- Webster, Juliet (1995) "What Do We Know About Gender and Information Technology at Work? A Discussion of Selected Feminist Research," *The European Journal of Women's Studies* 2, 315-334.

- Wellman, Barry (1982), "Studying Personal Communities," in *Social Structure and Network Analysis*, P. V. Marsden and N. Lin, eds. London: Sage, 61-80.
- Wellman, Barry et al. (1996) "Computer Networks as Social Networks: Collaborative Work, Telework, and Virtual Community," *Annual Review of Sociology* 22, 213-238.
- Wheeler, Deborah L. (1998) "Global Culture or Culture Clash: New Information Technologies in the Islamic World - A View From Kuwait," *Communication Research* 25(4), 359-376.
- Whillock, Rita Kirk (1997) "Cyber-Politics," *American Behavioral Scientist* 40(8), 1208-1225.
- Wilson, Gladstone (1993), "The Sistren Theatre Collective (Jamaica)," in *Alternative Media: Linking Global and Local*, P. Lewis, ed. Paris: UNESCO, 41-49.
- Wilson, Robin (1999), *Representing Women: Taking Forward the Consultation on the WIN Proposal*. Belfast: Democratic Dialogue.
- Winston, Brian (1998), *Media, Technology and Society*. London: Routledge.
- Yearley, Steven (1995), "The Social Shaping of the Environmental Movement in Ireland," in *Irish Society: Sociological Perspectives*, P. Clancy et al., eds. Dublin: Institute of Public Administration, 652-674.
- Young, Stacy (1997), *Discourse, Politics and the Feminist Movement*. London: Routledge.
- Zarat, David (1996) "Petitions and the "Invention" of Public Opinion in the English Revolution," *American Journal of Sociology* 101(6), 1497-1555.
- Zickmund, Susan (1997), "Approaching the Radical Other: The Discursive Culture of Cyberhate," in *Virtual Culture: Identity and Communication in Cybersociety*, S. G. Jones, ed. London: SAGE, 185-205.

Appendix

Chart 8: Revised research questions for the analytical framework

A: Media participants, production process and content
<i>1. Participants</i>
<ul style="list-style-type: none"> *Who participates in the alternative media production, in terms of their socio-economic status, gender, geographical location, language and other factors? *What are the restraints and barriers to accessing the technology, by individuals, by organisations, and within organisations?
<i>2. Production process</i>
<ul style="list-style-type: none"> *What is the media form or process and to what extent does it allow interaction between sender and receiver? *To what extent is there fluidity or interaction between media forms? *Is the media production democratic and participative or rather do some participants dominate the process? *Are rules of production agreed and respected by participants? *Who owns the media technology and what is the owner's influence on the production process? *What are the changes in production practices over time?
<i>3. Content</i>
<ul style="list-style-type: none"> *Does the content reflect the lived experiences of the media audience? *Does the content challenge dominant codes, use alternative codes, create or test new ideas? *Is the audience capable of criticising and correcting the media content? *Do these aspects of the content change over time?
B: Links with wider context
<i>4. Political participation</i>
<ul style="list-style-type: none"> *To what extent do the alternative media on the Internet reflect, complement or extend the political orientation, activities and goals of the participants?
<i>5. Social capital</i>
<ul style="list-style-type: none"> *To what extent do the alternative media on the Internet reflect, complement or extend existing networks and relations of support? *To what extent do participants believe they help create and consolidate common identities and communities? *Do they help build trust among participants? *Do they help build organisational capacity?
<i>6. Public sphere(s)</i>
<ul style="list-style-type: none"> *To what extent do the alternative media on the Internet reflect, complement or extend the mainstream media and public sphere activities and goals of the participants? *Do they operate with reliable sources of information? *Are participants able to participate as private individuals and freely exchange ideas? *Do the public sphere aspects change over time? *What are the influences of commercial forces?
<i>7. Local and global</i>
<ul style="list-style-type: none"> *To what extent do the alternative media on the Internet reflect, complement or extend existing global networks and relations of support?

Chart 9: Summary of suggested methods for future research

<p>A: Media participants, process and content</p>
<p><i>1. Participants</i></p>
<ul style="list-style-type: none"> *Postal survey - quant data on factors and levels of access by organisations *Telephone survey - quant and qual data on organisational restraints and barriers *Participatory involvement combined with: *Content analysis - quant data on levels of participation by individuals and organisations and changes in participation over time *Focus group/feedback session - qual data on restraints and barriers within organisations *In-depth interviews - qual data on individual factors and background
<p><i>2. Production process</i></p>
<ul style="list-style-type: none"> *Postal survey - quant data on levels of production of different media forms by organisations *Telephone survey - quant and qual data on production process within organisations *Participatory involvement combined with: *Content analysis - quant data on actual levels of production by organisations and individuals, interaction between sender and receiver, fluidity between different media forms, rules of participation, and changes over time; research in particular email use *In-depth interviews - qual data on production process within organisations and individuals' perceptions of production process, especially of email *Feedback session - qual data on group perception of production process
<p><i>3. Content</i></p>
<ul style="list-style-type: none"> *Participatory approach combined with: *Content analysis - quant and qual data on the extent of content reflecting: lived experiences of audience, challenging dominant codes, using new codes and testing new ideas, criticising and correcting the media, and changes over time *Focus group/feedback session and in-depth interviews - qual data on participants' perceptions of the extent to which content reflects their experiences, was creative, etc.
<p>B: Links with wider context</p>
<p><i>4. Political participation</i></p>
<ul style="list-style-type: none"> *Participatory involvement, combined with: *Content analysis - quant and qual data on the political content of the media *Focus group/feedback session - qual data on the political orientation of the participants and perceptions of political links of media *In-depth interviews - qual data on the political orientation of the participants and perceptions of political links of media
<p><i>5. Social capital</i></p>
<ul style="list-style-type: none"> *Participatory involvement, combined with: *Content analysis - quant and qual data on the social capital aspects of the media *Focus group/feedback session and in-depth interviews - qual data on existing social capital networks and relations and perceptions of links with alternative media on the Internet
<p><i>6. Public sphere(s)</i></p>

*Participatory involvement, combined with:

*Content analysis - quant and qual analysis of 1) reliability of information, 2) level and quality of discussion

*In-depth interviews, focus group/feedback session - qualitative data on links with mainstream media and public sphere, and how Internet media functioned as public sphere

7. Local and global

*Telephone survey - quant and qual data on geographical sphere of operations

*Participatory involvement, combined with:

*Content analysis - quant and qual data on content with global links

*In-depth interviews and focus group/feedback session - qual data on global activities and networks and perceptions of links with alt media on the Internet

Chart 10: VSIA project questionnaire (1996)

Chart 11: Telephone survey questionnaire (1997)

Telephone survey questionnaire - First page of two

Name of org:

Date:

Person speaking to:

Preliminary question: What does your organisation do?

1. Does your organisation use computers? Yes (go to **Q5**)

No (go to **Q2**)

2. Do you plan to use (a) computer(s) in 97? Yes (go to **Q3**)

No (go to **Q4**)

3. What do you plan to do with the computer(s)?

Skip to Q7

4. I'm finding that many women's (environment and international development/eid) organisations use computers but a good number don't. Could you tell me some of the reasons why your organisation doesn't use computers? If funds: are there any other reasons?

Skip to Q9

5. Does everyone in your group/organisation use computers?
all/ more than half/ half/ less than half/ one person-**who**?

6. Does your org use e-mail/the Internet? Yes (go to **Q10**)

No (go to **Q7**)

7. Do you plan to use e-mail/Internet in 97? Yes (go to **Q8**)

No (go to **Q9**)

8. How do you think e-mail/the Internet will be useful to your organisation?

Skip to Q15

9. As you may be aware, the Internet is an international network of computers. It is possible to put up information about an organisation on the Internet so that anyone in the world using the Internet can find and read it. The Internet can also be used to exchange information and network with other women's (/eid) organisations.

If it were possible to have e-mail/Internet access free of charge, would you be interested to do that? Why or why not?

Skip to Q15

Telephone survey questionnaire - Second page

10. Does everyone in your organisation use e-mail/Internet?

all/ more than half/ half/ less than half/ one person-**who**?

If not interviewing person who uses e-mail/Internet, skip to Q15

11. How has your experience been so far with e-mail/the Internet - are you satisfied with it

or are you having any problems with it?

12. How has e-mail been useful to your organisation?

WWW?

BBS/newsgroups/conferences?

mailing lists?

13. What is your e-mail address?

14. Does your organisation have a Web page?

Web URL:

15. Does your organisation produce a newsletter?

yes/ shared/ piggybacked/ no

If yes, shared, or piggybacked: How often is it published?

Is the newsletter the main way you let people know about what you're doing?

If no: How do you let people know what you're doing?

16. I'm researching how new information technologies can be useful for sharing information among women's (/eid) organisations.

Can you tell me if your organisation currently shares information with, or works with, any other women's (/eid) organisations?

If yes: Could you give me an example of how you share information? Do you meet formally, or meet casually, or talk on the phone, or exchange faxes (or e-mail)?

Thank you, etc.

Chart 12: Focus group process (1997)

At the start of the focus group, the seminar facilitators (a WRDA representative and the researcher) conducted a small-group exercise. Participants formed three groups to discuss the following two questions:

*What are the main problems with using computers in your organisation?

*If these problems were overcome, and all the computers in women's groups in Ireland were linked up through the Internet, what do you think could happen?

Afterwards the whole group came together to discuss the same two questions. The discussion, which lasted approximately an hour, was recorded.

Chart 13: Question guide for in-depth interviews (1998)

<p>Question guide for in-depth interviews - first page of four</p> <p>Name of org: Date: Person speaking to:</p> <p>1. Organisation details</p> <p>What is the main purpose of the org, what does it do?</p> <p>Is networking with other women's organisations a priority for org?</p> <p>How many staff, full-time or part time/ volunteers?</p> <p>What are their roles?</p> <p>Do you publish any newsletters or do regular mailouts?</p> <p>How often?</p> <p>Who does it go to?</p> <p>How else do you publicise the organisation?</p> <p>How do you hear about what other women's orgs are doing?</p> <p>2. IT hardware details</p> <p>How many computers in your org?</p> <p>New or old?</p> <p>How many staff use computers?</p> <p>Who is Internet Service provider? Staying or changing ISP?</p> <p>How long has the org been online?</p> <p>Why did org go online?</p> <p>How many computers with Internet access?</p> <p>Whose computer has Internet access?</p> <p>Easy to access the Internet-linked computer? How is it accessed?</p>
<p>Question guide for in-depth interviews - second page</p> <p>3. Experience of email and opinions</p> <p>How long have you been using computers?</p> <p>How long have you been using email?</p>

In the past week, did you log on to ISP?

If yes, how many times?

Did you check the email?

At regular times?

How many did you receive?

Who did you receive from/why?

What kind of messages do you enjoy most receiving?

Did you send email?

Who did you send to/why?

What kind do you most enjoy sending?

Any problems with email?

Compared to the telephone, how useful is email?

Compared to the post, how useful is email?

What would you like to see in an information or training manual on the Internet?

What do you think is the biggest barrier to other women's orgs going online?

Do you think "technophobia" is a barrier to women's orgs going online?

Do you think cost is a barrier?

Aside from Womenslink orgs, do you know of any other women's orgs online in the North or border counties?

If another women's org insisted in communicating only by email, would it be more or less hassle for your or your org?

Question guide for in-depth interviews - third page

4. Staff use of Internet

How many staff use e-mail/Internet?

Who are the staff members who use the Internet?

Who uses it most often?

What is done when an email comes in for someone? How distributed?

How is Internet use viewed by management?

5. Experience of the Web and other Internet processes

Did you go onto the Web?

If yes, what were you looking for?

Any problems finding the info or using the Web?

What would you say is more useful to you, email or the Web?

Does your organisation have a Web page?

Web URL:

If not, are there plans to develop one?

What is your opinion of the information on the Web?

Have you ever come across any feminist information on the Web?

Have you ever used Internet bulletin boards/newsgroups or mailing lists (aside from Womenslink)?

If yes, what is your opinion of them?

Question guide for in-depth interviews - fourth page

6. Womenslink

Do you know personally some/all the women who use Womenslink?

How often on average would you communicate with each other OFF the Internet?

When is it useful to communicate with Womenslink?

Anything you particularly like, dislike about WL?

Generally speaking, how useful is Womenslink?

How could it be more useful?

If there were more women's groups in the North and border counties on the Internet, do you think they should be invited to join Womenslink?

Would it matter that you don't know them personally?

Should there be a maximum number of women's orgs on Womenslink?

Do you think Womenslink would be useful for sharing information about what women's groups are doing?

Do you think it would be useful for sharing information about feminist issues?

About issues relating to women in Northern Ireland?

Any other issues?

What could you contribute to Womenslink?

Chart 14: Discussion guide for Womenslink feedback session (1999)

1. What is the value of Womenslink - Does Womenslink in any way(s) meet your needs and the needs of your organisation? (Question for focus group was a general discussion of the role of Womenslink.)
2. Building trust, relationships - Does Womenslink in any way(s) help to build trust and relationships with other Womenslink members?
3. Political activities, organising - Does Womenslink in any way(s) help the political organising activities of your organisation? (Question for focus group - Why do you think there has been so little discussion on Womenslink of the huge political changes that have occurred in Northern Ireland in the past few weeks?)
4. Wider women's movement - Does being a member of Womenslink help you or your organisation to feel part of a wider, global, women's movement?
5. Improvements in the future - Do you have any suggestions for improving Womenslink or any thoughts on how you would like to see Womenslink grow in the future?