

Digital Multimedia Use and Consumption in the Irish Household Setting

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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.

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Abstract

This thesis is essentially about human interaction and engagement with ICTs, in this case the internet. Its primary objective is to explain how human-techno relationships are constructed, maintained and modified, and to assess a number of social factors influential in the shaping process.

The thesis presents a qualitative in-depth analysis of 16 households, in order to provide an understanding of the intricate and subtle processes of domestication and how they are influenced by a range of social factors. In Ireland, traditional studies of internet users have been general and wide-scale. Thus, a small scale, user-focused qualitative analysis of the ways internet technologies are becoming technologies of everyday life is timely. Therefore, the present study marks a move away from determinist-focused reports, towards a social shaping of technology perspective, in order to analyse the influence of social factors on the domestication and consumption of the internet in the household.

The major conclusion of this research is that one must look beyond a single influence or social factor to accurately portray the nature of domestic internet consumption. The current study presents a multi-layered analysis of how social factors, especially social class, gender, age and economic factors influence the use and consumption of the internet. In addition, case-studies of individual households are used to examine the influence of such factors in depth. A user-based analysis of the domestication process, rendered from an application of the Silverstone model, is constructed. Through this practical application, an understanding is gained of the complex processes of domestication involved in acquisition, use, consumption and conceptualisation of technologies in 'everyday' life. The present thesis provides concrete examples and experiences of social factors working together to shape the ways people create themselves as users, and the ways they form relationships with and engage with the artefact.

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List of acronyms

ICT	Information and Communication Technology
TD	Technological Determinism
ANT	Actor Network Theory
SST	Social Shaping Technology
CSO	Central Statistics Office
MRBI	Market Research Bureau Ireland
PC	Personal computer
ISP	Internet Service Provider
PIS	Post Industrial Society
DHCP	Dynamic Host Configuration Protocol

Chapter One

‘Mapping the Context’ – guidelines to the thesis

- 1.1 Introduction
 - 1.2 Aims and objectives
 - 1.3 Background: relevance of the research
 - 1.4 Justification of the thesis
 - 1.5 Introduction to the theoretical framework
 - 1.6 Introduction to the methodology
 - 1.7 Chapter outlines
 - 1.8 Conclusions
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1.1 Introduction

The consumption of the internet in the household has become a matter of increasing concern for academic research, both in an international and Irish context. In the past, traditional media competed for the attention of domestic consumers/users. Now the internet, as a novel element in an expanding portfolio of media technologies in the home, is providing domestic users with a gateway to the information superhighway: to a source of boundless information and access to an electronic communications network. This shift in domestic media consumption habits deepens the methodological problems for researchers and poses an increased level of complexity for academics.

Such an important transformation in domestic media consumption requires careful investigation and examination to properly understand the subtle processes and social effects of its introduction and integration into the household. Once considered a tool for office work or a ‘giant calculator’ associated with university mathematics or physics departments, the internet can now justifiably be considered as another media technology for the home. The geeks, nerds and hackers of the early 1980s and 1990s who embraced the nascent technology and first brought the artefact home, have helped to render the internet and the personal computer as domestic technologies.

It is in this context that the current thesis is located. There has been an important transformation in the make-up of Irish domestic media networks. Over the last decade or so, a rapidly growing number of Irish households have obtained access to computers and the internet, as well as to a related cluster of digital multimedia ‘content’ and other products. Irish people are now using the internet in the home,

yet this has not been documented in any serious academic or critical fashion. Apart from some commercial and official surveys of general use (for example CSO, 2003; ISC, 2000), we lack a deep, longitudinal study of domestic internet users which goes beyond mere statistics and figures to a more in-depth study of new media consumption in the domestic sphere.

This thesis plans to further the tradition of academic studies exploring domestic use of information and communication technologies (ICTs)¹ by focusing on the user, or the active audience. The main conceptual approach for this study is the 'domestication of the internet' – the social processes which ICTs undergo in order to become embedded, integrated and a part of the household. The user, or the audience, is active in the sense that the internet is taken to mean different things to different people, and this meaning is generated through the process of *domestication* (Silverstone, 1989, 1992; Lie & Sørensen, 1996). Domestication draws on the notion that small groups or individuals are 'active' in the ways they construct their own interpretations and the meaning of their world.² The internet, as a result, is assigned meaning and significance by the user in accordance with the user's own pre-existing beliefs, values, codes or competencies.

In turn, these pre-existing beliefs, values, codes or competencies are shaped by a plethora of social factors, which shape how people regard media technologies. The social factors at play include a user's gender, age, social class and economic influences, along with where and how they live (e.g. their household composition, relations within the household, location and so on). These are not arbitrary factors pulled out of thin air, but are used regularly to shape studies in the same area, none more so than large-scale quantitative studies.³

¹ The field of domestic media consumption is a wide and varied discipline which focuses on the technology as a text *and* on the content of technologies (e.g. radio programmes, television serials, films, videos). Researchers have analysed the effects of the consumption of media technologies and the effects of the content of the medium, yet this has scarcely been documented in the Irish context.

² Wiebe Bijker (1995) has developed a theory of 'interpretive flexibility' to examine the ways in which different users develop different understandings and meanings of technologies and its uses.

³ The Market Research Bureau Ireland (MRBI) and the Central Statistics Office (CSO) regularly produce reports in which data are broken down into demographic categories, such as age, in order to show use.

Therefore, this thesis will avail of in-depth qualitative methodologies to explore the intricacies of domestic internet use. In Ireland, the tradition of broad and general quantitative surveys of Irish households has tended to take precedence over focused small-scale studies (see, for example, CSO 2001, 2003; Eurobarometer 2001a, 2002b; MRBI 2002). Such studies are useful in some contexts as they provide a certain 'helicopter' perspective of Irish domestic use with easily managed packages of numbers; one might be forgiven for thinking that all 'early adopters' of internet technologies are young, middle class males living and working in Dublin. What such statistics do provide is an impression of the trends and patterns of internet use and consumption. This tells us how many *households* have access to the internet, but this does not provide an accurate representation of what happens in these households, as in who is using the internet and for what purposes. The adage 'one size fits all' is particularly applicable in this sense.

Furthermore, the idea that *households*, as a unit, are using the internet is problematic. In the same way, another problematic concept is that which constitutes a 'typical user'. All householders may or may not use the internet in the same way. Instead, this thesis includes each household member in the sample. Non-users are as important as users in the ways they give us insights into the reasons why the internet is not attractive as an entertainment or communication medium, or what barriers have been erected to prevent access to, or use of, technology. This thesis concerns itself with users of technology and the relationships between the user and the technology and how these are modified and constructed. It must be made explicitly clear at this early stage that the focus and object of the research is the user/non-user and not the household as a unit of analysis. The household must only be understood as the context or the location of the research or the vessel which accommodates the individual user.

This thesis plans to describe the narratives of domestic users from the 'bottom up' – meaning it will focus on the lived experiences and realities of domestic users. Using qualitative methodologies, such as in-depth interviewing, allows us to gain a more holistic perspective of domestic internet use and to understand the new sets of relationships formed between people and technology, as well as how people have integrated the technology into their lives and their homes. Using these techniques it

is possible to gain an understanding of the changes to the 'everyday life' of the user. These techniques are useful in the ways they allow researchers to explore and understand the changes to the patterns of domestic media consumption of users, and how users personalise their internet, assign meanings to the artefact and conceptualise the technology. It is also crucial to explore how social factors or agents (for instance gender, social class) influence this process of domestication, in order to examine how the pre-existing beliefs, values, codes or competencies are reconciled with a person's own social characteristics and to explore how the internet is then integrated into the user's habits and routines of daily life.

Given the fact that there has been a great deal of in-depth research conducted on almost all other media technologies in the home,⁴ relatively little research has been conducted in the Irish context, particularly in the fields of new media and consumption. This research project marks an attempt to address this problem and provide a concise, empirically grounded study of domestic internet users in Ireland. This study is not intended to be a universal exemplar of normative usability nor is it intended to be a blueprint of domestic internet use in Ireland. Instead, it should be understood as a small-scale qualitative study of 16 households in Dublin. Rather than conduct a survey of a representative sample of the population to provide a package of easily managed figures and statistics, this thesis will strive to eliminate objectivity in order to achieve subjectivity. Subjectivity, in this case, represents individual domestication experiences and narratives of user's internet consumption. Yet one restriction entails another. We attain subjectivity, but we fail to attain an extended knowledge of a generalised, representative sample. However, in this case such a trade off is justified in order to provide a critical and qualitative understanding of the consumption of new ICTs in the household setting.

1.2 Aims and Objectives

Earlier in this chapter, a change in the consumption patterns and media networks was discussed, and it was proposed that such a change requires in-depth investigation and critical examination. The question then remains how best to

⁴ For example television (Lull, 1990; Morley 1986), video (Gray, 1992) and satellite television (Moore, 1996). Sonia Livingstone (1999) has greatly contributed to this field focusing more recently on young users of ICTs.

tackle this *problem* of domestic users. Domestic users are not simple research objects contained within a simplified context, but pose complex and problematic challenges for researchers. To adequately investigate the domestic user, a methodology and a set of research questions must first be identified which are sensitive to the research problem. I have briefly alluded to the research methodology above, but the *why*; the *what*; the *how*; the *where*; and the *who*; have yet to be identified, elaborated upon and set in context. This section will address what this thesis plans to do and how it plans to do it.

The core research themes framing this dissertation can be grouped into three main sections. The first key theme explores the social processes the internet undergoes, and is subjected to, in order to become 'domesticated', 'embedded', 'entrenched' or 'invisible' within the household setting. This implies a dual process where the user subjects the technology to make it fit into their personal context, and the user is shaped by doing so. The technology itself is adapted and shaped to fit into society and into domestic spaces. What are these social processes which render technologies domesticated? How influential are they in their ability to shape the user and shape the technology in turn? As mentioned above, analyses of media use or technology use have traditionally applied three variables to examine the trends and patterns of their sample – age, gender and class. This thesis also uses these three variables, but will incorporate a crucial other. Since the location and context of the research is situated in the household, the composition of the household is deemed to be a critical factor shaping the ways users construct *their* internet.

It is possible to draw from this theme how the research problem is to be supported by the conceptual framework. It implies a focus on how technologies become part of everyday life, for instance, using the concept of domestication of the internet as a guiding analytical tool for making sense of the empirical data once gathered. It also implies some understanding and integration of the concepts of domestication (Silverstone, 1989, 1992, 1994; Lie & Sørensen, 1996) and social shaping of technology perspective (for example, Mackenzie & Wajcman, 1999) which will be discussed in more detail in the next chapter.

The second research theme is concerned with developing a critique of user engagement with the internet technology. This question is possibly the most important element framing the research. It concerns how the routines and habits of the users' 'everyday life' are shaped by the use of the technology and how, in turn, the technology is shaped by 'everyday life'. This research question implies an appreciation and understanding of the audience, both in the traditional and new media sense. It also implies a level of integration of the concept of social shaping of technology and the process of domestication of the internet to understand fully the changes to everyday life.

The third research question examines the kinds of meanings users assign to internet technologies and explores how these meanings are socially shaped by a multitude of factors (in this case the four principle factors are gender, social class, age and household composition). These social 'factors' also shape the use and consumption of the artefact and how users conceptualise the internet and what it means to them as a technology and a medium. These 'factors' are based on the pre-existing beliefs, values, codes or competencies developed by users during their lifetimes.

Therefore, the hypothesis to be tested in the course of the present thesis involves assessing the agency or propensity of these 'factors' to influence the ways users construct their internet. For instance, gender is generally considered a major influence on the consumption of the media and technologies. This thesis will test whether the same generalisations can be applied in the same ways to new media technologies. Similarly, if one were to take the findings of major large-scale studies at face value, it might appear as though older members of society are reticent technophobes (CSO, 2003). Therefore, the qualitative nature of the current thesis will look behind the figures and the statistics about Irish internet users. It will privilege the lived experiences of users, their approach to new media and how they make sense of the media networks around them. In addition, the role of the internet in this network and how peoples' patterns of media consumption have shifted in order to fit the internet into the pre-defined trends of consumption will be explored.

This thesis proposes to move away from a certain dichotomy manifest in the discourse of internet users. Studies have tended to either talk about users or non-

users, but have failed to recognise that both are intricately linked to one another, especially when the context of discussion is the household (see for example, Eircom: Ennis Information Age Town, 2001; ISC 2000). The thesis aims to further the discussion of interpretive flexibility (Bijker et al., 1987) where the internet can mean different things to different users depending on how they construct and negotiate *their* internet. It no longer has to be the case of users on the one hand and non-users on the other. This thesis brings both groups together and offers analyses of both perspectives – of why certain people choose to become expert users of the internet and why other people choose to distance themselves completely from the technology and become (sometimes informed) non-users.

1.3 Background: relevance of the research

The social aspects of ICTs are an important area of research because the household is a significant site for the use and appropriation of pervasive new technologies. In addition, it is important to document, analyse and understand the changes that are occurring in the ways people consume media technologies in the home.

The media plays a significant role in people's lives. Grossberg (1998) discusses the importance of the media at both a social and an individual level. From providing access to information to sustaining communication, the media is an integral part of 'everyday life'. The majority of media consumption takes place in the home, where users have access to a multitude of media – television, radio, internet, books and so on. The household also plays a central role in the everyday life of people. First, it is the place where the separate realms of family, household and ICTs converge. Second, it is a place where consumer goods, in this case ICTs, are subjected to subtle influences, which constitute the domestication process. Therefore, it is important to engage with the site where key factors shaping our contemporary culture seem to converge and, especially in terms of this thesis, with the domestic domain of family relations and the ever-increasing presence of ICTs. Thus, I believe it is crucial to investigate this aspect of the more general phenomenon of *The Social Consequences and Shaping of New Media*, to quote the title of a recent book on the subject (Lievrouw & Livingstone, 2002).

It is important and necessary to conduct a study of this nature in Ireland. First, this study is significant in the Irish context because it marks a move away from the typically quantitative and deterministic approaches to conducting research into ICT consumption in Ireland. Second, studies of a similar nature have been undertaken in many countries; for example, in Britain, (Silverstone & Hirsch 1992; Haddon & Silverstone, 1995; Livingstone, 2002), in the Netherlands (Van der Loo & Mante-Meijer, 1997; Bergmann, 1997; Frissen, 1997; Rommes, 2003a; Rommes, Slooten & Oudshoorn, 2003), Trinidad (Miller and Slater, 2000), Canada (Bakardjieva 2001), and Norway (Sørensen & Lie, 1996; Aune, 1996). Third, it provides a context in which to place the results of a broad quantitative survey, by describing a rich, detailed account of the subtle factors inherent in the domestication process.

1.4 Justification of the thesis

The studies listed in the previous section all signify extensive research in the international field of domestic media technology consumption. What becomes noticeable when scanning the list is the apparent limited amount of research conducted of a similar nature in Ireland. Although this body of work serves as an important resource of comparable studies, the social changes associated with the emergence of the personal computer and the internet are yet to be examined in an Irish context.

Such an examination is important, in order to add to the existing body of research focused on the role, influence and usage of traditional media in the home (e.g. Kelly & O'Connor, 1997; O'Neill, 1997). The study presented in this thesis is sensitive to the peculiarities of the Irish situation. Ireland has many social, economic, political and cultural differences compared to Britain or Trinidad (Livingstone, 2002; Millar & Slater, 2000), hence such studies prove redundant when attempting to draw comparisons or conclusions relative to the Irish context. Apart from some very general descriptions and figures about the diffusion of the internet and personal computer, we know little about the incorporation of ICTs into the 'everyday life' of Irish domestic users.

1.5 Introduction to the theoretical framework

In order to understand technology in everyday life, this thesis will present an argument for the integration of two theoretical perspectives: (i) the social shaping of technology perspective (Mackenzie & Wajcman, 1999), and (ii) the domestication concept (Silverstone, 1989, 1992; Lie & Sørensen, 1996). Domestication is one of the more accepted conceptual frameworks used to analyse ICT users and their relationship to technologies they use. Domestication was deemed more suitable than alternative adoption of technology models (for instance, Rogers 1962) as it signifies the ability of individuals, families, households and other institutions to make new technologies and services their own; to integrate them into everyday lives. In a dialectical process, skills and practices interact with and underpin the construction of meaning around the use of ICTs.

The social shaping of technology perspective allows for many social factors to be considered in this process (including technology), while the domestication concept allows users to render the process as a personal experience. Domestication allows scope to challenge normative user relationships to technology. However, most popular accounts of technology and society tend to elevate the agency of the technology in the overall process, affording it status as the driver of social change, thus rendering the user's input or experience impotent. This perspective is known as Technological Determinism. Chapter two addresses the implication that technology can be argued to constitute an independent entity that causes or brings about direct social change (Ellul 1964, Toffler 1974, Negroponte 1995, Winner 1977).

In its strongest version, technological determinism claims that changes in technology have crucial agency over social, cultural, economic and political changes in society. As a consequence, technologies are presumed to be autonomous, almost accidental inventions – the outcome of isolated scientific and technical processes – and then assumes that they have direct effects on social life. This technical process appears to follow a fixed track, from less to more advanced configurations, and renders users as a homogenous group appropriating the technology in the same ways and for the same reasons. This study aims to present a more user-focused, '*user-friendly*' account of the relationship between technology

and society. This thesis presents a critique, based on qualitative empirical data, of the 'hype' as it is centred on technology's power to shape the user. It aims to privilege the user within the domestication process. Thus, the technological change is regarded and analysed as primarily a social process.

1.6 Introduction to the methodology

This thesis will argue that only through focused, qualitative research and individual case studies can we begin to understand the in-depth nature of the consumption of ICTs in households and the subtle complexities of people's relationships with ICTs. Given the household setting has such a central role in a person's life, it is important to document, analyse and understand the changes that are occurring concerning the ways in which people consume and use ICTs in that setting. The methodology for the research project was largely focused on an empirical study. The qualitative approach analyses the motivations of people for using (or not using) ICTs and their perceptions concerning uses and technologies. Ideally, these analyses should be located in a wider socio-cultural and socio-economic framework, making connections to the lives of these people overall.

This thesis relies on ethnographic methodologies⁵ to show how the internet, as a technological artefact, is domesticated, used and consumed in the household setting. The household setting is arguably the most private area for individuals. Therefore, in order to gain access to that private social space, a researcher must adopt a methodology that is sensitive to the user, the household and the user's space. This sensitivity can lead to the gathering of the most useful data from the field.

Qualitative research tends to engage with a small number of people in a more in-depth manner. Thus, qualitative research within media studies (and generally) often draws from anthropology (as mentioned in the domestication approach), using

⁵ A number of research techniques were carried out to provide a rich picture of the nature of internet consumption in the household setting. In-depth interviewing was the main research instrument. To complement the interviews, the respondents were asked to complete a time-use diary describing their media use. A small amount of participant observation was employed to find out how respondents spoke about their media use, their internet use, their household relations, their motivations for purchasing the technology and their fears and hopes.

ethnographic research methods (such as fieldwork, observations, long-term placements in the research field, in-depth interviews, focus groups etc.). The ethnography of ICTs examines the use of different media and communication devices in a socio-cultural context. It thus combines use as well as the ICTs themselves, since it is in the actual uses and the communication situations that the meanings of ICT use emerge. It takes into consideration the everyday environment of the user and is able to locate use within interactions.

As mentioned earlier, large-scale studies and surveys are useful in the ways they give us some indication that Irish households are experiencing changes to the patterns and routines of media technology consumption. However, this thesis wishes to go beyond the mere understanding that something is happening, to an understanding of the reasons, the stories and the lived realities of the users. The problem of audiences and their activities can be better served, in this case, by focused, in-depth case studies of households experiencing those transformations and changes to the make-up of their media environment and daily consumption practices. The nature of the present study requires sensitive and nuanced qualitative methodological techniques to aptly examine the intricate and subtle changes that users are experiencing.

1.7 Chapter Outlines

This introductory chapter provides the reader with a detailed context of the thesis. First of all, it addresses the key research questions and aims and objectives of the study. Second, this chapter provides a brief introduction to the theories and methods employed.

Chapter two addresses the main theories of technology and society, briefly introduced in Chapter one. It also serves three purposes. First, it provides the reader with a grasp of the main theories and concepts, while also introducing the influential authorities and critics in the field. Second, these theories are challenged and discussed to gauge their suitability as an over-arching framework to support

the current thesis against the paradigm set out by the Ennis project⁶. It represents the direction for the research and is codified and infused throughout the thesis. The empirical chapters are heavily dependent on the conceptual framework for their contextual basis and the theories, concepts and notions described in this chapter are referred to throughout the thesis.

Chapter three addresses the notion of audiences and users within the social shaping of technology approach, by analysing the social history of traditional media. It seeks to present lessons and examples from when 'old technologies were new'.⁷ Its aim is to demonstrate that the emergence of new ICTs is not so revolutionary as to constitute a break from the past, but common trends and patterns can be detected and learned from.

Since the study is located in Ireland, it is necessary to furnish the reader with a sociological context of the research. Chapter four presents a concise insight into the social, cultural, political and economic climate in Ireland. It seeks to portray an image of post-Celtic Tiger Ireland in which new technologies are playing an important role both in the public and private lives of Irish citizens. Furthermore, this chapter critiques four fundamentally influential factors on the use and consumption of ICTs. Gender, household composition, economic and generational factors have been identified as important social shaping factors not only on consumption practices but also on individual domestication processes. As briefly introduced in the previous section, this thesis will avail of qualitative and ethnographic methodologies. Chapter five addresses the main research concerns, the methodologies and the techniques employed.

Chapter six begins the first of five chapters presenting and analysing the primary research findings. General conclusions across the sample are presented here. Chapters seven to ten have a dual focus. First, each individual chapter presents a general overview of how one particular social factor, identified in Chapter four,

⁶ The Ennis project was Ireland's first Information Age Town (1997). It was an attempt to create a fully digital and wired community. A background to the Ennis project can be found on page 17.

⁷ The sentiment here borrows a title of a book by Carolyn Marvin (1988), *When Old Technologies Were New: Thinking About Electric Communication in the Late Nineteenth Century*.

shapes domestic internet consumption. The second part of each chapter deals with a single case-study, zooming in on one individual household to provide a rich, in-depth analysis of the influence of the social factor. The aim of these chapters is to give the reader a lived history of domestication and to show how the social shaping of technology can be useful to help us understand domestic consumption.

Chapter eleven concludes the thesis and reflects on the key questions and key concepts that have emerged. This chapter addresses the main achievements of the thesis, reflects upon the process of the research and provides suggestions for future research.

1.8 Conclusions

The emergence of new ICTs is linked to enormous changes in the routines and everyday practices of the Irish household. The household plays a crucial role in peoples' lives. It is the main focus of the 'private sphere', where many social values are learned and where many important personal relationships are formed. Because of the status of the household in peoples' lives, any changes to the patterns of domestic life are important areas of study. This thesis focuses on the changes associated with the introduction of the internet to the domestic setting: how people appropriate and place meanings on the internet, and how relationships with both the technology and family members within a household may change after its introduction. These are important, but subtle processes and changes that have been neglected generally in Irish research.

The dominant technology-led theory – technological determinism – provides an inadequate explanation of how ICTs are incorporated into the household. In fact, technological determinism completely ignores the role of the user in the process. It suggests that ICTs come into the household as completed or self-contained artefacts, with fixed interpretations and meanings. This ignores the role of users in shaping or reshaping technologies in many important respects. Users of technology are generally (and too easily) conceptualised as relatively passive end users and are thus overlooked or taken for granted. Technological artefacts are treated as 'black boxes', and users are denied agency to choose, use and experience them in different

and varying ways. This, in turn, denies them a role in the active construction of meaning.

Therefore, the process of the incorporation of technology into everyday life has been scarcely documented, with scant theoretical reflection, especially in an Irish context. Consequently, a more nuanced conceptual framework is necessary; one that is sensitive to social influences on the ways ICTs are incorporated into the household. I have shown how aspects of the social shaping of technology perspective and the domestication concept can offer a more sophisticated account of how ICTs are assimilated into the domestic setting. An amalgamation of these theoretical frameworks enables us to examine the underlying processes of the changes taking place. One outcome may be an assessment of whether the decisive influences on the ways ICTs are appropriated are technical and/or social. This thesis focuses on people rather than technology, as do the research methods used. It seeks to tease out how users form patterns of consumption and construct relationships with the technology, and under what circumstances those relationships are formed.

Chapter Two

‘Technology, society and theories’ - A review of the meta-theories of techno-social relations

- 2.1 Introduction
 - 2.2 Objective of chapter
 - 2.3 Background to the Ennis project
 - 2.4 Ennis: through a TD lens
 - 2.5 Ennis: through an ANT lens
 - 2.6 Ennis: through an SST lens
 - 2.7 Chapter conclusion
-

2.1 Introduction

This thesis is essentially about human interaction and engagement with ICTs. As outlined in the opening chapter, the primary objective is to explain how human–technology relationships are constructed, maintained and modified. This entails a discussion of how and why users initiate relationships with artefacts, and the effect, if any, the technology has on daily life and on the consumption practices of the user. A central controversy within the academic contributions to this field concerns how far technology does or does not condition social change. Various analytical frameworks have been proposed, which differ to varying degrees in their treatment of technology and the role or agency of users to influence this relationship. Several schools of thought have focused their efforts on trying to explain the relationship between society, the user and technology. The three major perspectives to be explored in this chapter are:

- a) Technological determinism,
- b) Actor Network Theory, and
- c) Social shaping of technology.

The first theory to be examined is technological determinism (TD). It represents the most popular, and indeed the most established, and influential critique of the relationship between technology and society. This theory can be framed by use of a title from a recent book by Smith and Marx entitled *Does Technology Drive History* (1994). Other major contributors to this field include: McLuhan (1964), Toffler (1970), Winner (1977), Negroponte (1995) and Kelly (1999) who are among the authors generally associated with this field. In its basic form, TD seeks

to explain social and historical phenomena in terms of one principle or determining factor – technology – which has historical or causal primacy.⁸

The second theory is Actor Network Theory in which all elements in a (socio-technological) network are dependent on each other. It evolved from the work of Michel Callon (1987) and Bruno Latour (1992) at the Ecole des Mines in Paris.

The third theory, which emerged through a critique of the TD tradition, is the social shaping of technology (SST) perspective. SST attempts to explain change as a thoroughly social process. This perspective emerged during the mid-1980s through influential writings from MacKenzie and Wacjman (1985, 1999), Bijker *et al.* (1987) and Bijker (1995).

2.2 The objective of the chapter

As discussed in the previous chapter, Irish studies of domestic internet consumption are rare. However, there is one study that provides a useful and paradigmatic context for this thesis: the Ennis ‘Information Age Town’ project (see section 2.3 below). First, the three theoretical perspectives above will be reviewed and critiqued against a backdrop of the Ennis project in order to test the validity and suitability of the theories in light of the current thesis. Hence, the Ennis project will be critiqued through a theoretical *lens*. Second, I will apply the theories to the current thesis, taking into account the provisos and what can be learned from the Ennis project. This exercise will ensure that the current thesis is supported by a sensitive and appropriate framework.

2.3 The background to the Ennis project

According to the promotional blurb on the project’s official website, the Information Age Town project was intended to be a live experiment to see what would happen when an entire town became ‘wired’.⁹ In October 1996, Telecom

⁸ The term ‘Technological Determinism’ was apparently introduced by American sociologist and economist Thorstein Veblen (1857–1929) (Ellul, 1964: xviii).

⁹ This extract is taken from the project’s homepage accessed at: http://www.eiat.ie/project_overview_history.php (3rd July, 2004)

Eireann¹⁰ announced details of a competition: a flagship project designed to accelerate Ireland's progress towards the Information Age. The goals of the project were twofold: (i) to saturate a town with 21st Century communications technologies to see how people came to terms with such technology, and (ii) to encourage the town to trial new technologies and applications. A public/private partnership, spearheaded by a task force comprising 11 men and five women active in business, community, education and public service, championed a successful bid for Ennis, resulting in the town (population 18 000) becoming Ireland's Information Age Town in September 1997 (McQuillan, 2002). The Information Age project was formally launched on the 3rd April 1997.

Since 1998, the Ennis project has provided a test-bed for:

- A fibre-optic ring, the first in any Irish town, connecting all areas of the town with 24 fibre-optic conduits.
- High speed internet via asymmetric digital subscriber line (ADSL), an experimental 'always on dynamic ISDN' (AODI) connection and a 3 000 capacity ISDN exchange.
- Public internet access via internet kiosks. Stand-alone internet kiosks were tested for 18 months in Ennis in hotels, shopping centres and tourist offices. These proved to be problematic from a technical and management perspective and have been replaced by PCs with free public internet access in staffed community network centres and in the county library – which provided 24 000 hours of free internet access in 2000.
- Smart cards. Ennis hosted a 12-month electronic purse trial to evaluate a smart card alternative to cash – an experiment centred on the concept of a cashless society.
- WAP trials, pioneering e-commerce transactions via WAP. Using a smart card and WAP phone, bank customers were able to transact online and secure transfer of cash.

Over the past five years, various reports and studies (in-house and independent) have been conducted to assess the 'impact' of how the town, its inhabitants,

¹⁰ Telecom Eireann changed its corporate identity to Eircom on 6th September 1999.

businesses, schools and communities have adapted to the £15 million investment by Eircom (1997–2002).

In 2001, an Eircom-sponsored resident survey reported a household PC ownership rate of 83% and active internet usage by 77% of its population. Four thousand six hundred households (83%) received subsidised, internet-enabled computers, supported by free PC familiarisation training (Eircom, 2001). Managed by a residents' co-ordinator, the program aimed to maximise access to computers at home, encourage internet usage and ICT skills acquisition. Three years on, in households that have an internet connection (76%), the average time spent 'surfing' per month is 15 hours. Formal ICT skills have been acquired by 41% of Ennis residents, ranging from basic IT and internet skills to web design and programming. Informal training also has had an important role in skills acquisition, provided by family, friends and neighbours (McQuillan, 2002).

The objective of this chapter is to analyse how Ennis, as an experiment, can be assessed in terms of the meta-theories of technology and society. The critique will address how such an initiative is helpful in the ways it addresses the relationship between the technology, the user and the environment in which it is used. With regard to the current thesis, it is vital to explore the different ways of addressing the socio-technical relationships and the kinds of studies produced when informed by user-focused theories or, alternatively, technology-focused theories. Examining the relationship between society, technology and the user will facilitate the development of a suitable theoretical framework to support the current thesis.

2.4 Ennis: through a Technological Determinist lens

It is first necessary to provide a detailed discussion of the technological deterministic perspective in order to define its theoretical origins and development.

Technological Determinism is the most familiar theoretical account of socio-technical relations. It perceives technology as something 'outside' of society. In its most basic form, TD suggests that technology is an independent factor causing social change. In its strongest version, TD claims that changes in technology are the most important cause of change in society. It assumes that technologies are

autonomous, almost accidental inventions – the outcome of isolated scientific and technical processes. The consequent assumption is that technologies have direct effects on social life (e.g. Negroponte, 1995).

The TD view is of technology-led social change: technology is seen as ‘the prime mover’ in history (McLuhan, 1964). In economics, this is known as a ‘technology-push’ rather than a ‘demand-pull’ theory. According to technological determinists, particular technical developments, communications technologies or media, or even technology in general, are the sole or prime antecedent causes of changes in society. Technology is seen as the fundamental condition underlying patterns of social organisation.

Technological determinists construe technology in general, and communications technologies in particular, as the basis of society in the past, present and future. They suggest that technologies such as the printing press, television or the computer have ‘changed society’.¹¹ In its most extreme form, society is seen as being determined by technology; new technologies transform society at all levels: institutions, social interaction and individuals. A wide range of social and cultural phenomena are also seen to be shaped by technology. ‘Human factors’ and social arrangements are considered to be secondary (e.g. McLuhan, 1964; Toffler, 1970; Negroponte, 1995; Kelly, 1999).

Technological determinism focuses on causality – cause and effect relationships – a focus typically associated with ‘scientific’ explanations. However, any exploration of communications technology must recognise the difficulty of isolating cause and effects, or even in distinguishing cause from effect. Another feature of TD is that technology is presented as autonomous (or sometimes semi-autonomous); it is largely external – ‘outside’ society, ‘supra-social’ or ‘exogenous’ (as opposed to ‘endogenous’). Technology is presented as an independent, self-controlling, self-determining, self-generating force, rather than as a product of social processes and

¹¹ Various non-Marxist theorists, such as Lynn White Jr, Harold Innis and Marshall McLuhan, have adopted the TD stance in their attempts to explain the effects of technology on society. For example, White attributed the coming about of feudal society to the invention, and diffusion to Western Europe, of the stirrup (White, 1978; cited in McKenzie & Wajcman, 1999).

integral to them. It is seen as out of human control, changing under its own momentum and blindly shaping society. One of the most famous theorists adopting this perspective was the sociologist Jacques Ellul. In his book *The Technological Society*, Ellul declared 'technique has become autonomous; it has fashioned an omnivorous world which obeys its own laws and which has renounced all tradition' (1964:14). He presented complex interdependent technological systems as being shaped by technology rather than by society and wrote 'there can be no human autonomy in the face of technical autonomy' (1964:138). Ellul insisted that technological autonomy reduces the human being to 'a slug inserted into a slot machine' (1964:135).

Marshall McLuhan is another exponent of the TD tradition (McLuhan 1962, 1964; McLuhan & Fiore, 1967). McLuhan viewed changes in the dominant medium of communication as the main determinant of major changes in society, culture and the individual. He argued that the 'medium is the message', suggesting that the invention or presence of a new medium was far more significant than any uses or message (content) it may enable. For instance, print created individualism, privacy, specialisation, detachment, mass production, nationalism, militarism, the dissociation of sensibility (a split between head and heart), and so on.

These discourses have a very particular, technology-focused view of the historical significance of new ICTs. Indeed, a key element in techno-pundits' forecasts is that the existing media, such as television, newspapers and books, will soon become obsolete, and will be replaced by radically new digital, multimedia or interactive systems of communication within a very short time (Toffler, 1983; Negroponte, 1995; Gates, 1995). Alternative theories, which advance diametrically opposed perspectives of techno-social relations, will be discussed below as they offer both a definition and a critical analysis of TD and its significance to the present thesis. The discussion of techno-social relations is crucial to the present project as it permits me to explore how the relationship between technology and society is constructed and maintained in domestic contexts.

Among the most prominent of the current generation of techno-pundits is Kevin Kelly. Founder of *Wired* magazine, one of Kelly's key beliefs is that technology is

pervasive in society; it is everywhere and is having the effect of changing everything. According to Kelly, as 'technology becomes ubiquitous it also becomes invisible. The more chips proliferate, the less we will notice them. The more networking succeeds, the less we'll be aware of it' (Kelly, 1999:19). Therefore, according to Kelly, it is chips and technology which proliferate and become invisible to us and not the other way around. In doing so, he removes human input from the equation by suggesting that technology emerges under a momentum of its own and that people have very little influence, if any at all, on the process. This is a strong TD perspective, one that gives crucial and often directive influence to technology over social or human input.

From what we have seen so far, the relationship between technology and society renders the role of the user in the overall process as secondary, and elevates the role of the technology as the prime mover or influencing factor. If we analyse the Ennis project in terms of the theory above, then it can be assumed to be a project influenced by deterministic conceptions in the treatment of users. The outcome is a broad study of domestic ICT users with no distinction between those who have adopted and fitted the internet into their lives successfully, and those who failed to appropriate the technology. The domestic users, in the Ennis case, were not afforded the chance to reveal their experiences or impart the reality of domestic use. In this scenario, the technology takes precedence over the human. This makes it problematic in relation to the present study. The experiment, in this sense, was more about the technology and less about the actual domestic users.

Critics of the notion of technological autonomy argue that technology is shaped by society and is subject to human control. In addition, the political scientist Langdon Winner argues that technologies are not politically neutral because they are sometimes designed, deliberately or not, to open certain social options and to close others – some technologies may be more compatible with some social patterns than with others (in MacKenzie & Wajcman, 1985).

Some writers argue that particular developments in communication technology were essential preconditions for the development of modern industrial societies. Causal theories vary in the degree of determinism they reflect, although this is

seldom made explicit by those expounding them. Critics have sometimes made a distinction between 'hard' and 'soft' TD, the latter allowing somewhat more scope for human control and cultural variation.

Strong (or hard) TD is the extreme stance that a particular communication technology is either a sufficient condition (sole cause) determining social organisation and development, or at least a necessary condition (requiring additional preconditions). Either way, certain consequences are seen as inevitable or at least highly probable. For example, a facet of the 'hard' strain of TD would lay claim to the 'heroic inventor' ideal. This ideal is based on a narrative concerning a solitary figure confined to a laboratory or basement working away at inventing something new, an innovation, when he is suddenly struck by a flash of inspiration and a new invention emerges. An example where this ideal has been applied is the notion that John Logie Baird 'invented' the television. This contention ignores the fact that the 'invention' of television depended upon a whole series of earlier advances in electronics, telegraphy, photography, motion pictures and radio, several of which were initially developed with the needs of commercial or military organisations in mind (Williams, 1974).

Weak (or soft) TD, more widely accepted by scholars, claims that the presence of a particular communication technology is an enabling or facilitating factor leading to potential opportunities, which may or may not be taken up in particular societies.

Some commentators argue that constraints on the human control of technology do exist (although these may be more social than technological), and consequences following from the use of technology are not always intended, but we still have considerable freedom of choice in the use and control of technology.

Technological determinism is often an inexplicit, taken-for-granted assumption, assumed to be self-evident. Persuasive writers, such as Negroponte (1995), can make TD seem like 'natural' common sense: it is presented as an unproblematic 'given'. The assumptions of TD can be easily spotted in frequent references to the impact of technological revolutions, which have led to or brought about inevitable, far-reaching effects, or in consequences or assertions about something that will be

happening sooner than we think, whether we like it or not. This sort of language provides an animated, visionary, prophetic tone, which many people find inspiring and convincing. Negroponte, one of the most prominent TD writers of the 1990s, argues that media technologies emerge through 'purely technological imperatives' (1995:81). His book *Being Digital* (1995) is a collection of essays he wrote for the magazine *Wired*. Negroponte, a self-proclaimed futurist, outlines in the book what it is like to live in a digital world. For him, it means a life immersed in new technologies, especially ICTs. For him, it is a byte world rather than an atom world. He can foresee a time when ICTs are so prevalent that a person's cufflinks will become more powerful than the average personal computer and will be able to communicate with each other via a low orbiting satellite (1995:6).

Negroponte adopts the classic determinist position of arguing that technology emerges out of scientific and technological endeavour, and is then unleashed into society, which must adapt itself to accommodate the technology. Negroponte's take on the relationship between technology and society ignores the role of social factors in the development and consumption of technological artefacts. A recurrent theme among technological determinists is the tendency to portray consumers and users as 'passive dupes, as comparatively impotent, as malleable consumers, unthinking and unprotesting in the face of media technology' (Heap *et al.*, 1995). This utopian account of the socio-economic and cultural dimensions of new ICTs provides a poor reflection of the social and economic implications of such technical advances, or the complex interplay of technical, social and economic forces shaping their application, adoption, diffusion and domestication.

However, the inclusion of Negroponte as an authority on TD is very significant in respect of the current thesis. Negroponte, as argued above, holds a utopian reading of the power of technology and the revolutionary potential of ICTs. Similarly, the Ennis organisers displayed a comparable outlook when they spoke of unleashing technologies onto the town's population and standing back and seeing 'what happens'. This sort of perspective assumes the technology itself will bring about change and the user or other social factors have very little influence. Furthermore, Negroponte's association with the Irish context is of particular significance here. At the end of 1999, MIT and the Republic of Ireland announced a partnership to

establish MediaLabEurope, an independent, university-level research and education centre, designed "to invent the future" and replicate the innovative and entrepreneurial environment of the world-renowned MIT Media Lab¹². As its chairman, Negroponte brought his 'visionary' and utopian readings of technologies and valorised the Celtic Tiger's affirmation of the essentialist benefits of new ICTs already exhibited by the Ennis project¹³.

Technological determinism is, of course, particularly widespread at present with regard to computers and the internet. Many enthusiastic users of these technologies drift unquestioningly into the assumptions of TD, as do media and marketing campaigns that present new media technology as all-changing, empowering and necessary tool for living in the modern world. A more grounded, concrete approach, which is sensitive to influences other than technology, is required to seek an explanation or way of thinking about the role technology plays in society. A TD approach to a study of this nature would neglect the crucial significance of cultural, social, political and economic factors, which have an influence on the 'shape of things to consume'¹⁴.

The Ennis project can be deemed determinist because the project developers started out with a determinist stance – deciding to 'saturate' a town with ICTs and sit back for a while and then decide to assess the impact. In the very first instance, agency was removed from the user and the important phases which constitute the acquisition of the technology were absent.

The project team also studied the experiment in a very detached manner employing quantitative methodologies to ascertain statistical information about the domestic users in the town. Technological determinism has a close research tradition with quantitative methodologies. It became apparent during the analysis of the Ennis

¹² <http://web.mit.edu/newsoffice/1999/media-1208.html>

¹³ At the beginning of 2005, MediaLabEurope announced major financial difficulties as it failed to attract the expected levels of private investment. It is now disengaging from the Digital Hub, a facility in Dublin for digital media start-up and early stage companies, as well as digital media research. See <http://www.medialabeurope.org/news/release.php?id=76>

¹⁴ To borrow a title of a book by Cawson *et al.* (1995).

study that the project designers employed a cause and effect strategy – to supply the technologies and wait and see what happens and report on those findings.

In terms of the current thesis, the application of the technological determinist approach is problematic. The conceptual framework needs to be supportive of the empirical process from the very beginning and the research is seen as a more dynamic process – where each stage is as important as the last stage. The current research project is more concerned with the people and how they use the technology rather than the effects of the technology on the people. As far as the current project is concerned, it can be concluded that a conceptual framework based on TD principles would not be appropriate. A framework which includes and privileges the user, in a more holistic and complementary fashion, is required in order to be reconcilable with the methodology.

2.5 Ennis: through an ANT lens

The objective of the Ennis project was to introduce new technologies to a town and see what would happen. The two main players (or actors, from an ANT perspective) in the project were the town, or in other words the users, and the technologies provided for them. This could be deemed to represent a reciprocal, or equitable, relationship between the artefacts and the social groups, where the technologies were put in place and the users still had some work to do in order to make them fit into their everyday lives. This approach is best explained using the Actor Network Theory. It was developed by Bruno Latour, Michel Callon, and Madeleine Akrick from the Ecole des Mines in Paris, and John Law of Lancaster University. ANT proposes that both society and technology are made of the same ‘stuff’: networks linking human beings and non-human entities (actors, or in some versions ‘actants’).

According to the ANT perspective, innovation is the art of involving a growing number of allies who become collectively stronger and stronger (Akrick *et al.*, 1988:17, quoted in Flichy, 2002). Callon (1987) attempted to define ANT, using as a case-study the effort of the French ministry Electricite de France (EDF), to introduce an electrically-powered automobile to replace internal-combustion-powered automobiles in the early 1970s. If it had been successful, Callon thought

that the development would have ushered in a post-industrial society. The framework (network) created by the EDF was comprised of components (actors), not all of which (whom) would have previously been considered as actors by academically oriented sociologists. The network consisted not only of people and social groups, but also of artefacts, devices and entities. Engineers who develop a new technology, as well as everyone else who participates at one time or another in its design, development and diffusion, constantly construct hypotheses and forms of argument that pull these participants into the field of sociological analysis. Whether they want to or not, participants are transformed into sociologists, or what Callon calls engineer-sociologists.

One of the distinguishing factors in ANT is the complete dependency of each actor on every other actor in the network. This is how cohesion is maintained. Each part of the network is, at the same time, representing several different smaller parts of a whole, while being minimised into a small part of an even larger whole. Each part in the network is equal. The failure of any one part of the network could cause the failure of the entire network, if not corrected or replaced in time. The most important point about ANT is that it is based on an unstable theory of the actor. In other words, it assumes a 'radical indeterminacy' (Law and Hassard, 1998) of the actor. For example, neither the actor's size, nor its psychological make-up, nor the motivations behind its actions, are predetermined.

The indeterminacy of the actor naturally entails a number of difficulties. ANT is so tolerant that it ends up presenting an actor as an anonymous, ill-defined and indiscernible entity. Since everything is action, the ANT actor may, alternately and indiscriminately, be a power which enrolls and dominates or, by contrast, an agent with no initiative which allows itself to be enrolled. It is certainly this aspect that has produced the most negative criticisms of ANT and has led to the frequently repeated accusation of relativism.

The attributes of any particular element in the system, any particular node in the network, are entirely defined in relation to other elements in the system, to other nodes in the network. Technical objects are not 'things' in the usual sense, but nodes in a network that contains both people and devices in interlocking roles.

ANT argues that the social alliances in which technology is constructed are bound together by the very artefacts they create. Thus, social groups do not precede and constitute technology, but emerge with it. This brings about an interest in symmetry. Symmetry is an important concern in ANT, which calls for symmetry in the analytical treatment of human and non-human actors, giving equal agency to both. Therefore, it can be seen as a hybrid of both TD and SST perspectives.

Giving credence to technology as a major, even isometric, determining factor lends itself to TD doctrines. Latour (1996:57) claims that people and machines should be treated as equal, in ways that may be surprising. For example, he says that we have to negotiate with machines just as with people, we need to recruit them as allies, to authorise and notify them, and to mobilise and delegate them; he claims that this kind of language should be taken literally, not metaphorically. Equating technical and social factors, which bring about a network of actors working together, would seem to be the simplest way of finding a juncture or a compromise between SST and TD. Instead of subscribing to a mantra based on either technical or societal determinants influencing social change, ANT seeks to give all factors including technical, economic, cultural, and social factors an equal role in the network, with the network in question being an intricately connected system of things or people. The main points of ANT may be summarised as follows:

- There is an emphasis on networks and links, as opposed to the heroic individual 'genius'.
- The nodes in these networks, called actants, include not just humans, but also non-humans such as physical objects; they all do some kind of work to maintain the integrity of the network.
- Groups (and individuals) in general have different value systems, and translation, or compromise, among these systems is necessary for a network to succeed; this is the work that is done along the links in the network. Socio-technical compromise is the work done to bring the various technical and social nodes into alignment.
- The structure of a project can only be seen clearly when these translations (and hence the project) have been successful; hence the values, and even the parts and structure, of a failed project are not, in general, well defined.

- The human actors in a project are, in a sense, sociologists, since they must engage in acts of interpretation, which in effect are theories of the project.

Actor network theory is an attempt to find some middle workable ground between the two dominant theories of TD and SST. Since the present research would be best informed by a theory of socio-technical relations underpinned by a social shaping perspective, the weight given by ANT to the agency of the technological artefact was deemed unworkable. This reasoning will be explained in the next section, which discusses the SST perspective. ANT belongs to an area of sociology of technology and science (STS) that is often called constructivist, because it focuses on how social systems are constructed by their participants. The developers of ANT (Latour, 1996, 1999; Callon, 1987) have recently declared that ANT is over,¹⁵ but of course it is too late now to stop others from using, criticising, and modifying the ideas, or even using the name. It is included in this discussion because it has been highly influential in some recent work. Furthermore, it can be considered to be a useful theory informing the relationship between society and technology.

Both SST and ANT touch on the notion of social groups. In ANT, social groups emerge with the technology, a phenomenon which removes the human factor in the early stages of inception. In SST, social groups are located within the process as a whole, from inception to eventual consumption. In SST, the relevant social group is made up of influential actors and active shapers of the technology right through the innovation process.

Therefore, if we apply the ANT theory to the Ennis project, we are faced with a different picture than the one presented in the previous section on TD, where the role of technology was purported to have the agency or influence over the types of relationships constructed between users and artefacts. Applying ANT as the conceptual framework sees a more balanced relationship between the user and the technology, with each factor assuming an equal or reciprocal influence. However, in the Ennis project, using ANT as a theoretical framework, the removal of users

¹⁵ <http://www.comp.lancs.ac.uk/sociology/stslatour1.html> – key note speech by Bruno Latour – ‘Actor Network and After’ Workshop, Keele University, July 1997; Latour pronounces the death of ANT with the admission: ‘I am not here to praise ANT but to bury it’.

from the early stages of the overall process is problematic. Users are only worked into the equation later in the process. The influence of Eircom,¹⁶ in rendering the acquisition of technologies as unproblematic, lends an air of artificiality to the overall process. The role of users only began once the technologies had already entered the home. ANT can then be useful as a theory to explain how the construction of relationships is a dual process whereby the user and the technology are both changed and changers in the process. However, to take the starting point of an analysis from the use-stage serves only to devalue the users' role as active agents in the overall process from inception to domestication.

The research hypothesis outlined in Chapter one emphasises the requirement of a conceptual framework that privileges the user over all other factors, including technology. The research questions also demand a focus on unstable, transitory phases before the technology even becomes a factor. It can be concluded that ANT does not fit to the particular size required by the current study. Applying ANT as the conceptual framework to the current study is problematic in the same ways as it is problematic in the Ennis project. It is necessary to find a framework which is sensitive to the ways external, but social, factors, influence all phases of the process, including the technology's arrival and eventual use by individual household members.

2.6 Ennis: through SST lens

So far two theories have been critiqued – first, TD, which privileged the technology as the driver of change, and second, ANT, which tried to find a happy medium between the technology and the user, but fell short of taking the whole process, from inception to consumption, into account. This section will argue from the user's perspective – privileging social factors and user experiences as opposed to technical aspects. This section will also seek to explain why the user is instrumental in socio-technological relations and will present a theory which is a facet of SST (domestication), which seeks to explain how users render technologies as significant and meaningful in their everyday lives.

¹⁶ Then Telecom Eireann

The Ennis project represented an attempt by Eircom to artificially create an environment where ICTs would be available at a small cost to all residents, businesses, the public sector, schools and libraries. It was the aim of the organisers in Ennis to saturate the town with ICTs to 'see what happens'. This represents a clear example of deterministic assumptions accounting for changes in society post-emergence of ICTs. As will be discussed in more detail in this section, concepts such as 'impact' and 'saturate' and 'see what happens' disregard the role of users and how they can influence the situation as a whole. As we will discover, the type of experiment conducted in Ennis is far from representative of the ways in which people become users and owners of ICTs. In fact, each stage the user goes through is heavily influenced by social factors both external and personal to the individual. The pre-existing beliefs, values, codes or competencies alluded to in Chapter one are shaped by a plethora of social factors, which in turn shape the kind of user created. This section will critique a theory, which is sensitive to social factors, but in the Ennis project such social factors were ignored.

To illustrate this, Eircom's evaluative report on the progress of the 'Information Age Town Project' cites 83% of residents availing of the discounted multimedia packages available to them. Households were offered free internet access for one year. Latest figures show that only 45% of Ennis households have at least one active user, compared to a figure of 34% nation-wide¹⁷. This constructed reality has not had the desired effect of creating an *entirely* digital community. In Ennis, ICTs were introduced to the household as a closed 'black box'. People were given a computer which brought about an artificial appropriation of the technology, as opposed to having to negotiate its entry into the home. The residents of Ennis have not seen drastic changes to their perception of everyday life since the arrival of cheap ICTs. What these statistics suggest is that in order for ICTs to become successful in a contrived and fabricated situation, users have to find a need and a place in their lives, and they have to shape ICTs in accordance to their social circumstances.

¹⁷ Ennis figures obtained from official press release from Ennis Information Age Town website: available at: http://www.eiat.ie/2000_oct_press2.php. National figures obtained from CSO report (2003)

Studies of the social shaping of technology (SST) emerged in the 1980s through a critique of the prevailing TD tradition. SST researchers, in contrast to TD theorists, problematised technological change by showing that it is shaped by the conditions of its creation and use, rather than developing solely according to an inner technical logic. SST stands in contrast to post-Enlightenment traditions that do not problematise technological change, but instead limit the scope of enquiry to social change brought about by technological development.

Social research on technology and ways of thinking about technology have tended to focus on the effects of technology on society: its impacts, its implications, and so on. These phrases reflect the TD perspective examined above and the phrases associated with the Ennis project. A 'social shaping' or 'constructivist' approach to technology means to locate technology as social, or a product of social interaction. This differs substantially from the dominant understanding of technology, which perceives technology as distinct from social life, but with the ability to radically change our lives in a utopian or dystopian manner. This remains a powerful and prevalent way of thinking about technologies. According to this determinist view, the potential for change lies in the invention of the technology. This view of technology has until recently dominated academic research. Technology has been viewed as determining the development of social structures. An SST perspective, in contrast, radically reverses the views advanced by TD proponents, emphasising that technologies are embedded in the social (see Mackenzie & Wajcman, 1985, 1999). SST studies have shown that technology does not develop according to an inner technical logic, but is instead a social product, patterned by the conditions of its creation and use.

The SST theory seeks to grasp the complexity of socio-economic, cultural and political processes involved in technological innovation and use, and to move beyond narrow technical considerations. Within the SST approach, one particular theory addressing the relationship between technology and society is of interest here: Social Construction of Technology (SCOT), developed by Wiebe Bijker and Trevor Pinch (Bijker, 1995; Bijker *et al.*, 1987; Bijker & Kline, 1999). This theory focuses on a very significant point – 'interpretive flexibility'. Interpretive flexibility refers to the way in which different groups of people involved with a

technology (different 'relevant social groups', in Bijker and Pinch's terminology) can have very different understandings of the technology, including different understandings of its technical characteristics (McKenzie & Wajcman, 1999:21). The notion of relevant social groups makes SCOT very useful as a theory. Relevant social groups play a vital role in the development of a technological artefact and are defined as groups who share a meaning of the artefact. This meaning can then be used to explain particular developmental pathways. Typical groups might include engineers, advertisers, consumers, and so on. These groups are not static, and newly emergent groups can also be identified within SCOT. Although relevant social groups share a meaning of the artefact, for example, young boys viewing computers as games machines (Haddon, 1992), they may also share other group characteristics. However, interpretive flexibility does not continue forever. 'Closure' and 'stabilisation' occur, such that some artefacts appear to have fewer problems becoming embedded in society. These can become the dominant form of technology.

In essence, the research hypothesis, explained in Chapter one, give us an indication of the kind of conceptual framework required in order to provide a coherent account of domestic users' experiences of use and consumption and how they render the technology as something significant. A framework that is sensitive to social factors and domestic users is required. The SST perspective allows researchers to look beyond the explicit, technical artefact to implicit influences, for example, cultural or social factors. Within the SST approach, scholars have developed a theory of reception, domestication (which is social in nature), to understand technologies in the domestic sphere.

The domestication concept enables researchers to understand media use in the complex structures of everyday life settings, with attention to interpersonal relationships, social background, changes and continuities, but also to the increasingly complex interconnection between different media, the convergence of different media technologies and media texts. Domestication traces the creation of meaning in media from its inception (when the producers and advertisers create certain meanings for new media) to its later use (or non-use) and the meanings that emerge. Thus, the emphasis is on consumption as well as use.

The Ennis project did not afford their sample the agency of the domestication process. The researchers took it for granted that the technology became domesticated almost immediately, without any prior negotiation or shaping on the part of the user. In order to provide insights into the lived experiences of users in the current thesis, it is useful to incorporate the domestication process as a valuable tool.

It is worthwhile to note early on that domestication is but one concept or theory that can be used to make sense of how technologies find their place in the home. Several authors have employed alternatives to the domestication concept, for example, the Diffusion concept (Rogers, 1962).¹⁸

However, in terms of this project, I have found the domestication concept useful on a number of levels: (i) in the ways it provides a contextualising frame for the research overall, (ii) in the ways it provides a useful tool for analysing the empirical data-set, and (iii) because it allows for multiple interpretations of the technology. While the diffusion process is useful in the ways it explains how technologies are appropriated, the domestication process is more valuable to this thesis in the ways it provides insights into the intricate processes whereby the user assigns meaning and significance to the artefact, and how this is experienced by domestic users during the acquisition and consumption of the technology.

So, how does the domestication process fit when applied to the current research problem? Domestication, both as a metaphor and as an analytical concept, is used to find the crossover where technologies and people adjust to each other and find (or do not find) a way to co-exist. Central to the domestication process is the attempt to make technologies fit into their surroundings in a way that makes them invisible or taken for granted. This requires mutual adjustment on behalf of both

¹⁸ Rogers (1962) researched and later schematically portrayed the adoption of innovations by individuals. He combined the adoption of the innovation and the role of the actors in the adoption process, hence the idea of different kinds of adopters (the best known being the “early adopter”). His scheme is still being used today to illustrate a likely S-curve within technology adoption processes. However, it assumes that innovations will be successful and ignores instances where this is not the case.

the users and the technology, and is where social shaping comes in to play. In essence, the person shapes the technology to fit into his or her life. Domestication is about giving technology a place in everyday life. The concept catches the practical, temporal, spatial place, but most importantly, it underlines how this is mixed with the cultural as an expression of lifestyles and values.

The acceptance, use and meaning of ICTs in the context of everyday life of households is central to this thesis, as outlined in Chapter one. The incorporation of ICTs into household activities and routines, and thus into the social organisation of the household, shapes and may change the everyday life of these households. At the same time, there is a clear impact of the technologies on households themselves; patterns of ICT acceptance, use and meaning construction are shaped by the way people have organised their everyday lives.

Two major strands of domestication literature can be detected – the UK strand (Silverstone *et al.*, 1989, 1992, 1994) and the Norwegian strand (Sørensen *et al.* 1996).¹⁹ The emphasis on the Silverstone model, in this thesis, is due to the fact that Silverstone and his collaborators focused their version of domestication within the household setting and on media technologies, while Sørensen and his collaborators widened their interest in domestication to contexts outside of the home and on other technologies, such as the car and smart-houses. The Silverstone perspective of domestication is deemed to be more suitable to this thesis as the location and the context of the research bear many similarities. For this reason, the Silverstone version of domestication will be employed in this thesis as it lends an analytical frame to the conceptual framework.

¹⁹ Lie and Sørensen (1996) have attempted to extend the range of the term, rejecting Critical Theory for failing to comprehend and inspire agency in the technical sphere. They seek to join domestication theory to social constructivism in a synthesis explaining the active role of users in design. However, to accomplish this ambitious goal, they have been obliged to modify the original theory in a significant way: they ‘disentangled it from its location in homogeneous and relatively stable, moral economies of households’ (Lie and Sørensen, 1996:13). The results of this modification are encouraging; their book offers a number of concrete examples in which the limitations of Silverstone’s approach are overcome to some extent. However, on analysis of Lie and Sørensen’s approach, the present thesis asserts that the centrality of moral economy is integral to the framing of technologies in the household setting. Therefore, if this component is removed it weakens the notion of domestication. The essence of SST is the agency of social factors and actors, including the moral economy of the household in influencing the shape of the technology in use.

Domestication of technology may be defined as 'the family's capacity to incorporate and control technological artefacts into its own technological culture, to render them more or less 'invisible' within the daily routines of family life' (Silverstone *et al.*, 1989:24).

The key challenge is the attempt to conceptualise how ICTs are culturally transformed to fit in with the household's own understanding of itself. The aspect of family culture that technologies are fitted into comprises what Silverstone *et al.* (1989) call the 'moral economy' of the family. This concept is the starting point for a way of analysing how technologies become part of the household's value system. Moral economy refers more explicitly to:

...these families' own way of working with the social, economic and technological opportunities which frame their world, and which depend on, contribute to and sometimes compromise the ongoing structural forces for change which can be observed and analysed on a macro-sociological scale (Silverstone *et al.*, 1989:1–2).

An extended account of the concept and its applications can be found in a subsequent theoretical essay, where the authors explain:

...via the mesh of class position, ethnicity, geography and the rest – the household engages in a process of value creation in its various daily practices...Different families will draw on different cultural resources, based on...beliefs...biography, or the culture of a network of family and friends, and as a result construct a (more or less permeable, more or less defended) bounded environment – the home...The moral economy of the household is...grounded in the creation of the 'home' (Silverstone *et al.*, 1992:19).

This quote implies that the uses and interpretations of media texts or technologies in domestic contexts will be negotiable – depending upon the material and discursive resources which are accessed by households and their members.

Silverstone *et al.* (1992) stress how meanings of ICTs in formal and public life are actively transformed and translated through negotiations in the practices of everyday life in households.

This engagement involves the appropriation of these commodities into domestic culture – they are domesticated – and through that appropriation they are incorporated and redefined in different terms, in accordance with the household's own values and interests (1992:16).

The implementation of technology in the household is seen as a transactional system in which the moral economy of the household is expressed. Meanings are seen as symbolic currencies that must be exchanged within a larger cultural universe. Drawing on images from economic exchange, moral economy is a way of accounting for values and symbols. This takes place in a negotiation process; the negotiation of meanings and values between the ICTs and the moral economy of the household.

Four aspects or 'non-discrete elements' may be identified to describe and analyse this system where the moral economy plays a central role: appropriation, objectification, incorporation and conversion.

In the **appropriation** phase, possession and ownership are central. The acquisition of the technology is the main activity or concern. A technology gets appropriated as it is sold and then owned or possessed by a household. That is the point at which a commodity crosses the threshold between public and private, beginning its new life as a domestic object. **Objectification** tries to capture how values, tastes or styles are expressed through the display of the new technology. It involves both a spatial aspect (where it is placed in the house), and a temporal aspect (how it is fitted in the time structure). However, the spatial aspect is more central in this phase, '...physical artefacts, in their arrangement and display, as well as...in the creation of the environment for their display, provide an objectification of the values, the aesthetic and...cognitive universe, of those who feel comfortable or identify with them' (Silverstone *et al.*, 1992:22–23). The **incorporation** phase emphasises how ICTs are used, and the temporal aspect is more central in the

incorporation phase. Silverstone *et al.* (1992) suggest that for an artefact to be incorporated it has to be actively used, such as in the performance of a task. The **conversion** phase is concerned with the relations between the households' internal affairs and the public domain or outside world.

Throughout, the users play a role in how the technology is adopted, not only into the household as a physical space, but also into the everyday routines of the household members and their perception of the technologies. The overall process is not a linear or closed one. Re-negotiations are common and assessments and uses can change over time. Roger Silverstone has spoken about the 'double and interdependent character of the meaningfulness of the mass media', arguing that we need to address, on the one hand, responses to particular texts or genres brought to us by the media and, on the other hand, the significance of media technologies themselves in our daily lives. He writes: 'There is meaning in the texts of both hardware and software' (1991:189). This plays an important role in the ways the technology is conceptualised.

At the time of its first formulation, the domestication concept within the media studies framework quite crucially shifted the emphasis away from a concentration on texts and reception, but instead focused on the practices of use. This was an important step in recognising and researching the embeddedness of media consumption in wider social practices, in everyday lives. The domestication concept also embraced the engagement with the whole media environment and not just one medium or even one text. The first formulation was also developed in order to deal with the integration of mature media technologies, such as the television. The task for this thesis is to successfully apply the domestication process to the integration and assimilation of new media technologies, in this case the internet. The problem with the domestication concept is the difficulty it poses when trying to draw wider conclusions from the often rather specific user groups that are researched (as is the case here). However, the focus in domestication theory on social processes means some wider societal trends – which might be closely related to the emergence and use of ICTs – cannot necessarily be clearly seen in this kind of research.

The approach has also been useful for feminist research, since it focuses attention on the under-researched domestic context. Some go as far as claiming the need for further fluidity of the concept, accusing it of being too rigid (Ling and Thrane, 2001). Despite the potential problems with the concept, it is one of the only theoretical approaches that explores the complex processes of adoption and especially the use of technologies into and in everyday life. Like other theories in media studies that emphasise the partial power of the audience in the interpretation of media content (for example, Ang, 1991; Morley, 1992, 2000), domestication adds a similar element of partial (and ambivalent) power to the user of technologies in general (and shifts the emphasis from the content to the technology). The theory thus adds perceptions concerning the artefact in question to the process of appropriation and use of technologies (including the idea that sometimes only parts of the technology are adopted or rejected, even after the acquisition).

2.7 Conclusion

The idea to use the Ennis project as a testing ground for the relevant theories was inspired by its closeness to the current project: both projects wish to examine domestic users in the context of new media technologies. The value of using the Ennis project here is that lessons can be learned from the experiences. Unfortunately, the 'Information Age Town Project' in Ennis represents a lost opportunity to undertake valuable, qualitative research into the ways ordinary users incorporate and domesticate ICTs into their lives. The Eircom project relied on quantitative methods that tell us how many people are using ICTs, but not *how* they are using them. SST-focused research could have discovered valuable information about the reasons why users assign meaning to ICTs, how and why they domesticate them, and how their patterns of usage and consumption evolved during the lifecycle of the ICTs. In addition, qualitative research techniques based on a conceptual framework sensitive to changes in the pattern and routines of users' domestic lives would have delivered a more nuanced, grounded study of users' experiences. The Eircom project failed to do this because it availed of a purely TD framework and followed a one-dimensional approach. The present dissertation will learn from the Ennis example and will recognise and consider the crucial influence of social factors and employ a theoretical framework that is sensitive to the role of social actors and factors on the shaping of ICTs to understand why people become

users of ICTs, appropriating them to fill social needs, or why people decide not to appropriate the technology due to specific reasons.

The domestication process is understood as a tool to analyse how users make sense of the internet in their 'everyday-lives'. The domestication process was employed in this thesis because it allowed for user differentiation, multiple meanings, diverse forms of use, changes in meaning, and user's behaviour and relationship to the artefact, which other theories, for instance the diffusion concept, does not allow for. Second, the diffusion concept relies mostly on a quantitative research approach, which in the context of this thesis does not adequately explain or illuminate the subtle changes, processes and adoption-mechanisms on which the domestication process is based. The model of domestication is strong and well suited to my research because it stresses the social processes that a technology goes through as it locates itself in the home.

Silverstone *et al.* (1989, 1992) have used and successfully applied the concept of domestication to their empirical work on consumption of domestic media technologies in Britain. In addition, Frissen (1997), Bergmann (1997), Haddon (1992a), Livingstone (1999), and Lohan (1996) have applied the domestication theory to research. More recently, the EMTEL 2 research group have applied the notion of domestication to several contexts. For example, Ward (2004) has studied the domestication of the internet and participation in public life, while Hartmann's (2004) study concerns the relationships between young adults and ICT use. Similarly, Berker (2004) has studied ICTs and the flexibility of everyday life.

The SST perspective helps us to understand how a technology is shaped by the crucial influence of social factors. The SST approach is more grounded than the TD or ANT approaches because it takes into account a range of social actors, which have important roles to play in the development and consumption of a technological artefact. The SST approach empowers the researcher to examine the role of the user in the processes of development far more than the TD perspective.

Although I have critiqued TD for its over-reliance on the agency of technology, any study of use and consumption of technology must take into account the mutually

shaping role of *both* society and technology. ANT provides a framework that incorporates both societal and technical 'actors', but it gives too much emphasis to the role of technology in the 'network'. The quest for symmetry in ANT literature (Callon, 1986) is an interesting approach, but when technology is equated with all of economics, organisation, politics and culture, the framework becomes unbalanced – technology makes up one full side, while such crucial factors make up the other side. This overestimates the agency of technology.

Although research has expanded and developed in recent years, 'users of technology' studies remain secondary to studies of 'production of technology'. The SST approach tends to give the user a meaningful role in the development and shape of information and communication technologies. Therefore, after considering these competing theories in the field, SST, specifically the domestication of technologies perspective, provides the most suitable framework in which to locate the present research.

Chapter Three

‘The importance of audiences’ - historical perspectives of the emergence & consumption of ICTs

- 3.1 Introduction
 - 3.2 Defining Audiences
 - 3.3 Three phases of audience reception research
 - 3.4 Media audiences in Ireland
 - 3.5 Historical perspectives of something new
 - 3.6 Social history of the radio
 - 3.7 Social history of television
 - 3.8 Social history of Video Cassette Recorder (VCR)
 - 3.9 Social history of home computing/internet
 - 3.10 Conclusions
-

3.1 Introduction

The previous chapter was concerned with situating the user in the overall system of technological innovation and consumption. This chapter will focus exclusively on the user as the audience of new media technologies. It will discuss how audience research has emerged as a form of cultural studies, but will retain its focus on the artefact, or technological hardware, drawing on the emergence and development of mature media technology audiences as a starting point to illustrate how ‘users’ are created and shaped.

The present thesis is concerned with the significance of the technological ‘hardware’ for consumers and not so much with the meanings of sounds and images conveyed in media content. This is a valuable extension of traditional inquiries into audience engagements with media texts, which has been adopted by recent approaches to communication technologies to be read as texts (see Haddon, 1991). These approaches represent a relatively new wave of research, which addresses the significance of communication technologies as objects of domestic consumption. Like sounds and images, which constitute the ‘software’ of mass communication, ‘hardware’ might equally be seen as a collection of signs that have multi-accentual social meanings, which audiences are capable of decoding and appropriating in a plurality of ways within the context of household cultures. The remote control for changing channels (Morley 1986), the time-setting switch of the video recorder (Gray, 1992), the satellite dish attached to the outside wall of the

house (Moore, 1996), and, more recently, the computer/internet (Haddon & Silverstone, 1996; Livingstone, 2002; Seiter, 1999) are all examples of contested cultural symbols. In everyday family interactions, the possession, utilisation or interpretation of these technological artefacts appears to be fought over constantly. But first, it is necessary to shed some light on what the term 'audience' connotes in relation to new media technologies.

3.2 Defining audiences

Audiences today bear little resemblance to those of early radio or early television, on which a large body of academic research has been conducted (Ang, 1996; Brody, 1990). It is therefore necessary to construct a new theory of audiences for today's new media. This thesis argues that the pre-existing definitions of traditional audiences will not suffice for new media audiences. Demographically, by lifestyle, and in terms of need and desire for information, audiences are continually changing. According to E.W. Brody (1990), two processes have caused the once accepted notion of audience to require redefinition. He charges demassification (a notion borrowed from Alvin Toffler, which describes a process through which once homogeneous societies splinter into special interest groups) and audience fragmentation with producing three problems for the designation of the notion of audience. Segmentation is far more extensive for new media than it was for mature media of the press and broadcasting. First, Brody asserts that today's audiences are becoming less trusting and more sceptical. They are more and more predisposed by education and experience to test rather than readily accept new concepts, services or products. Second, audiences are growing more difficult to reach with mediated messages. Target group members have increasingly less time available and commit their time more selectively to a still-growing number of information delivery media. The internet, for example, has an in-built selective mechanism to actively search out information and content which is specific to personal interest. This is in contrast to broadcast media, whereby the audience still select a certain programme of choice, which is available at that certain time, but do not have content on demand (although this is changing with the onset of digital broadband services). Third, and most importantly, the pace of change continues to accelerate (Brody, 1990).

Therefore, today's audience differs demographically and socio-economically as well as psychologically from those of earlier decades. Hence, traditional definitions of audiences cannot be applied in the context of new media technologies. From a social constructivist perspective, societal changes are responsible. Household configuration has changed from the traditional nuclear family make up to more single-parent families, and cohabitation has become more socially acceptable. Economically driven changes have also been pervasive. An increasing number of women are working in more economically rewarding positions. Changing these circumstances has produced changes in behavioural patterns. Increases in the number of media – new and old, print, electronic and digital – have created mounting competition for the limited time available to individuals for information acquisition. Each medium that gains an audience of sufficient size to be commercially viable succeeds at the expense of predecessors, further fragmenting the media message marketplace. I am not implying here that new media will inevitably replace older media. I will argue in this chapter that, historically, the emergence of popular new media do not replace or substitute for older media, but merely fragment the audience further.

Thus, a reformulation of the notion of the audience(s)/user(s) is essential in order to study the role of the new media user. However, it is important not to discount past research on audiences, as it is still a valuable source of data and comparison. Reception studies are still particularly useful to incorporate trends and patterns into the new concept of new media audiences. As with new technologies, reference to history is still useful to help us to conceptualise the notion of audiences in new ICT studies.

Ien Ang states that the 'audience' no longer represents simply an 'object of study'. Nor does it represent a reality 'out there' constitutive of and reserved for the discipline, which claims ownership of it. She argues it must be defined first and foremost as a discursive trope signifying the constantly shifting and radically heterogeneous ways in which meaning is constructed and contested in multiple everyday contexts (1996:4).

This shifting and changing state complicates the definition of audiences today. Shaun Moores contributes to this argument, stating that there is no stable entity that we can isolate and identify as the media audience, no single object that is unproblematically 'there' for us to observe and analyse (1993:2). In fact, he suggests that the plural 'audiences' is preferable, because it denotes several groups divided by their reception of different media and genres, or by social and cultural position. Consequently, it is necessary to expand the current notion of audiences to make it 'fit' into today's understanding of the term. Moores also states that domestic media consumption is "geographically dispersed across a multitude of settings and frequently in competition with other practices as a consequence of its embedding in day-to-day social life. It then becomes harder to specify exactly where media audiences begin and end" (1993:2). A critical examination of the current thinking about audiences tells us that we are no longer dealing with a specific or particular audience, but a multitude of different groups using different media, in different places for different purposes.

Roscoe (1999) attempts to explain the role of the new media audience. According to him, there has been a shift in the perception of the internet, from a technology to enable computers and people to communicate and share information, towards a mass medium much like television. While this proves to be an interesting point, Roscoe attempts to account for the shift in perception by availing of the problematic technological determinist approach to technological relations. In the previous chapter, I outlined how this perspective is flawed and serves only to provide us with a tainted account of the relations between technology and society. Roscoe attributes the process by which the internet has come to be viewed as a mass medium to the determining "nature of the technology that makes up the network", in this case DHCP²⁰ (1999:673). In my view, this is a difficult argument to present, because it adheres to technological determinist doctrines and ignores the influence of socio-economic and cultural forces. Roscoe attempts to argue from a position which ignores and removes all traces of human influence from the equation. However, Roscoe endeavours to acknowledge the agency of users, claiming that one cannot ignore the socio-economic forces at work in shaping the

²⁰ Dynamic Host Configuration Protocol

perspectives of users of the internet, and the process by which the technology is produced. However, what this amounts to is a token appreciation of the role of users in the overall system of technological innovation, while maintaining a deterministic thesis.

Roscoe also outlines a 'prevailing view', which implies that the:

...internet is growing up and that with progress, the internet will assume its 'natural' place as a mass medium following print, radio and television models of a small numbers of media distributing content to a large number of consumers who are not involved in (or have any real access to) the processes of production (1999:677).

This thesis has, in earlier chapters, critiqued such determinist claims as the internet will 'assume its natural place' as a mass medium. Such claims imply that the internet follows a predefined course or a predestined route, which removes the human influence from any input into the designs or the future of the technology.

In spite of relying on a flawed theoretical framework to inform his paper, Roscoe presents an interesting and contentious point regarding audiences. He asserts that the:

...idea of an audience presupposes a binary opposition between producers and consumers, between the creators, providers and purveyors of content, and the 'audience' itself, which views, browses and 'consumes' the content (1999:678).

Roscoe believes that internet users have come to be positioned as 'subjects' who view the world wide web as a source of information and, recently, as a place to make purchases, rather than as a means of expressing their own creativity and ideas. The production of 'content' is increasingly seen to be "a job for large commercial interests who can do this kind of thing 'properly'" (1999:678). He suggests that new media consumption relates only to online content, but at the same time users are exposed to goods and services, which are available for

purchase and consumption. However, he fails to take into account the fact that consumers can also be producers of content, especially in the digital multimedia environment. Roscoe relegates the agency of the audience, or end-user, to mere consumers of goods and content and ignores the possibility that consumers can, at the same time, also be active producers of content. As this thesis will demonstrate later on, the negation of the complex role of users as active participants in the process is a simplistic and flawed argument.

It has been established that the notion of the audience/user has been subjected to review recently with the emergence of new ICTs. It is, then, worthwhile to trace the different phases of audience research and how it has modified and transformed itself with the emergence of new ICTs.

3.3 Three phases of audience research

3.3.1 First generation: reception research.

The birth of reception/audience studies in mass communication research is typically dated back to Stuart Hall's *Encoding and Decoding in the Television Discourse* (1974), which in its earliest version came out of the Media Series of the Centre for Contemporary Cultural Studies. What became known as reception research in Media Studies was from the very beginning associated with cultural studies and, in particular, the Birmingham Centre.

According to Pertti Alasuutari (1999:2), Hall's encoding/decoding article laid the foundation for and articulated the problems to be addressed in the 'reception paradigm' of what became known as 'media studies'. Hall's encoding/decoding model approaches mass communication as a process whereby certain messages are sent and then received with certain effect. The idea that a message is encoded by a programme producer and then decoded (that is made sense of) by the receiver means that the sent and received messages are not necessarily identical, but different audiences may decode the same programme differently. Hall's encoding/decoding model (1974) suggests that there are four 'ideal-type' positions from which decoding of mass communication by the audience can be made: 1) within the dominant or hegemonic code, the connotative level of messages is

decoded in terms of the dominant preferred meanings; 2) the professional code is what the professional broadcasters employ when transmitting a message which has already been signified in a hegemonic manner; 3) the negotiated code contains a mixture of adaptive and oppositional elements; and finally, 4) the oppositional code is the position where a viewer perfectly understands both the literal and connotative inflection given to an event, but determines to decode the message 'in a globally contrary way'.

The encoding/decoding model led to a series of empirical studies about the reception of television programmes by different audiences, one of which was David Morley's *The Nationwide Audience* (1980). By selecting different groups of people and showing them *Nationwide*, a public affairs television programme, Morley could more or less confirm and develop Hall's idea about the four codes discussed above. *The Nationwide Study* (1980) investigated how meaning is generated among different segments of society. Morley advocates that there are two distinct types of constraints to the production of meaning. There are (i) the internal structures and mechanisms of the text/message/programme, which invite certain readings and discourage others; and (ii) the cultural background of the reader/recipient/viewer, which has to be studied sociologically.

3.3.2 Second generation: audience ethnography

Morley's seminal study was soon followed by studies about the reception of, especially, romantic serials (Ang, 1985; Hobson, 1982; Katz and Liebes, 1990; O'Connor, 1997). What became known as qualitative audience reception studies meant that a researcher analysed a programme and studied its reception among a particular audience by conducting 'in-depth' interviews with its viewers. Examples of such studies include: Ien Ang's work *Watching Dallas* (1985), Dorothy Hobson's study of *Crossroads* (1982), and Barbara O'Connor's study of the *Ballroom of Romance* (1997). As stated in the outset of this chapter, this thesis is concerned more with the significance of the technological 'hardware' for consumers as opposed to the meanings of sounds and images conveyed in media content.

3.3.3 *Third generation: from content to technology*

There then ensued a diminished interest in programme content, and much more emphasis was laid on the functions of the medium; early examples include, for instance, James Lull's (1980a, 1980b) analyses of the social uses of television, or David Morley's *Family Television* (1986). Morley's *Family Television* was a study conducted in the homes of 18 households/families. All families were drawn from one area in London. The study concentrated on a number of themes including power and control over programme choice, styles of viewing, television related talk, and so on. These interviews raised important questions about the effect of gender in terms of the above themes. In *Family Television* (1986), Morley explored the relationship between family members and the television. In addition, Morley looked at the gender differences between family members and the media, and how these relationships are constructed and maintained. Morley's work acknowledges that patriarchal society has had an enormous effect on the viewing patterns and styles of the family and also, that the home has become particularly gendered.

This shift from content to technology saw an increase in the number of projects about the role of ICTs in the home, which also reflected the increased interest in the social uses of television and other media (Silverstone *et al.*, 1989; Silverstone, 1991; Morley 1986; Gray, 1992; Moores, 1996; Livingstone, 1999). The development towards a discursive approach in media reception and qualitative audience research has also meant that researchers have moved away from concentrating wholly on the 'determinant moment' of decoding, as in Hall's encoding/decoding model. A psychological interest in viewers' mental processing and interpretation of media messages has given way to a more sociological perspective, within which one studies the range of frames and discourses on media technology and content as a topic in its own right, and not as a lens through which to peek into individual acts of reception. This represented a change of perspective from treating interviews as a picture of 'decoding' to treating them as discourses on the media and everyday life. Since studies such as David Morley's *Family Television* (1986) began to perceive the media from the viewpoint of the *everyday*, as household appliances used in different ways amidst domestic life, it was natural

to start conceiving of individuals' talk about the media and their contents as just a topic.

3.4 Media audiences in Ireland

Kelly and O'Connor remark that to date there has been little published research on Irish audiences and even less from a sociological or cultural studies perspective (1997:2). The fact that most of these ICT-based studies relied on quantitative methodologies did not help either. Therefore, while researchers abroad were engaging with audiences through qualitative research methodologies, consisting mainly of in-depth interviews and group discussions, the initial focus in Ireland remained "exclusively on the examination of media texts with some linking of this textual analysis to an examination of production and cultural practices" (1997: 2). However, in the late eighties, researchers in Ireland began to adopt a qualitative research methodology, and work such as Kelly & O'Connor (1987) & O'Connor (1990) emerged. O'Connor (1987) studied the responses of women in different social classes to Irish television drama, and she later researched the gendered and class-based responses to both domestic and imported soaps (O'Connor, 1990).

Barbara O'Connor, in Kelly and O'Connor (1997), devotes a chapter to a study completed a decade previously (her unpublished PhD dissertation), which investigated responses to the television drama the *Ballroom of Romance*. The drama is set in the west of Ireland in the 1950s and is concerned with a woman's search for love in a remote village's ballroom. The responses to the drama from different social classes varied from a general 'dislike' of the film from working-class women to a favourable response from middle-class women to one of 'total enthusiasm' from a group of rural middle-class women. O'Connor explains that social class was shown to be a major factor in influencing the general response of the women's groups and that

...because they inhabited different kinds of discourses and had access to different cultural competences, the viewing situation was framed in ways which differentially influenced the pleasures and meanings of the text (1997: 83).

Research into uses and functions of media technologies have also been of a quantitative nature in Ireland. The surveys outlined in the first chapter of this thesis illustrate the extent of research into technologies as texts in this country. Therefore, this thesis will provide a baseline study in terms of which subsequent and future work can be compared. Apart from O'Connor's work on media audiences in Ireland, there is very little else of note to report on. Even so, O'Connor's work is firmly located in the second phase of audience research, while this thesis is primarily interested in third-phase research.

So far we have traced the history of the audience and we have determined that new media audiences are problematic to define. The focus on the social context of use, the everyday lives of users, in addition to the hardware of the technology, instead of the content and messages of software, requires us to assume a plurality of meanings for what we want to term the 'audience' of new media technologies. What follows is a discussion of the ways users fit into the overall process of domestication through an analysis of the social history of mature media technologies.

3.5 Historical perspectives of something new

The previous chapter was concerned with a discussion of three broad perspectives, which deal with the relationship between technology and society. In this section, I shall discuss how a historical analysis of ICTs in society, when viewed through a social shaping lens, is useful to explain the emergence and eventual consumption of new ICTs. I will illustrate how ICTs emerge, not as completely new artefacts, but as artefacts, which embody analogies and similarities from older, mature media that can be shaped or reshaped by consumers accordingly. Murdoch ((1993:533) cited in Thompson, 1995) states "the history of communications is not a history of machines, but a history of the way new media help to reconfigure systems of power and networks of social relations". I believe it is important to assess and analyse the rise of older media and evaluate how they were shaped by society, and how they were eventually domesticated. It is important to also look at the type of society in which the technology emerges, to get a sense of how the ICT fitted into that context. An example of this is the work of Raymond Williams, who was briefly mentioned in the previous chapter. Williams, one of the most influential SST

researchers, studied the social origins and cultural form of television. In his seminal work, *Television: technology and cultural form* (1974), Williams uses the emergence of television as an example of how society shapes technology. He illustrates how society achieves this when he wrote: “The invention of television was no single event or series of events. It depended on a complex number of inventions and developments in electricity, telegraphy, photography, motion pictures and radio” (1974: 18). Essentially, technological development also depends on the type of society into which technology emerges. I will discuss the social history of television later in this chapter, but building on Williams’ model, I wish to locate the emergence of the mature and nascent ICTs within the same social conditions. This analysis will begin with radio.

3.6 Social history of radio

Williams (1974) wrote about how the privatised home became more and more porous to media and information sources. Before the arrival of broadcasting in the form of radio, the information sources available to people were the newspaper and word of mouth. Society changed much over the last three centuries, which had a direct impact on the nature of the home. The economy developed according to capitalist principles; resulting in the emergence of a new middle class which narrowed the gap between the lower and higher classes. This middle class was increasing its hold on the power base of society, which was shifting from property to industry, or the means of production in the Marxist sense. Since the power base of society relies on the control of money and the possession of land and wealth, this new class formed a new voting public. New citizens with new needs emerged. This period saw a shift in the movement of people from rural to urban areas, which created a surplus of available labour in urban areas and led to increased employment opportunities. Local authorities harnessed this convenient workforce and used them to build vital infrastructure for the survival of the emerging economy. Public works, such as canal building, public lighting, roads and housing, transformed the urban areas into centres of employment. This brought about a dramatic transformation of the lifestyle of the ordinary person. The most significant shift in lifestyle was the separation of work from home life. The idea of work moved out of the family home and into designated areas of work, such as factories. For those who were employed, the day was divided into periods of work and rest.

The period of leisure time for the worker was spent recuperating and resting before the next work shift. This time was spent mainly at home, so the need for information and entertainment to be brought directly into the home was recognised and addressed.

After the First World War, new kinds of needs were emerging in a different kind of society. The changes witnessed during the previous century had brought about a whole new way of life and a new kind of society. Crowley and Heyer (1991) describe some of the changes which occurred during this time. They state that the decades that marked the end of the nineteenth and beginning of the twentieth centuries were characterised by many developments – for example, the bicycle, automobile, and aeroplane emerged as significant modes of transportation. This in turn promoted further urban growth and permitted workers to live further from their workplace, creating a commuter society as well as a consumer society. The sense of space they fostered, coupled with the increased speed of railways and steamship travel led to World Standard Time via the creation of time zones. This further shifted the cultural identification away from the immediate and local (1991:155–157).

The concept of a new consumer society is especially important here. Throughout the Industrial Revolution, exhibitions and celebrations of technology and progress were commonplace. Along with the presentation of new technologies, new consumer luxury goods were becoming increasingly evident. The arrival of huge department stores gave credence to the fact that life was becoming more materialistic and consumption driven. The emphasis was shifting from citizens and nationals to consumers and individuals.

The new style of society and life needed specialised means of communication. Williams outlines these new modes of communication: the press for political and economic information; the photograph for community, family and personal life; the motion picture for curiosity and entertainment; telegraphy and telephony for business information and some important messages (1974: 22–23). He goes further to say that it was within this complex of specialised forms that broadcasting arrived. Williams explains that there was – in the very broadest terms – “an

operative relationship between a new kind of expanded, mobile and complex society and the development of ...modern communication technology” (1974: 20). The social need to overcome barriers of physical distance, especially in commerce and in military or government administration, led to a quite deliberate search for new, more rapid means of transmitting messages from one place to another. Similarly, the wishes created by an increasingly domesticated yet ‘outward looking’ style of daily living – the desire for a sense of home and security, but also for contact with the public world beyond – served to define broadcasting as a technology of mobile privatisation. Williams suggests that the applied social usage of broadcasting (for the centralised transmission of news and entertainment to dispersed domestic audiences) met some of the crucial cultural requirements of modernity, articulating; “two apparently paradoxical yet deeply connected tendencies” in urban industrial society. The technology “served an at once mobile and home-centred way of living: a form of ‘mobile privatisation’”. Radio, like television later on, was both a sought-after consequence of and an effective facilitator for this historically specific mode of lived experience. A condition in which “significantly higher investment in the privatised home” is coupled with the opening of “greater ...social and physical distances between these homes and the decisive political and productive centres of society” (Williams, 1974: 29). Television, and radio before it, has been bound up in the contradictions of modern social existence, which Williams describes in the dialectics of home and travel, of privacy and mobility. They are domestic artefacts – part of a range of ‘consumer durables’ – first arriving with the electrification of household spaces in the inter-war period. The scheduled ‘flow’ of the output (Williams, 1974:78–119) is designed to fit the day-to-day routines of viewers and listeners.

3.6.1 Parallels in media technology history: the case of radio

This sub-section illustrates the domestication of the radio. It is useful to acknowledge that media technologies enter the home in similar ways and undergo comparable processes of negotiation and transformation to make them fit into the existing domestic environment.

Shaun Moores (1993) conducted research on the entry of early radio and gradual incorporation into household life during the inter-war period (see also Moores,

1988). This research was a small-scale oral history project that entailed the recording of conversational interviews with a group of elderly people who were living close to the centre of a northern English town. Moores' project attempted to chart the process of the entry of radio into the private sphere as an 'unruly guest' and its establishment years later as a 'good companion' to family members. Moores (1993:76–77) believes that radio "consolidated and accentuated an ongoing historical process" which might be called 'the withdrawal to interior space' and that the medium "gave listeners access to a common calendar of quotidian rituals and great public occasions". He concludes:

Its contents, schedules and modes of address invited household consumers to imagine themselves as part of a constructed national community (1993:77).

According to Moores (1993:77), if broadcasting was to 'capture' a place in the time and space of everyday life (that is to become domesticated) – "to win an accepted and taken-for-granted position in domestic cultures" – then this victory was less than immediate. Moores points to testimonies of his respondents who remembered radio as a considerable disturbance to day-to-day routine, and radio's entry into the home seems to have been marked by quite deep social divisions between household members.

As with later information and communication technologies, consumers seemed to be more concerned with the means of reception, that is, the technology itself, as opposed to programme content. Moores views this as reflecting the technological novelty of the medium. Moores' interview material indicates that it was mainly young men who were listening to broadcast transmissions. To reflect this, Moores claims that when broadcasting entered the private sphere, it did so in the shape of a 'miraculous toy' – a novel piece of electronic gadgetry that husbands, fathers, brothers and uncles could playfully experiment with²¹.

²¹ A trend that was noticeable with the entry of the television, VCR and computer.

Moore acknowledges that there are some comparisons between these accounts of radio in domestic life during the 1920s and the findings of recent qualitative research on contemporary patterns of television consumption. Moore's evidence concerning power and control over the use of wireless headphones sounds familiar and has a lot in common with the way in which Morley's families talked about the role of the remote control (which in essence means having control over what is watched on television). In both instances, a newly arrived piece of technological hardware becomes a symbolic site of (principally gendered) frictions within the family context.

3.7 Social history of the television

The first television broadcasts began in North America in 1939. It was a time when radio was at the height of its golden age. Until then, radio had enjoyed a dominant position in the leisure time of people, but with the arrival of television, radio had its pre-eminence challenged. Levinson (1997:91) points out that the 1950s were 'trying times' for radio. However, just as World War One put the development of broadcast radio on hold, World War Two delayed for almost a decade "the dream of television as the new mass medium" (Crowley & Heyer, 1991:215). A post-war boom in America followed the war in Europe. Employment levels were at the highest levels witnessed in decades. The conditions were ripe for a new player to emerge into the entertainment market. Brian Winston (1998) believes the crucial enabling factor which transformed television from toy to mass medium was the spare capacity of the electronics industry. Winston points to a reference from Boddy (1991) to highlight this:

The question now arises what to do with these facilities after the war, for the demand of aural radio alone will not be sufficient to keep many of them going. Only television offers the promise of sufficient business (Boddy 1990: 45, quoted in Winston, 1998: 111).

Winston (1995) outlines that if there are accelerators (or supervening social necessities as he conceptualised them), which influence the rate at which the technology emerges, there are also brakes. The supervening social necessities that influenced the development of television include the rise of the private home, the dominance of the nuclear family, and the political and economic need to maintain

full employment after World War II. Brakes work to slow the disruptive impact of new technology. Winston describes the operation of these brakes as the 'law of the suppression of radical potential' (1995: 69). The brakes, which caused television to be nearly a century in development, are thus an instance of this 'law'. The brakes ensure that a technology's introduction does not disrupt the social or corporate status quo. A major factor in the delay of television's arrival in the United States was that the RCA (Radio Competition Authority) controlled the patents and the FCC (Federal Communication Commission) was worried about the survival of the other firms that could make television equipment. It therefore, according to Winston (1995:66), stood in the path of RCA's development of television from 1936 to 1941. In Britain, the economic difficulties of the depression prevented its widespread use.

Television was quite slow to get off the ground as an entertainment medium. This could be explained by the fact that radio itself was quite a nascent medium. With the popularity of radio still quite strong, it was difficult for television to find demand in the lives of people who were already being satisfied by radio. However, after the war, Winston identifies that the American post-war economy needed enhanced levels of consumer demand, which could only be fuelled by an effective new advertising medium (Winston, 1998:111). Winston also attributes the growth of television to the fact that after the war the market situation was quite different. The radio industry was looking for a new technology to exploit, having saturated the market with radio sets.

3.7.1 Parallels in media technology history: the case of television

This sub-section presents several qualitative and ethnographic studies of television users to illustrate the domestication and consumption of the television in the home. These studies are well positioned to open up yet another dimension of domestic consumption and help us understand the heavily gendered use of media technologies in the home.

The most well-known qualitative/empirical study conducted in the field of television consumption is David Morley's *Family Television* (1986). In *Family*

Television (1986), Morley found that the behaviours of television usage were inextricably linked to family hierarchies and gender roles. Morley had set out to “produce a more developed conceptual model of viewing behaviour in the context of family leisure” (1986:17). He interviewed 18 white families in South London; each family consisted of two parents, two or more children, and a television and VCR in the home. Morley argued that television audiences needed to be studied in natural settings in which most media are consumed, and so he elected to study television at home, among family members.

Morley found distinctively different viewing styles reported by men and women, and a great deal of conflict between them concerning the television. Husbands responded that their wives and daughters talked too much while the television was on; and wives complained that their husbands talked too little. The men Morley interviewed tended to adopt a style of intense, cinema-style viewing, the women were more distracted, tending to do some chores at the same time as watching television – unless they were alone in the house.

Morley organised gender-related themes in the interview material into the following categories: power and control over programmes choice; viewing style; planned and unplanned viewing; amounts of viewing; television related talk; use of video; solo-viewing and guilty pleasures; programme type preference (Morley, 1986:146). Morley found that men watched more television, planned their viewing, and tended to control what others in the household watched. Women viewed less, often deferred to other family members in selection of programmes, and enjoyed watching soap operas and melodramas, especially when they were alone. Women voiced a taste for soaps and movies; men preferred crime shows and sports. In *Family Television*, Morley draws on the work of James Lull, who had explored the place and significance of television within family and household relations. This work, *The Social Uses of Television* (1980, referred to in his later work, 1990), provides important insights into the social use of television; Lull distinguished between the structural and relational uses of television. The former implies environmental and regulative use, and the latter the creation of practical social arrangements. This approach to television audience research emphasises the importance of attending to the social dimension of television viewing and to the

ways in which the dynamics of domestic life, and relationships of power within that environment, affect the practice of television viewing. The approach insists on investigating the microcosm of the household in terms of the ways in which its members, in different permutations, organise space and time within its geography (Lull, 1980). Lull argues that television can be thought of as an 'extension' of the patterns of family communication within households.

3.8 Social history of the VCR

Of all the new technologies now available to the home, the video-cassette recorder has proved to be the most significant, according to Winston (1998: 126). Overshadowed by the enormous public relations exercise mounted first by the world's cable and satellite interests, and then by proponents of home computing and the internet, VCR growth has gone, by comparison, almost unnoticed; yet between 1980 and 1995, the number of VCRs increased, in the US, from 1.8 million to 86 million. Ninety percent of all households with a television had a VCR by 1995. Television and VCR growth were quite similar in their formative years. In Britain 74%, and in Ireland 77.8% of all television-owning households had a VCR by 1998²². Winston remarks that no hyperbolic reaction accompanied this development. Srebreney-Mohammadi describes the function of the VCR as a kind of storage capacity, which allows the audience to 'time-shift' (1995:35), that is, to record a programme shown at a particular time, in order to watch it at an alternate time, depending on which time suits the consumer. The VCR is, therefore, more or less, complementary to the television. It has not caused any visible change in the basic television time schedule, which supports the "daily divisions of work and leisure in highly developed post-industrial societies and reinforces patterns of family life, gender interests, and sub-cultural tastes" (Srebreney-Mohammadi, 1995:35).

During 2005, DVD players have out-sold VCRs. Figures for 2004 show that 91% of Irish adults possess a VCR compared to 60% of adults possessing a DVD

²² Figures from Britain quoted from Winston (1998: 126) and figures for Ireland supplied from IDATE (Institut de l'audiovisuel et des telecommunications en Europe) paper – 'Development of Digital Television in Europe – Ireland/1999' viewed at <http://europa.eu.int/ISPO/infosoc/telecompolicy/en/Eurorep99ir.pdf>

player²³. More to the point, there has been a strong tradition of VCR research in the home with particular relevance to the current thesis (for example, Ann Gray's *Video Playtime* (1992))²⁴.

3.8.1 *Parallels in media technology history: the case of the VCR*

In her book, *Video Playtime* (1992), Ann Gray chose to pursue the kinds of questions about gender, labour, leisure and power that had been opened up by Morley's *Family Television* (1986). Gray focused on a series of interrelated topics: the incorporation of the VCR into the domestic sphere, the gendered division of labour and leisure in terms of use of and attitudes towards the VCR, and preferences for particular genres of video. Her data comes from lengthy conversations with 30 women in Yorkshire, all of whom lived in households that possessed a video machine during the mid-1980s. All the women in Gray's sample had children at home and had husbands who were the household's primary wage-earners. These respondents were contacted either through a tape-hire outlet or else by way of personal introductions and 'snow-ball' sampling, producing a group which included women with varied class positioning. Gray found that her respondents were not content merely to talk about VCRs. They would frequently relate details of their life experiences. This provided the researcher with an unexpected but useful picture of the contextual circumstances in which video is made sense of. Far from being superfluous, as she originally feared, this material was necessary if the technology was to be analysed as a socially situated object. Thus, *Video Playtime* contains a wealth of data of these women's everyday lives, and particularly on work patterns and the organisation of their occasional periods of 'spare time' – outside, as well as inside, the family home.

In an effort to make explicit the implicit – largely unconscious – gendered meanings of different domestic tasks, objects and spaces, Gray invited the women she spoke with to code activities and technologies around the house on a scale from pink to blue (an investigative strategy which Gray adopts from Cockburn's work on gender and technical know-how; see Cockburn, 1985).

²³ <http://www.medialive.ie/>

²⁴ Although recently, significant research involving DVD and new media audiences was conducted in Dublin by STEM researchers (see: <http://www.stem.dcu.ie>).

This produces almost uniformly pink irons and blue electric drills, with many interesting mixtures along the spectrum. The washing machine ... is most usually pink on the outside, but the motor is almost always blue ... my research has shown that we must break down the VCR into its different modes in our colour-coding. The 'record', 'rewind' and 'play' modes are usually lilac, but the time switch is nearly always blue, with the women having to depend on their male partners or their children to set the timer for them. The blueness of the timer is exceeded only by the deep indigo of the remote control ... which in all cases is held by the man (Gray, 1987:42).

Gray found that many women reported that the home was a difficult place for them to relax. The women she interviewed rarely took breaks from domestic chores, which lessened the enjoyment of the VCR. Gray explains that the husbands' greater involvement with the VCR was the result of a "combination of masculine address of VCR advertising, the relative freedom of male leisure time in the home, and male economic power" (1992: 243). For children and husbands, then, the greater freedom from domestic chores made them more likely to watch videos, rent them, plan ahead for recording and time-shifting, and become adept at operating the machine. Some women expressed resentment towards television and video as a deterrent to engaging in more appealing forms of leisure activities, such as going out, and as a barrier to family communication and intimacy. Gray found more differences among women in her sample in the area of preferences for video to rent and television material. She divided her sample into two groups: 'Early school leavers' and 'later school leavers and graduates'. She found starker gender differences in the second group, who tended to evaluate negatively a taste for romance, melodrama, and trash television.

So far, we have seen how mature media technologies have entered the home and the social conditions of their emergence. We have seen similar patterns of domestication and that a certain level of shaping is required in order for them to become technologies of everyday life, especially in the domestic context.

3.9 Social history of home computing/internet

Running parallel with the 'video revolution' of the 1980s was a rapid boom in the home computer market – and qualitative research on computer use. The emergence of the computer as something other than an office tool began to take hold during the 1980s. This section will explore how the computer moved from an impersonal giant calculator to a technology of social significance, to a technology which in domestic settings is used for entertainment, interpersonal communication, self-expression, and access to information of many kinds. This section will assess how computers are used not as calculating machines but as media communication technologies.

The computer is not regarded in the same light as it once was: mechanical number cruncher. Today, the conceptualisation of the computer is one that takes many forms. It may be thought of as the web/internet, computer games, CD-ROM, reference works, email, and a diverse range of applications for displaying and manipulating text, images, graphics, music, databases and the like. In essence, it depends on whom you ask to define what the computer actually is or means to them. Therefore, it is possible to accept the assertion that the computer/internet is a 'meta-medium' (Mayer, 1999:1), with the capacity to replicate many of the functions of other media forms. It is a tool for interpersonal interaction and collective communication in virtual groups, but also a new medium with multiple sources of information. In addition, this multi-form information and communication tool also tends to undermine the separation between the professional and private spheres, in the ways it makes it easy to work from home.

However, the PC/internet has an interesting history. It has a history as both a tool and as a medium. This section begins with a history of the computer as a business/work tool. However, the account will be necessarily short, because the technical innovations that produced faster, smaller, more advanced computers is not the main focus of this chapter. The first generations of computers were developed before the Second World War and were analogue machines. At MIT, Vannevar Bush built a machine in the 1930s based on the principle of seeking natural or artificial devices with variations analogous to those to be calculated. Without going into too much detail of how computers developed, I will progress to

the 1960s, when IBM (International Business Machines) began selling transistorised computers. This era is important because, around the same time, the notion that the computer could represent something more than a calculator appeared. Joseph Licklider and Robert Taylor made one of the most significant realisations in 1968. In an essay entitled “The Computer as a Communications Device” (1968), Licklider and Taylor explored the conception of computers as media. In the paper, Licklider and Taylor prophesied that: “In a few years, men will be able to communicate more effectively through a machine than face to face” (1968, cited in Mayer 1999:97). This important realisation came as the US defence department was funding a network which could maintain communication in the event of a nuclear war. ARPANET, from which the internet is an outgrowth, was first installed in university campuses and government offices. However, Patrice Flichy (2002) disagrees with this assertion. Instead, he proposes that rather than military command and control in mind, this network had a far more modest aim: it was to link the computing departments of universities working for ARPA, the US Defence Department’s advanced research agency.

The internet was designed in the second half of the 1970s. Its founding fathers, such as Licklider or Englbart, thought that computing was not only a calculation tool, but also a means of communication. However, these influential players in the development of the internet were not the only ones to think along these same lines. Academics interested in the field were also exploring the same notion. For example, Hiltz and Turoff considered that once computer mediated communication was widespread, the society in which they worked:

...will become the Network Nation, exchanging vast amounts of both information and socio-emotional communications with colleagues, friends and strangers who share similar interests, who are spread out all over the nation (Hiltz & Turoff, 1978; cited in Flichy 2002:139).

An infrastructure was developed and put in place whereby people could communicate with each other, but those who participated in this new form of communication were the proverbial computer geeks, hackers and university academics. The internet is the result of a long history that started in the late 1960s.

While IBM and AT&T had the competencies to launch a digital network, it was the collaboration of academics and hackers, with military funding, that actually spawned this network. So it is, therefore, necessary to acknowledge the agency of these actors, in particular hackers. Flichy states that:

...without the myths produced by the American counter-culture of hackers in the early 1970s, the microcomputer would probably have remained a mere curiosity (2002:139).

Flichy attributes the emergence of the internet to the hackers because he feels it was this group who sought out an ideology of computing for all. He identifies the 'community ideology' as the defining feature, which produced a mythical frame of use.

After locating the origins of the development of the PC/internet in the public sphere of hackers and academics, Flichy (1995, 2002) also traced the appearance of new ICTs in the domestic sphere. He aligned the history of information technologies in the private sphere, with that of the business world, in that it originated in the nineteenth century. According to Flichy (2002), there were a number of key developments that involved the emergence of theatre, cinema, photography, and later in the twentieth century, radio and television. Cinema was seen as part of the emergence of collective urban entertainment, but at the same time there was the advent of entertainment at home. Flichy identifies the piano and private musical life as the forerunner of private entertainment.

Despite discourse on the information society revolution, one has to agree that the computer, followed by its connection to the internet, did not spread as fast in homes as radio and television. In the US, for example, it took about 20 years before households were equipped with at least one computer (according to Flichy, more than one computer in the home remains rare). It seems that in many cases one member of the family tends to appropriate the artefact. Flichy (2002:147) points to a French study by Jouët and Pasquier (1999) which shows that in wealthy families it is often the father who appropriates the artefact, and in working class families it is, by contrast, a child and often the oldest son (who also installs the set

in his bedroom). These findings also concur with those of Sonia Livingstone's study of young people and the internet (2002).

In his book, *Dynamics of Modern Communication* (1995), Flichy describes the social, political, cultural and economic factors shaping the emergence and eventual uptake of ICTs. However, he rightly points out that research in the area of computers, internet and computer-mediated communication in the home is still limited, and final conclusions can hardly be drawn.

3.9.1 *Parallel studies: consumption and domestication of PC/internet*

The recurring theme of gender makes a predictable point of departure for inquiry in the dispositions users display towards new information technologies. A good example of this work is Sherry Turkle's observational study, conducted in educational rather than household settings, which explored the reasons for 'computer reticence' shown by a group of US female college students (Turkle, 1988). In the case of these young women, she was not faced with a straightforward inability to operate the machine – they were quite capable of doing so – but with an openly declared reluctance to enter the predominantly masculine culture of 'computer virtuosos', where the object is taken as a partner in an intimate relationship. For many of their male counterparts, however, mastery of technology became a way of exerting perfect control in a world of safe things, free from the complexities and ambiguities of close human ties. As one of those 'hackers' tells Turkle, he has 'tried out' having girlfriends and 'got burned' in the process:

...with social interactions you have to have confidence that the rest of the world will be nice to you...but with computers you are in complete control...you have confidence in yourself and that is enough (1988: 46).

Although Turkle's ethnography is focused on a non-dramatic context, her study still helps us to cast light on some of the more general issues that I am undertaking in this chapter. In fact, her writing can be seen as a valuable attempt to go beyond the descriptive charting of gender differences, and provide an adequate social-psychological explanation of how particular groups of women and men interpret information technology.

Sherry Turkle's book *Life on the Screen* (1995) examines a group comprised mainly of students or white-collar computer programmers who work on computers throughout the day. Turkle is especially interested in participation in Multi-User Domains, or MUDs: online fantasy games that can have dozens of players. Turkle describes this balance of play and work:

I have noted that committed players often work with computers all day at their regular jobs. As they play on MUDs, they periodically put their characters to sleep, remaining logged on to the game, but pursuing other activities. The MUD keeps running in a buried window. From time to time, they return to the game space. In this way, they break up their day and come to experience their lives as cycling through the real world and a series of virtual ones (1995: 189).

Turkle gives many examples of women experiencing the MUDs, using their own identity or impersonating the opposite sex in their virtual personae, which is another facet of the gender debate.

Haddon (1992), whilst expressing certain reservations with regard to Turkle's project, proposes that such work on educational settings is a necessary complement to 'family-based' studies of consumption. He asserts:

...the popularity, patterns of usage, the meaning and the gendered nature of the home computer arises in large part from processes outside the home... 'home computing' cannot be viewed as an activity based solely in the home (Haddon, 1992: 94).

Leslie Haddon investigated through empirical research the effects of a home computer in the early 1980s. His research generates some relevant questions regarding the consumption of computers in the home which are particularly relevant to the current thesis. His investigations, which centred on the development and cultural significance of the BBC micro-computer, were intended to situate this machine in a whole web of social institutions and practices – considering the various stages of design, production, marketing, appropriation and

use, as well as its intertextual links with other technologies and images. One specific aspect of his broad research agenda, which I touch on here, is the analysis of computers as an object of boys' classroom discourses and leisure activity. Haddon (1992) focuses on the 'computer talk' generated by young boys on the subject of computer games. He compared the interest in computer games with the interest in popular music. He analysed the development of computer talk to the nature of talk and computer-related activities the boys entered into. Haddon concluded that the early use of the home computer was devoted mainly to games. The culture of video games has grown ever since.

Further to Haddon's study of home computer use, Eric Hirsch's case-study of the Simon family (Silverstone & Hirsch, 1992: 213-21) offers us an in-depth analysis of one family's uses of the ICTs available to them. It also highlights the key aspects of a household's distinctive moral economy²⁵, and the different types of boundaries that may be constructed around the home. As Hirsch notes, the family "has the cultural and economic resources to extend its domestic life beyond the city, into the country", so that it "oscillates between an urban life of intensely hard work and wide-ranging social relationships and a rural ...cut off life where social existence are, according to Charles and Natalie, mutually reinforcing" (1992:213). Meanwhile, in the ground floor sitting room area, the television and CD player have recently been joined by a VCR – the installation of which was hotly disputed. Hirsch (1992:219–220) explains how the lengthy debate that they had over its appropriation and incorporation indicates "a particular axis of values which are intrinsic to the moral economy of the Simon family". He reports:

Television...was downgraded as a passive and inappropriated form...to spend much time on. Charles and Natalie place a high value on doing rather than passivity. The word 'activity' was frequently used by the Simons...Their relationships with objects and others, and those of their children, are informed by this and related values. This sentiment was exemplified early on in our visits. When talking about whether or not they

²⁵ Moral economy is a concept from Silverstone *et al.* (1989, 1992) It is referred to in Chapter two of this thesis. It is "the family's own way of working with the social, economic and technological opportunities which frame their world" (Silverstone *et al.*, 1989:1-2).

had a video, Charles said they made a conscious decision not to...It is interesting, then, that in the six months that separated the start of our fieldwork from its completion a video made its way into the Simon home (Hirsch, 1992:218-219).

However, the case-study is useful in itself as a study into the wider processes of domestic consumption of many ICTs in a single household.

Seiter in *Television and New Media Audiences* (1999) describes the ways in which familiar forms of television are “migrating to computer screens” (1999:115). Seiter begins by stressing the fact that computers and televisions are beginning to share the same space in the domestic sphere. She refers to computers with built-in television tuners, and set-top boxes allowing internet access via television sets as increasing the chances of both a computer and television sharing space in the same room in the household. She claims that the World Wide Web:

...reproduces some popular genres from television (and radio) broadcasting: sports, science fiction, home shopping clubs, news magazines, even cyber-soap operas with daily postings of the serialised lives of its characters. In fact, the most popular Web sites represent the same genres – science fiction, soap operas, and ‘talk’ shows – that form the topic of some of the best television audience research (1999:116).

As the home computer becomes increasingly domesticated and assimilated into more homes, with the added technology of the internet, the scope of empirical studies has widened to deal with issues ranging from gender studies to issues dealing with online democracy to social exclusion.

Spilker and Sørensen (2000) conducted a study in the late nineties which analysed the ways in which gender is constructed in multimedia form and content. The study, entitled *A ROM of one's own or a home for sharing?* is concerned with a CD-Rom, called Jente Rom which was aimed at women between the ages of 15 and 30, and a web service called Hjemme Nett, which was aimed at the whole family. It was an effort by the producers to make computers and multimedia attractive to young women. Through the course of this chapter, we have seen instances where technologies have been dominated by men (radio, television, VCR) and claims by

feminists that some technologies were inherently gendered²⁶. This fact, that the female gender was being excluded from technology, was recognised by the producers of Jente ROM and Hjemme Nett, and a concerted effort was made to ascribe feminine attributes to the contents of a CD-Rom and web service to make them more appealing to women.

So far this thesis has been concerned with the domestic consumption of computers and multimedia, but Spilker and Sørensen's study gives an insight into the production processes, where we see an attempt to translate the technology into a feminine artefact. It is useful as an insight into how the user can influence the shape of multimedia content.

A study conducted by Maria Bakardjieva, *The Internet in everyday life* (2001), researched the 'ordinary user' in his or her home in a similar vein to this thesis. It was an attempt to understand the integration of the internet into everyday life of 19 homes in the Vancouver area of Canada. The authors wanted to determine what part or role the internet played in the lives of 11 men and 11 women, and to explore the process by which the user becomes an active and significant figure in the social shaping of a new communication technology. Bakardjieva and Smith identified six "situational characteristics responsible for the personal experiencing of the internet as needed, useful and significant" (2001: 71). These are:

1. Isolation brought about by circumstances such as sickness, dysfunctional marriage, single parenthood, retirement and unemployment;
2. Dislocation or recurrent change of location;
3. Globally spread family and social networks;

²⁶ The issue of gender in relation to technology studies is a well-documented one. The concern for women's exclusion from computers provoked feminist researchers in the late 1970s to argue that computers were used to degrade typically female professions like office work, health and social services. This concern fuelled what is called the first wave of studies of women and computers. It focused particularly on office automation and showed that basic design concepts were gendered against women and not gender neutral. Design of office computers systems reflected a misleading and suppressive image of many female jobs as low skill and easy to replace by computers (Cockburn & Furst-Dilic, 1994). A second wave of studies of women and computers started out from a concern about the lack of women participating in the design and development of computer technology and the masculine bias in the definition of what constitutes relevant computer competence and mainly signifying masculine interests (Turtle, 1988, 1996; Wajcman, 1991). We are now entering a third wave of research on women and computers. This wave is characterised by a changing image of the computer. Spilker and Sørensen (2000) claim that we face "a technology that is no longer primarily about programming, systems, control and calculation. Increasingly, computers are a gateway to communication and cultural activities (2000:270).

4. Lack of intellectual challenge in current work;
5. Uncertainty or dissatisfaction with current job; and
6. Sense of belonging to a dispersed community of interest.

In the study, the authors explain how the technology of the internet has “empowered ‘boxed in’ ordinary people to transcend certain limitations of their situations and to open spaces for meaningful individual and collective action and creativity” (2001:80).

What Bakardjieva’s study achieves is a critical analysis of the user and his or her personal or social-biographical situation, and how the user transforms the internet technology from a piece of technological hardware to a meaningful and significant artefact, which allows the user to transcend physical or virtual boundaries through the use of the medium. This study is crucial to the framing of the present thesis, as it takes the same approach to users and identifies the fact that no two users are alike and their appropriation of ICTs is shaped accordingly to the user’s social-biographical situation. Although the domestication process is similar, the fact still remains that users find a need in their personal lives, be it social or personal, that the internet medium can address, and the technology is shaped accordingly.

The issue of social exclusion is one explored by Haddon (2000) in relation to information and communication technologies. Haddon examined the role of ICTs in relation to people’s ability to participate in society. Haddon (with Silverstone) has also conducted research on single parent and young elderly households to show how ICTs include or exclude these two particular groups in society. Haddon and Silverstone (1995, 1996) interviewed 20 single-parent households and 20 young-elderly households to access their experience of ICTs. In this study, the ICTs in question are mobile telephones, landline telephones, television, and computers. Haddon found, in both the young-elderly and single-parent households, reluctance to appropriate newer ICTs, especially the home computer. This is for a number of diverse reasons.

Haddon claims that few single-parent households possessed or routinely used a computer. Haddon stresses that this tended to be because PCs were a standard tool of their work or necessary for their educational commitments, and for the

households in his study, single parents out of work and with no such commitments, coupled with a lack of exposure to the technology, meant that they often had little competency with computers and had limited awareness of how they might be useful in everyday life.

Affordability and cost were also factors. Most households basically could not afford to buy and run a computer on their income, and many of the single parents in the study talked of preferring to spend it on childcare or holidays instead. The young-elderly households in Haddon's study also exhibited disinclination to acquire new ICTs. Haddon relates this to the fact that many of the households came from working-class backgrounds and had undergone upward social mobility as middle-class occupations expanded. However, these households "retained non-consumerist values" (2000:398), meaning that the young elderly were not impulse buyers and acquisitions had to be justified. Haddon also adds that, like many of the single-parent households, the young elderly had not acquired familiarity or competency with PCs through work. Falling the wrong side of the computer generation and "too old to be swept up by the home computer...in the 1980s" (2000:398), the young elderly would have missed out on office automation in their working lives. Both social groups relied heavily on the phone as a means of connecting to the outside world. Television became more of a companion and time filler as both social groups were in most ways tied to the house, in the case of the single parents – through inability to afford babysitters – and in the case of the young elderly – through increasing physical immobility. However, both groups were noticeably excluded from internet technology by material and cultural costs.

In an attempt to study groups who would naturally be excluded from information and communication technologies, Haddon focused on two groups, which were easy targets to study when looking at the issue of social exclusion. The elderly have been traditionally associated with rejecting or refusing to accept new technologies. The mobile phone was slow to be adopted by the elderly population until its safety features were highlighted. The computer is probably the best example yet. Single parents are also easy prey as many find the cost involved too prohibitive. Haddon has excluded from his study any other groups from society which may experience exclusion due to, for example, class reasons or gender reasons.

Miller and Slater (2000) conducted a study of internet culture and consumption in Trinidad. The authors visited and spent time in cyber cafés and businesses, and in addition conducted house-to-house surveys in order to build a comprehensive picture of internet use and consumption in Trinidad. The findings of this study are not remarkably dissimilar to other studies of internet consumption, where the main findings include:

1. Access to and use of the internet is more widespread than might have been expected, with one in twenty households having an internet account, and one third of households including a regular Internet user.
2. Domestic access to the internet shows little distinction of gender or ethnicity, but gender and age are reflected in different patterns of use and in unequal institutional attitudes.
3. The internet has considerably strengthened the nuclear family throughout the Trinidadian Diaspora.
4. The use of random chat, especially within ICQ (internet chat), has generated new forms of short-term, often anonymous, but also often profound and intimate relationships between Trinidadians and people of other countries, some leading to marriage.

Similarities exist in the findings of the study outlined above by Bakardjieva and Smith (2001). In particular, the findings related to global communication with dispersed family members and relations are remarkably similar. While Miller and Slater did not concentrate wholly on domestic consumption of the internet, their findings related to this area are quite comparable to other studies.

However, Miller and Slater outline a more contentious finding to do with a 'natural affinity' the Trinidadians seem to have with the internet. The authors assert that the Trini take to it 'naturally', fitting it effortlessly into family, friendship, work and leisure; and in some respects they seemed to experience the internet as itself 'naturally Trinidadian'. While the authors, to their credit, describe this finding as outlandish, they do report that this finding is 'inescapable' (2000:2). I find this finding quite controversial. To claim that a particular culture has a 'natural affinity' for a certain technology is quite implausible.

Historical evidence highlights Trini preference for face-to-face communication contact, that is liming, and I feel this integral part of the Trini culture would be lost

on the internet. Generalised statements like those above bear all the hallmarks of an essentialist take on the situation of internet consumption in Trinidad. Again, it might be a well-meaning attribution of a characteristic, but it is difficult to establish how empirically it is so, in that, how does one empirically challenge whether one culture or another has an, 'affinity' for a certain technology?

3.10 Conclusion

This chapter had two objectives. First, it introduced the notion of the audience, the user, the subject of the study. It presented a comprehensive narrative of audience research and located this study in the cultural studies discipline of audience research. This was essential to define precisely who we are talking about. I concluded that new media audiences are difficult to identify and define and that traditional interpretations of audiences are not adequate.

Second, the latter part of the chapter presented a social history of media technologies. It tracked the emergence of the technology into society and its eventual domestication into home. Essentially, it presented new media technologies as being socially constructed and parallel studies of domestication were used to highlight how this thesis is related to the literature of media technology consumption in the field. The chapter was also concerned with examining how technologies, such as the radio, television and computer, emerged and were domesticated into society. Each media technology was explored in detail, with emphasis on certain aspects, such as when it emerged, the type of society into which it emerged, how it entered the household, and how the relations between family members were adapted to it.

This chapter was designed to show that media technologies do not emerge under a momentum of their own, as advocated by the technological determinist perspective described in the previous chapter. Instead, it shows that social factors such as political, cultural, economic and technological factors influence and shape the emergence, diffusion and domestication of ICTs. In essence, this chapter was designed to give a social history behind the emergence and eventual domestication of ICTs, and in some ways to expand the hypothesis outlined in the previous chapter.

Chapter Four

‘Actors and Factors’ – Social characteristics influencing ICT consumption and use

- 4.1 Introduction
 - 4.2 Sociological context of research
 - 4.3 Gender and technology
 - 4.4 Social class
 - 4.5 Household configuration
 - 4.6 Age
 - 4.7 Conclusion
-

4.1 Introduction

The social shaping of technology perspective, which was discussed at length in Chapter two, implies that ICTs are malleable and more open to interpretation than technologically deterministic perspectives permit. The SST concept suggests that technology must be understood as being social in production and equally social in consumption. In dominant discourses we are led to believe consumption is influenced or even determined by a set of factors, such as age (*Falling Through The Net: NTIA, 2000*), or even more ostensibly, gender has been traditionally presented as a crucial determinant in the diffusion of all ICTs (see for example, Gray, 1992, Cockburn, & Furst-Dilic 1994). This trend can also be detected in quantitative studies, where data is regularly analysed along several variables – among which are age, gender, class/economics and household configuration (for example, the Central Statistics Office surveys regularly report along age, gender and location lines). The concern for the current thesis is to analyse, using qualitative techniques, how such factors shape the domestication processes and consumption patterns of individual domestic users in the sample.

The purpose of this chapter is to review the literature supporting the discourse that one 'social factor' is sufficient to shape a user's consumption or use patterns. The following sections will first locate the study in a geographical, economic and political context. Second, it will then address separately the 'social factors' at play to understand how the dominant discourses have portrayed the agency of individual factors on the shaping process.

In the previous chapters, the aim was to challenge the position that assumes media messages and technologies are simply coded, transmitted and decoded as the producer intended. It also challenged the assumption that media technologies emerge and are domesticated in an uncontested and unchallenged manner. This chapter outlines the social factors that make media messages and technologies contestable by the audience. The social factors and actors to be discussed were derived from applying an SST perspective to the research problem. In addition, they were identifiable from the analysis of the social histories of the media in Chapter three, where traditional media and new media have been influential in the 'everyday' lives of users.

This chapter will argue that people choose to watch/listen/read/use/interact with a variety of media texts and ICTs, and this choice is less affected by traditional stereotypes (e.g. white, middle class males are early adopters of ICTs) than by a user's social and personal characteristics. These characteristics include a user's gender, age, where they live, their household composition, and a range of class/economic factors. These are important features which provide a context to understand how a user interprets and makes sense of the technology.

Kim Schrøder asks, "Do people who watch the same programme actually see the same programme?" (1987:19, cited in Schrøder 1999). As this thesis is focused on media technologies, it is not as specifically concerned with the medium's content as the medium itself. Therefore, what is important to the research problem is not what the user views with the technology, but how, and in what ways, they use the technology or not. Schrøder's question is useful to apply to this research project to understand how users interpret the technology and where the technology acts as a text to be read by the user. This is done via an interplay of complex processes of interpretation and negotiation of meaning.

With Schrøder's question in mind, I want to apply the same critical understanding to new media technologies to discover do people of similar social characteristics use/consume the technology in similar ways? Do 'relevant social groups' exist? Or is it the case that users interpret and redefine the artefact as they adapt it to their purposes and apply their understandings of what it is through the subtle processes

of domestication, discussed in Chapter two. Each group understands the artefact based on what they already know about related technologies. Bijker calls each perspective a technological frame. If an individual belongs to more than one relevant social group, she may 'see' the artefact in new and innovative ways by integrating two or more technological frames (Bijker, 1995). 'Interpretive flexibility' and 'relevant social groups' are terms used by Trevor Pinch and Wiebe Bijker to denote "institutions and organisations...as well as organised or unorganised groups of individuals" for whom an artefact has a shared "set of meanings" (Bijker *et al.* 1987). New technological artefacts have interpretive flexibility. Whether artefacts 'work' or 'don't work' depends entirely on who uses them and how they use them.

Berg (1999) also concurs with this notion of interpretive flexibility. She adds that a technology's impacts are never entirely determined by its designers' and producers' intentions or inscribed vision (Akrick, 1992). Rather, she states, technology should be seen as a process open to flexible interpretation by its various user groups. For example, a middle-aged man with certain social characteristics may not interpret the technology or use it in the same ways as a user with similar social characteristics. Also, a number of studies have shown that audience members who share social commonalities (such as gender or class) are more likely to interpret content and/or media technologies in similar ways, than audiences or groups of users who have social differences (see Haddon, 1992; Morley, 1986; O'Connor, 1997; Bijker, 1995).

I decided to form a hypothesis to test the agency of these four factors: age, gender, economic factors and household configuration, within the domestication process to ascertain whether one or more factors are active during this process. The dominant discourses generally understand ICT use, as we shall see later, in relation to one active factor. The hypothesis set out in Chapter one, then, will question whether it is problematic to consider ICT use and consumption in such confined terms. Instead, this thesis will argue that use, consumption and individual domestication processes are open to flexible interpretations and negotiations, and open to the influences of all social factors.

4.2 Sociological context of research

Geographically, the context of the study is Ireland, a small Republic, both in terms of geographical area and population. The population of the entire island is less than that of a large city in many other parts of the world. The study is located in north Dublin, the capital city of the State. Ireland, remarks Sweeney (1999), has been transformed over the past 15 years in economic, political, cultural and social terms. This section of the chapter will deal with these contexts.

4.2.1 Situating Ireland: the economic, social and cultural context

It has been widely accepted that Ireland has undergone major social transformations in all contexts due to an economic boom known as the Celtic Tiger. The term 'Celtic Tiger' was coined by the US investment bankers Morgan Stanley in 1994, but it took a number of years to pass into popular currency. Some commentators consider Ireland has been 'transformed' or 're-invented' during the Celtic Tiger period (Kirby *et al.*, 2002).

Ireland's economic success in the second half of the 1990s has been dependent on very high levels of US foreign investment. This economic success was a dramatic reversal of fortunes for the Irish economy, which had been stagnant for decades. The growth experienced in the 1990s was quite unexpected and sudden. The recent success of the Irish economy was visible almost everywhere in 1998, according to Sweeney (1999). Irish economic growth rates were the highest among the 15 European Union (EU) states and the 29 OECD member states for several years in the 1990s. Economic growth has averaged 8% over the last six or seven years. Over the last decade, unprecedented economic growth has seen Ireland's gross domestic product almost double, and employment has increased by almost 50%. Nevertheless, the rapid rate of economic growth eventually subsided, with virtually zero growth in the latter half of 2001. Irish GDP is now forecast to increase at 3.3% in 2004 and at an annual average rate of 4.4% over the three years 2004-2006 (FAS, 2002).

Ireland's greatest and longest standing socio-economic problems have traditionally been unemployment and emigration. Class positioning in Ireland has been more

difficult to determine and to identify than in, for example, Britain or other highly industrialised countries.

From the late 1950s, Ireland adopted an economic policy to attract firms from abroad to accelerate the process of industrialisation. In the late 1960s to 1970s, this policy succeeded in generating significant growth, but was followed by depression in the 1980s, following global trends, resulting in large-scale unemployment and recession. By 1994, the rates of unemployment began to steadily fall and continued to do so to such an extent that there is a growing shortage of labour in some areas. Employment is expected to grow by 1.3% in 2004 and by more than 1.4% a year on average over 2004-2006, compared with a 1.8% average over the last three years. The service sector in Ireland experienced quite regular growth all through the 1980s and more dramatically in the 1990s. This period saw huge increases in the financial sector, electronic and computer firms, and welfare services, all of which are based on a highly educated labour force (see Table 4.1).

Economic Sector	1996	1995	1997	2001	2002	2003
Other production industries	266.5	263.9	288.5	330.8	314.0	303.2
Hotels and Restaurants	73.6	70.6	76.4	116.3	116.6	110.5
Financial/other business services	135.2	126.4	134.7	230.7	229.1	226.6
Education and Health	209.9	192.1	212.9	248.1	262.7	280.7

Table 4.1 Employment figures ('000s) per economic sector (CSO, 2003)

The transformation of the Irish economy has been evident in many other sectors of society. First, living standards have experienced growth. The performance of the economy has been reflected in social and private spheres. There have been increased incomes, higher inflation and more jobs – an average of more than 1100 jobs a week each year between 1994 and 2000. Incomes rose a little in the decade to 1999. Living standards have been rising rapidly. The Irish government introduced a framework in the late 1990s to ensure incomes and inflation were kept in check. This was known as the Programme for Prosperity and Fairness. It was aimed at developing an agreement between governments and social partners – that is, all sectors of business, administration, public sectors and community groups. Its intention was to ensure that all groups of society could share and partake in the new wealth generated in the wake of the Celtic Tiger.

Setting the context of the study is an important exercise because it makes known the type of environment into which the internet emerged in Ireland. Not only is the context important and necessary, but so too are the factors and actors which influence the ways in which the technology is domesticated and consumed. The next sections will deal with each factor, and the effects they have on the appropriation, domestication and consumption of ICTs.

4.3 Gender and technology: the reflexive relationship?

The issue of gender and technology has dominated discourse in the area of ICT consumption for decades. It is an important factor to include/discuss when assessing influential factors of consumption, use and meaning generation. While it would be tenable to conduct a similar project based solely on the gendering capacity of ICTs and the consequences for domestic ICT consumption, this thesis also looks to other factors contributing to how ICTs are used and how the relationship between the user and the technology is constructed.

There is a consensus among academics that technology is in fact gendered, or that technology and gender are mutually shaped or co-constructed (Berg, 1994b; Bijker *et al.*, 1987; Rommes *et al.* 1999; McKenzie & Wajcman, 1999). The co-construction of the technological and social has been a basic constituent of science and technology studies for quite some time (Bijker *et al.*, 1987; Latour, 1987). This has been made use of in analyses of gender and technology in several contributions (e.g. Cockburn & Ormrod, 1993; Cockburn & Fürst-Dilic, 1994; Berg & Aune, 1994). These studies suggest that technologies are designed with specific assumptions about the gender of future users.

As shown in Chapters two and three, new media technologies are rapidly becoming more and more part of daily life. The idea of technology being gendered is not novel. Technology has commonly been associated with masculinity, rather than femininity. Feminist scholars have for a long time observed that technology and engineering is very much a male domain. There is a kind of symbolic identity between technology and masculinity, between boys and their toys (Horowitz, 2001). Judy Wajcman provides a useful paradigm of gender relations of technology in terms of a dichotomising process (1991:5). She frames gender

relations as a simple male versus female paradigm, whereby the opposing elements are distributed into a contrasting sphere. Her paradigm takes the following format:

Culture	→	Nature
Mind	→	Body
Reason	→	Emotion
Objectivity	→	Subjectivity
Public	→	Private

In each dichotomy, the former must dominate the latter, and the latter in each case seems to be systematically associated with the feminine. If each dichotomy is studied and applied to the criteria required for merit in the field of science and technology, then the preferred, even required, one is that of the male attribute. This conceptualisation can be traced back to the Enlightenment period of science, whereby empirical rationalism and positivism were the only accepted forms of justifying science and knowledge. Female attributes such as body and subjectivity, had no place in the scientific world. How did these gender relations appear? Some feminist writers believe that the gendering of technology has its roots around the time of the scientific and industrial revolutions. Both revolutions, Wajcman argues, constructed science around the fundamental “masculine projects of reason and objectivity” (1991:5).

This thesis wishes to move away from the notion that technologies are inherently masculine or feminine. Such an assumption removes the agency of the user to define, redefine, resist, reject and negotiate the meaning of the technology according to existing routines, rituals, responsibilities and conflicts. Constructions of meaning and acquired connotations are assigned as a consequence of their cultural ‘circulation’ or through their ‘biographies’ during domestication. Only through the meanings that are constructed by producers, by those who market or regulate them, and by those who consume them, do artefacts have any significance. ICTs mean different things to different people, and these meanings will change and often conflict.

The issue of gender in relation to technology studies has been well-documented. The concern for women’s exclusion from computers provoked feminist researchers in the late 1970s to argue that computers were used to degrade typically female

professions, such as office work, health and social services (Cockburn, 1985; Lie & Rasmussen, 1983; Probert & Wilson, 1993; Webster, 1995; Zuboff, 1988; all cited in Sørensen, 2000). This concern fuelled what is called the first wave of studies of women and computers (Sørensen, 2000: 269). It focused particularly on office automation and showed that basic design concepts were gendered against women, and not gender neutral. Design of office computer systems reflected a misleading and suppressive image of many female jobs as low skilled and easy to replace by computers (Cockburn & Fürst-Dilic, 1994).

Also, at this time, feminist writers were concerned by the widening gap between men and women's use of technology, and the gap between male and female technological competency. The concept of technological competency refers to the set of attitudes and skills that a person mobilises in relation to all technologies within the domestic and extra-domestic environment (Silverstone *et al.*, 1987, 1992).

A second wave of studies of women and computers started out from a concern about the lack of women participating in the design and development of computer technology. The second wave was also concerned with a masculine bias in the definition of what constitutes relevant computer competencies and mainly signifying masculine interests (Turtle, 1988, 1996; Wajcman, 1991). A number of theories attempted to explain this position of women in society and suggested means of amending the growing divisions in technological competencies. Many studies emerged looking at the structural barriers to women entering the scientific institution, that is, sexual discrimination in the workplace and the educational system (Cockburn, 1985; Cockburn & Fürst-Dilic, 1994). Others looked at how female identity and behaviour are constructed in society and encouraged by our culture (Turtle, 1988, 1996; Wajcman, 1991).

The solution to this problem, according to some theorists, lies in increasing the number of women entering the scientific profession, which will alleviate many of the problems and barriers facing them. However, if this solution is to be implemented, it will only push women into a sphere of work that is inherently anti-female. This approach has drawn criticism from Sandra Harding (1986 cited in

Wajcman, 1991). She believes that this is not the way to solve the problem of under-representation of women in the scientific and technological spheres of work. She views the whole area of science as the problem. Harding questions how science could be reshaped sufficiently to make it a more attractive employment opportunity for women.

Gender differences, however, are not limited to production and design. Considerable research, originally based on the study of the use of television in the home, has illustrated the extent of male appropriation of media technologies (Morley, 1986). This can be seen as an expression of traditional male and female roles and responsibilities. Many writers point out that women are still more likely to take on the main responsibility for housework and childcare. Whereas home can be more of a site of leisure for men, it is a site of work for women (Gray, 1992). This has a variety of ramifications. The attention that women give to television tends to be more fragmented as they simultaneously go about other jobs (Morley, 1986). They also feel guilty when indulging themselves in the consumption of programmes (Morley, 1986; Gray, 1992). Gray found that many women she interviewed rarely took breaks from domestic chores, which lessened the enjoyment of the VCR. Gray explains that the men's' greater involvement with the VCR was the result of a "combination of masculine address of VCR advertising, the relative freedom of male leisure time in the home, and male economic power" (Gray, 1992:243). For children and husbands, then, the greater freedom from domestic chores made them more likely to watch videos, rent them, plan ahead for recording and time-shifting, and become adept at operating the machine. Some women expressed resentment towards television and video as a deterrent to engaging in more appealing forms of leisure activities, such as going out, and as a barrier to family communication and intimacy.

Oakley's (1974) household studies demonstrated that women carry the burden of responsibility for household and childcare within the home. This may lead to isolation and cause resentment and unhappiness, as the role and the work undertaken are not valued by husbands or partners, children and the wider society. Also, women find it harder to justify time spent experimenting or 'playing' with new ICTs such as computers (Haddon, 1990). In fact, some studies have indicated

that women are wary of getting involved with some ICTs, such as the VCR, to avoid assuming the additional work of recording items for other people (Gray, 1992).

Spender (1995) suggests that if computers solved problems, paid bills and saved women time, they would be more likely to use them because they would see advantages in doing so. Whilst women may not have the time or motivation to learn computer skills at home, breaks from employment may also lead to them not updating skills they need to keep up with the technological developments taking place so rapidly in the work place. In turn, this impacts on the uses of the internet at home, since the skills are not being learned by women in the work place and hence cannot be transferred or applied to ICT use in the home. Spender (1995) asserts that, if girls and women are to be involved in using the internet as men and boys do, they need more than access, they need motivation.

Spilker and Sørensen (2000) suggest we are now entering a third wave of research on women and computers. This wave, they say, is characterised by a changing image of the computer. They claim that we face “a technology that is no longer primarily about programming, system, control and calculation. Increasingly, computers are a gateway to communication and cultural activities” (Spilker & Sørensen, 2000:270).

In light of the above arguments, gender and household dynamics combined together have an influence on the patterns of use and consumption of ICTs. This further contributes to the argument I have constructed in the previous chapters, which is in favour of the ‘social shaping of technology’ perspective. This section on gender was concerned with attempting to trace how ICTs have assumed a ‘male’ identity through their circulation and biography in society and in the domestic sphere. This approach has been used before in such studies as Wajcman (1991) and Spender (1995), which have used sociological arguments to reject the idea of natural differences and have shown how social relations surrounding technology hinder women’s competencies and confidence. Wajcman carefully deconstructs the myth in society that defines and reproduces women as technologically incompetent. Arguing against theories of natural difference in technological

competence, she shows how masculinity has become aligned with technological expertise and that women's so-called incompetence is the 'result' of the historical and cultural construction of gender (1991:137).

Cassidy (2001) takes an interesting look at how the PC industry has attempted to review and redefine the home computer's identity. She analysed PC magazines to assess how the industry has tried to readdress the signifying of the PC as a male construct and domain. The PC magazine industries attempted to create an illusion that PCs were necessary for modern living for the modern woman. The PC "liberated the career mother" allowing her to perform a "balancing act" of motherly duties and job with the "computers help" (2001:52). This attempt to include women as PC users marks initiatives by the industry and governments to address the status of women as PC/internet users.

More recently, SIGIS (Strategies of Inclusion: Gender and the Information Society) researchers have addressed strategies and initiatives aimed at including more women in the information society (MacKeogh & Preston, 2003). They focused on public and private initiatives put in place to make ICTs more attractive to women. For this, I analysed students of basic computer courses to assess how such courses may or may not promote domestication in the household setting. The study concluded that in order for such courses to be successful, that is to enable the students to translate the artefact into something useful and valuable, their resources (both material and symbolic) need to be addressed (see Hynes & Rommes, 2005).

4.4 Social class

One of the key propositions of sociology is that contemporary capitalist societies are 'class' based societies. Sociologists argue that class position is a major determinant of life conditions and resources, including access to property and income, to education, to housing, to good health, to power, and consumption of ICTs. This section addresses how social class influences ICT consumption.

Social class has a multitude of definitions, depending on the contextual discipline. Therefore, it is necessary to explore the subject area of 'social class' and extricate a suitable working definition. First and foremost, social class is determined by and

related to work and occupational position/status. The kinds of leisure pursuits we follow and the time and money available to enjoy them are all related to our income, which is, in turn, determined by our employment. The type of work a person does is generally the most important single factor deciding status in modern societies – most people categorise themselves and others by the job they do. Therefore, work is central to the individual's sense of identity and self-esteem, as well as their material resources. For most people, the work they do provides their sole or major source of income. The remuneration from employment, how much and in what conditions one works, and how long 'work' takes, decides in many ways the kind of life a person will lead, how the person interacts with friends and family, and time available for activities other than work (including media consumption). There are a number of contrasting approaches to social class from the main schools of sociological thought. I shall outline the main tenets of three relevant perspectives. I shall assess the functionalist, Marxist, and Weberian perspectives in order to formulate a working theory of social class.

Tovey and Share regard functionalist analyses as basically 'common-sense' understanding of inequality (2000:133). Functionalists see inequality as normal, indeed functional, for society. Further, they claim social inequality is not only inevitable but morally defensible. Until the early 1970s, functionalism was the dominant social theory in sociology, in Ireland, as elsewhere, according to Drudy (1995:297, cited in Tovey & Share, 1995). The influence of functionalist stratification theory is still to be seen in contemporary analyses. It is particularly evident in analyses which focus on the occupational hierarchy. Stratification theory also essentially underpins the social class distributions to be found in many official publications, such as the Census classification of occupations in Ireland.

Marxist analyses of class, on the other hand, are sharply critical both of the basis of the class system and its social effects. The Marxist viewpoint on class starts from the premise that every kind of production system entails a definite set of social relationships existing between individuals involved in the production process. Classes emerge, according to Marx, where the relations of production (i.e. the social relationships existing between individuals involved in the production process) involve different divisions of labour. This allows for the accumulation of

surplus production, which can be appropriated by a minority grouping. This minority grouping (in the capitalist instance, the bourgeoisie) thus stands in an exploitative relationship to the mass of producers. Society, as a whole, was described by Marx and Engels as progressively splitting up into two great classes directly facing each other – the bourgeoisie and the proletariat. The bourgeoisie is the class of modern capitalists, owners of the means of social production and employers of wage labour; the proletariat is the class of modern wage labourers who, having no means of production of their own, are reduced to selling their labour power in order to make a living.

The third important perspective of class comes from Max Weber. This perspective of class has been influential in the sociological analysis of class and occupational structure. Weber suggested that a 'class' arises when a number of people have in common a specific causal component of their life chances. This component is represented exclusively by economic interests in the possession of goods and opportunities for income, and is represented under the conditions of the commodity labour market. He identified four principal 'social classes'. These are: (a) the working class as a whole; (b) the petty bourgeoisie; (c) the property-less intelligentsia and specialists (i.e. technicians, white collar employees etc.); and (d) the classes privileged through property and education. Drudy (1995) acknowledges that although Weber's theories on class have had an important influence on the development of class analysis as a whole, its impact has perhaps been greatest among those studying patterns of social mobility.

4.4.1 What about women?

The class position of women poses a problem for class analysis because of the assumption in many studies that the basic unit of class or stratification analysis is the household. Drudy (1995) refers to the *Labour Force Survey*, which is the resident population of all private and non-private households in Ireland. The *Labour Force Survey* defines a private household as 'any person or group of persons (not necessarily related) with common living arrangements, separately occupying all or part of a private house, flat, apartment or private habitation of any kind' (Central Statistics Office, 1994; cited in Drudy, 1995:313).

One recent major survey of poverty, class, unemployment and social welfare in Ireland uses the household as the unit of analysis (Nolan & Callan, 1994, cited in Tovey and Share, 2000). Although, this research acknowledges the distinction between the individual, the family and the household, on the whole it uses the terms 'household' and 'nuclear family' interchangeably (Drudy, 1995:313). The difficulty with such an approach in this, or any, study is that gender differences, and in particular the position of women, tends to be subsumed within the household or family.

Recent figures highlight the low participation rate of females in the paid labour force compared to male participation, and the very low participation rates of males in 'home duties'. Figures released by the CSO (2001) show that women make up 40.9% of the total number of people in employment. In fact, if we break down the total number of those on home duties by gender (560,400), we find that 98.5% of them are female, compared to 99% in 1992. The labour force participation rate for males was 70.6% and 47.6% for females. Since occupational position is used as the main indicator of class position, this automatically excludes a high proportion of adult women from the analysis. Using the household as the unit of analysis is one way of addressing the issue. This can provide rich insights into the distributions of income and resources, as recent studies have shown (Nolan & Callan, 1994; Tovey & Share, 2000). Class analysis in which the household is assigned a class position on the basis of the occupation of the 'head' of the household is almost certain to distort the interpretation of central processes such as social mobility, as Drudy (1995) correctly points out. However, the purpose of the present thesis is not to conduct an analysis of class as a major factor, but as having both a shaping influence on the technological artefact and on the ways in which it is consumed. Therefore, it is necessary to formulate an operational definition of class, which is relevant to the core concerns of this thesis.

4.4.1 Working definition of class

Hence, from the above arguments, I define social class as a person's social positioning depending on their job type, income and education. This approach is a combination of the functionalist and Weberian approaches. It is functionalist in the sense that it takes the stratification theory as the structuring paradigm. It relies on

the census classification of occupation to distinguish and identify the relative social class of the respondent (Table 4.2). This classification of class incorporates the following dimensions:

- Higher grade professionals, administrators and officials; managers in large industrial establishments; large proprietors.
- Lower grade professionals in small industrial establishments; supervisors of non-manual employees.
- Routine non-manual employees, higher grade (administration and commerce).
- Routine non-manual employees, lower grade (sales and services).
- Small proprietors, artisans etc., with employees.
- Small proprietors, artisans etc., without employees.
- Farmers and small holders; other self-employed workers in primary production.
- Lower grade technicians, supervisors of manual workers.
- Skilled manual workers.
- Semi-skilled manual workers.
- Unskilled manual workers.

Table 4.2 Classification of occupation

The adopted approach is based in the Weberian perspective, as I believe ‘life-chances’ are an important factor to take into account when assessing a person’s social class standing. ‘Social class’ arises when a number of people have in common a specific causal component of their life chances. Haralambos and Holburn (2002) point to the ‘life-chances’ of the working class to provide the most illuminating example of this phenomenon. They see the inferior market situation of manual workers as also reflected in their inferior life chances. This view draws on Weber’s terminology, where a person’s class situation is basically their ‘market situation’. Those who share a similar class situation also share similar life chances. Their economic position will directly affect their chances of obtaining those things defined as desirable in their society, for example, access to higher education and a good standard of living. According to Haralambos and Holburn:

A variety of studies show that, compared with non-manual workers, they die younger and are more likely to suffer from poor health; they are more likely to be convicted of a criminal offence; and their children are less likely to stay on at school after the age of 16 to achieve educational qualification, or to go on to higher education (2000:74-75).

The notion of life chance is important to my redefinition of 'social class' as it extends the conceptualisation of class beyond merely economic factors, but also incorporates social and cultural factors into the equation.

In conclusion, class has a significant influence on the consumption and meaning of ICTs, but a number of points must be noted. First, the definitions of class must serve as a practical application of the concept. It requires acknowledgement of a plurality of factors exerting influence on the construction of the concept. These factors, mostly social characteristics, include where people live, where they work, what they work at, their income, and so on. The answers to these questions provide a rich insight to the class position of the respondents in the present research. The conceptualisation of social class presented here is an interpretation of a range of definitions of the notion.

As stated before, social class is determined by and related to work. In this way, social class has a crucial effect on media consumption, as this too is heavily influenced by work. It depends on the ability and willingness to pay for the new digital media services offered by media content providers. This, combined with the cost involved in accessing the means to display the content, means the technological artefact is an important feature to bear in mind. Media consumption is rapidly becoming a costly leisure pursuit.

The individual conceptualisations of class presented above, the functionalist, Marxist and Weberian perspectives, on their own do not provide a practical working definition of class suitable for this project. An amalgamation of the concepts – which takes into account income, life chances, and education – is required to properly conceptualise class in Ireland. As Crompton (1993) points out, the centrality of class as an explanatory concept in sociology derives from a conviction that “the work individuals do remains the most significant determinant of the life-fates of the majority of individual and families in advanced industrial societies” (cited Breen & Whelan, 1996:2). The majority of class theory relies on occupation only. Class groups share not just economic position, but a web of social relationships, attitudes and values.

The extensive work of Pierre Bourdieu, a French sociologist, has shaped contemporary thinking on the subject of capital. Bourdieu discusses issues pertaining to class, education, wealth and taste in his book *Distinction* (1984). Bourdieu argues that an individual's consumption choices of items such as food, clothing, and recreation, and the aesthetics that guide all choices of manner, style, and appropriateness are determined by that person's social position and relationship to the culture of the dominant class. He refines this by stating that the cultural competencies required by the artistic aesthetic of the dominant class, and an individual's access to social privileged aesthetics, shape their view of artistic and non-artistic products and events.

To Bourdieu, capital can be divided into three types: economic, social (which consists of family and personal connections) and cultural capital (which includes education, consumption and taste). Within this logic, for Bourdieu, an individual's aesthetic disposition or 'habitus' is determined by the combination of the types of capital possessed and by the way that capital was acquired. The 'habitus' provides "the capacity to produce classifiable practices and works, and the capacity to differentiate and appreciate these practices and products (taste)" (1984:170). The combination of these elements constitutes an individual's lifestyle and perspective. This concept of 'cultural capital' and 'habitus' can also be applied to internet consumption if one takes Bourdieu's blueprint for all cultural consumption. Using Bourdieu's logic, social position, taste, education, any other factors, are all valid social factors influencing internet use and consumption.

However, as I have demonstrated, occupation is one of many factors to be taken into account when trying to develop a working notion of class. In my view, I believe occupation, income and education are all important factors to include when discussing 'class'. Education has become a more significant determinant of occupational position than occupational inheritance, because society has become increasingly meritocratic as a consequence of the functional necessities of industrial development. In Ireland, it is possible for social mobility to occur through educational attainment. The relationship between socio-economic position and educational attainment is closely linked. The points system in place in Ireland

– as a means of achieving college places through grades in exams – has increased the possibility of social mobility through education or betterment.

In Ireland, industrialisation has been both recent and rapid, and as a consequence the shift from agrarian based employment to service centred employment and government acts enforcing the minimum school leaving age has created a society of better educated citizens. There has been a major shift in the class base of Irish society. Where formerly property was the main determinant of social wealth and position, it has now been replaced, partly at least, by the ability to secure wages or salary in a competitive and dynamic labour market. As a result, there is now a closer link between educational attainment and labour market position. With better educational qualifications, a person is better able to command a higher occupational position and command a greater salary. In essence, education along with class, income, wealth, and job position are highly interconnected.

4.5 Household configuration

The most recent MRBI (2002) survey includes household constitution as a factor, which has an influence on ICT consumption. The figures show that the more people there are in the household, the greater the likelihood of having the internet at home. Fifty-five percent of households with three or more people have internet access, while 35% of households with one or two people have internet access. This is also reflected in the figures for no access. Sixty-five percent of households with one to two people have no access to the internet, while 45% of households with three or more people have no access.

Household configuration, I believe, has a significant impact on the types of media used, the content consumed, the mode of consumption – both in time spent online and the types of meaning constructed. Household composition can also be considered dynamic (Haddon & Silverstone, 2000). People pass through different types of households at different times. Haddon and Silverstone state that the transition between households can be traumatic and involve major readjustments, many of which can involve new demands on ICTs.

Livingstone defines the 'family' or household in terms of dynamic properties emerging from the interaction between members. Family dynamics are expressed and managed through shared goals, family myths, rules and routines, conflicts and tensions, and its frameworks for explanation and understanding (1995:113).

The notion of the 'family' has undergone major transformations in last couple of decades. These changes irrevocably changed the entire conceptualisation of the notion of the 'family'. These changes include:

- The changing role of the family in society, with the removal of some tasks once performed by the family to other social institutions, including the state.
- The change from the classic extended family to the privatised nuclear family as the most common form of the family.
- A move to more child-centred families.
- A decline in the average family size.
- A rising divorce rate and separation.
- A rising unmarried mother rate among young girls. This has been facilitated by welfare states, which has made it easier for a woman to support a child financially without a husband or help from relatives.

Table 4.3 The evolving nature of the family

What this amounts to is an entirely different domestic environment into which the technological artefact must negotiate its entry in order for it to become 'embedded' within the codes and norms of the household, or in other words 'domesticated'. New ICT consumption also deviates from modes of consumption associated with mature/traditional ICT. The most obvious differences include the fact that new ICT consumption is highly time intensive. Also, the mode of use varies greatly from mature ICT use. The distinction between, for example, television and the internet is as follows: the television is primarily a medium for entertainment, which is consumed more often than not collectively, and physically is consumed at some distance from the screen displaying moving images and the speakers emitting sound. The PC/internet is primarily a medium for study and work, used individually, with the user close to the monitor displaying text, graphics and data, and working with a keyboard and mouse to enter commands. Moreover, the television is usually located in the living room, with the kitchen and the bedroom for the second and third set. The PC is not associated with any particular location. The PC does not encourage collective use but does so in a virtual capacity where users can actively participate in online discussion groups, message boards, email,

ICQ (internet chat) and other forms of electronic communication. It is in this sense that household configuration becomes an important factor which influences new ICT use.

This thesis argues that a user's marital status – whether co-habituating/married/single or their position in the family structure – also has an effect on time available to spend online. Household configuration is also related to available time/budget matters. This may present itself as an axiomatic statement, but this chapter is dedicated to outlining and situating the research. In households with more people living in the one geographically enclosed space naturally brings about different living conditions compared to those living under different circumstances. Interaction with the technology will also be contested to a greater degree in households with more people. As outlined above, new ICT consumption is highly time-intensive, and more importantly new digital media require users to pay for many services, including television, pay-per-view and internet/online services and access. Currently, the new media services are only accessible to a minority, and in the future, access to the new media will be commercially determined and segmented in groups able or willing to pay (in terms of subscriptions and pay per view).

David Morley (1986) noticed a similar phenomenon where 'household configuration' can be said to influence a user's relationship with the technology. The idea that the remote control was typically found on 'father's chair' denoted that the power lay with the male head of the household. While this had gender connotations (the fact that only one person controlled the access to content, and in his absence, the control of content passed to the eldest son) is also inherently bound up with the configuration of the household. The constituent elements of the household ultimately determine ICT consumption. So, echoing Morley's findings, households with male heads, and male children, will have different consumption patterns to households headed by females. Therefore, along with gender and class, this thesis hypothesises that household configuration will have a significant influence on internet consumption in households.

Another point deserving attention is the increased blurring of spheres of living. With the advent of new media technologies, there has been a further increase in the blurring of boundaries between the macro, meso, and micro levels of social life, between the public and the private spheres, and between the spheres of living, working, studying, recreation and travelling. It is possible to say that the home is no longer considered as a place excluded from public discourse and debate. It is possible to study, work and travel (virtually) from the home via a PC with internet access. Once considered as a site of recreation and relaxation, the home is now regarded as a multifunctional site, both in terms of work and leisure purposes.

4.6 Age

The final key factor to be considered in this chapter is age. Generational influence has a critical shaping effect on the uptake and use/consumption and domestication of new ICTs, as certain authors have suggested (for example, for younger generations, Tapscott, 1998; Livingstone, 1999, 2002; and for the not so young, Haddon, 2000).

These studies suggest that use, consumption, patterns, interests, awareness and perceptions of ICTs are shaped and influenced by the age of the user. When new ICTs emerge, they are faced with a certain resistance posed by some societal groups who feel threatened by their existence – either by fear of change or the sense of feeling left behind. This section is concerned with examining the propensity of a user's age to promote or alienate their engagement with the technology.

Apart from some specific works dealing with certain age groups, such as Tapscott (1998) and his N-generation, or Sonia Livingstone (2002) and her young people and new media, or Leslie Haddon (2000) and his elderly users, the age factor and its ability to influence the uptake and domestication of new media technologies has received little attention, especially in an Irish context. This section will review the literature and where appropriate will incorporate and present the recent surveys and quantitative studies and research conducted.

4.6.1 Statistics

The ODTR (Office of the Director of Telecommunication Regulation, now Commission for Communications Regulation) conducted a major study titled *Consumer Demand for Broadband in Ireland* (MRBI, 2002), which entailed a specific section dealing with internet use and users. This study found that those in the higher age groups, 55-64 and 65 plus, are least likely to have access to the internet in their homes. The younger age groups are not only most likely to have internet access at home, but also count for the group of users most enthusiastic about the new technology.

Age	15-24	25-34	35-44	45-54	55-64	65+
Access	62	54	5	43	49	18
No access	38	46	43	57	51	82

Table 4.4 Home access demographics (%) (MRBI, 2002)

As Table 4.4 above highlights, age of the user has a critical influence on their propensity to appropriate and engage with the technology. The older the age group, the less likely they are to become familiar with the technology. Put differently, the study presents four profiles of respondent.

Age	15-24	25-34	35-44	45-54	55-64	65+
Enthusiasts	34	26	30	19	24	5
Regulars	28	28	27	24	25	13
Potentials	33	35	29	34	28	15
Rejectors	5	11	13	23	23	67

Table 4.5 Profile of users with age breakdown (source: see Table 4.4)

Where:

- Enthusiasts are characterised by heavy use
- Regulars are characterised by frequent use,
- Potentials are those who may in the future use the internet,
- Rejectors are those who have no intention to use the internet.

Furthermore to what was outlined in the Table 4.4, the user profile above indicates distinctly how the age of the user shapes their attitude towards the internet. In Table 4.5, those most likely and enthusiastic about the technology are constitutive

of the younger age group. The next group, those who are regular users of the internet, is spread across most of the age groups apart from the 65+ age group. Once again, the age of the respondent is critical to determining their propensity to form a relationship with the technology. The rejectors category reveals the most obvious example. In this group, a striking 67% of users do not use the internet and are not likely to use the internet in the future.

Many studies conducted in the home concerning media technologies have pointed to the existence of a 'gap' between technological competencies between age groups, and in particular between parents and children.

In his book *Growing up Digital* (1998), Don Tapscott views the youth of today as a more educated, confident, computer-savvy, tolerant bunch of people. He writes that this generation should be labelled the 'N-generation' (N referring to the Net). This generation of people are the only generation to be born into and grow up in a world completely surrounded and immersed in digital technologies. The digitised world into which they have been born has witnessed the appropriation of such digital technologies, specifically the computer, into many spheres of daily life, such as the place of work, schools, shops, banks, and more importantly, the home. Technologies such as CD-ROMs, PCs, games consoles, digital cameras, VCRs, mobile phones, digital television and satellite have all been incorporated into daily home life.

Tapscott remarks that "for the first time in history, children are more comfortable, knowledgeable, and literate than their parents about an innovation central to society" (1998:2). Of course, Tapscott is referring to the computer/internet, but the same observation can be made in regards to the other digital technologies in the home. Many studies conducted in the home regarding media technologies (Tapscott, 1998; Gray, 1992; Silverstone *et al.*, 1989, 1992; Livingstone, 1999; Haddon, 2000) have remarked on the apparent gap in 'technological competence' between parents and children. These studies concur that, in the home, it is most often the children who are required to operate many of the media technologies, or provide instructions as to how the technology operates.

Whatever the precise reasons, we have a youth generation who are comfortable with digital technologies, who are introduced earlier to ICTs than previous generations. This youth generation tends to have an alternative view of digital multimedia technologies compared to older generations. This is substantiated by the fact that office automation has enforced the notion of PCs as work tools to the older generations, who have to sit in front of them daily using spreadsheets, word processing and databases. Their children, on the other hand, use the computer for entirely different purposes, mainly leisure related. Also, digital multimedia technologies are used more and more as a virtual babysitter, and therefore children gain intimate knowledge of the technology through use. Livingstone (1999) reiterates Tapscott's point by saying:

as the leisure experiences of young people in the late 1990s differs in many ways from those of their parents, this raises new questions about whether young people are being drawn into new forms of technological expertise, 'mediated' leisure and consumer participation not readily available to their parents" (1999:4).

Added to this acquired expertise, the success of game consoles such as Nintendo, Playstation™, and X-Box™, are increasing children's technical competence with digital technologies. The comparison may be drawn between television and the internet.

Sonia Livingstone and Moira Bovill (1999) conducted a more grounded, empirical study of young people's media uses. The most significant finding of this study confirms that the dominance of old media in the home is being challenged by the introduction of new media technologies in the shape of the PC and internet. The project investigated the diffusion and significance of media and information technologies among 6–17 year-olds in Europe. Livingstone and Bovill found young people are uncertain whether to associate the PC with print or with screen entertainment, or whether to associate the internet with an encyclopaedia or with communication and fun. Despite the conflicting reports on young users perspectives, the fact remains that young users are still one of the heaviest users of ICTs in the home.

The young middle age group have been identified as one of the highest adopters of new technologies, along with the younger age groups. An Irish Information Society Commission research paper (2000) identified typical characteristics of early adopters in Ireland. It regarded a typical early adopter as male, aged between 15 and 34 years old, middle class, either still in education or working in an office environment, and based mainly in the Dublin/Leinster areas. This profile indicates heavy users and early adopters as being part of this age group. This age group have been termed the generation X, aged between 25 and 44 years old, and constitute the mainstay of the Irish labour force. They are regarded as young enough to consider themselves able to learn and adapt to new technologies. They have been born into a society that has witnessed many social, political, and cultural changes. They most likely work in an environment that uses computers in some shape or form. To them, what was once regarded as a work tool has since been incorporated into the domestic setting. They have seen the transformation of the PC from work tool to leisure, entertainment, and communicative tool, and they have been heavily implicated in this shift. They could be regarded as the first of the computer generation.

The young elderly (60-74) are a societal group with the younger end of the spectrum reaching the end of their productive working participation in the labour force. The older end of the spectrum are most likely retired. Haddon and Silverstone (1996) have studied this group and found that many of this generation have adopted a very active life to replace work by either studying, doing voluntary work, joining clubs, and sitting on committees, amongst other things. Again, the same authors have found that the telephone is a very significant ICT to this group. They say for the more active of this group the phone is very significant in managing their commitments and many have actually noted their dependency on it. For the more home centred, the phone is a significant ICT for keeping in touch with family and friends. For widows and widowers, the phone can become very significant for social contact, especially with geographically dispersed adult children. Apart from the mature media and ICTs, this group's use and interaction with the internet and new multimedia technologies is low.

Across Europe, the elderly population is growing, including the older elderly (+75 years old). Although percentages vary, many of the older elderly are women, and a substantial proportion live alone. In general, older elderly people have limited income, especially the women, since they have benefited less from occupational pensions.

Haddon (2000) conducted a comparative study of elderly ICT users and single parent households. Some of the findings, he reports, show a disinclination by the elderly to acquire new ICTs. Haddon believes this is related to the fact that many of the households came from working class backgrounds and have undergone upward social mobility as middle-class occupations expanded. However, these households “retained non-consumerist values” (2000:398). This portrays the elderly as a group who were not impulse buyers, and acquisitions had to be justified. Haddon also found the general perception among them was that the elderly had fallen on the wrong side of the computer generation and felt “too old to be swept up by the home computer in the 1980s” (2000:398).

The main uses of ICTs for this group are those related to health and safety. These include aids to living technologies such as home automation, remote medical monitoring, diagnostics and personal alarms. It is no surprise that this age group forms the mainstay of those who reject new ICTs and those who are ‘excluded’ from the Information Society. The MRBI survey (2002) identified the elderly as the major constituent of the group they termed ‘rejectors’. The most significant characteristic of this group is that a striking 67 per cent of them are 65 years or older. This group displays no interest in the internet whatsoever and would be reluctant to even try it.

4.7 Chapter conclusion

This chapter started out by highlighting the assumption that dominant discourses of ICT use and consumption typically rely on one 'social' factor as having some sort of determinacy or agency on the ways users/respondents shape and domesticate their 'internet'. The hypothesis of the current thesis concerns the extent can we further examine this assumption and understand domestic use and consumption in terms of personal, individual domestication processes informed by social

characteristics relevant to the individual user. The 'social factors' described and explored in this chapter give the reader an understanding of the dominant discourse and how each factor pertains to the shaping of technologies. A true SST approach to the domestication process understands the use of ICTs as a social process which is influenced by a myriad of factors: the environment in which it is used, the user (including gender, age, education background, and social class technical competencies), the social relationships and networks in the household all combine to shape the technology and the user.

Much published work address ICTs in general, without addressing and social specificities in which they are consumed. The literature discussed in the earlier sections of this chapter serves to remind us that while the dominant discourses are important to help place the study in context, in terms of shaping factors, it just gives us a part of the overall picture. Domestic use of ICTs is more nuanced and complex than the literature discussed suggests. To understand the issue of domestic use in a more complete and holistic way, one must look beyond one single factor or single influence to accurately portray the nature of domestic internet consumption.

In the same way, using surveys such as the Eurobarometer (2002a, 2002b) or the MRBI (2002) as benchmarks, it appears that one or two principle factors exert a critical shaping influence on the patterns of consumption of domestic users. For example, large-scale studies suggest there is a significantly higher proportion of men with access to the internet from their household, this does not tell us enough about how these men interact with the technology, the types of relationships they construct with it, nor do these figures tell us anything about how women fit into the picture. This study will provide the lived reality behind those figures. The case-studies of four households, in Chapters seven to ten, will further examine the hypothesis by dealing with each factor separately to assess the potency of each to shape the ways the users constructed their own 'internet'.

Chapter Five

‘Who, what, where, and when’:

Methodology – concepts, instruments and tools of the research

- 5.1 Introduction
 - 5.2 Justification of methodology
 - 5.3 Qualitative and ethnographic techniques
 - 5.4 The home (study setting)
 - 5.5 Methodologies
 - 5.6 Conclusions
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5.1 Introduction

Most research in Ireland on new media consumption has been produced by government and commercial sources, for example, the Eircom study of the Ennis project and smaller scale studies by Market Research Bureau Ireland (MRBI), the Information Society Commission (ISC), Amarach Consulting and Nua Consultancy (until its closure in 2001).

While research of this nature is valuable for providing researchers with perceptions of use from a more generalised viewpoint, this research project would be better served by applying a qualitative methodology. The dearth of any kind of in-depth analysis of Irish domestic ICT users was identified in the opening chapters of the current thesis as problematic in terms of contrasting and comparing the results of a focused, qualitative research study.

The quantitative studies proved to be very useful in setting the context and the scenario of the current project in the ways it identified 'norms of use' to be later probed and explained through qualitative methods during the empirical phase. For instance, as outlined in Chapter 4, large-scale studies tend to report their findings along a number of variables, such as age, gender and social class. To draw conclusions based on figures or statistics alone disregards the underlying reasons why people choose to become users or why they choose to become non-users. It is the aim of the current thesis to go beyond the statistics and figures and portray the experiences, lived realities and histories of users/non-users in the cultural context and environment in which they occur. It is important, on that note, to ensure the research techniques and methodologies employed in this thesis are sensitive to the

ways in which the interpretation, translation, use and consumption practices associated with new ICTs are being understood in the household setting.

5.2 Justification of methodology

The intellectual and methodological origins of my study were a number of related research agendas that converged around the study of the domestic consumption of ICTs. These included audience research, media technology consumption and domestication studies. I selected my research agenda with the aim of comparing and extending other pivotal studies in the area of consumption; for example, Sonia Livingstone's 'Young People New Media research' (2002), Silverstone et al.'s studies of ICT use (1989, 1992), Silverstone (1994) and Maria Bakardjieva's study of Canadian domestic internet users (2001). Therefore, whilst producing the literature review which conceptually underpins the current thesis, I was concerned with the methodologies and research techniques employed by researchers working in similar contexts which proved useful to them in order to obtain the rich data resources associated with qualitative research. I was eager to learn from their experiences to understand what methodologies they employed, and the problems they encountered using such time-consuming, difficult research methods.

Maintaining consistency in research methodologies provides a reliable basis for drawing comparisons and contrasts between national and international trends in ICT consumption patterns. However, it is important to acknowledge that the literature referred to above was produced in social and cultural contexts different to Ireland. Thus, the concepts and methodologies which proved successful for other research might not be appropriate for, or fit into, the Irish context.

It should be noted that my study was conducted under different, but not dissimilar, circumstances. However, in contrast to other studies in this area, all interviews and empirical work in my research was carried out by me. In many of the other studies, the principle researcher was aided by research assistants (more than one researcher carried out the empirical data collection), or conducted the research in environments where the point of entry was guaranteed and organised prior to research (availing of a ready-made research population i.e. students from the same university faculty), which enabled the researchers to avail of a broad body of

potential informants. In addition, apart from Bakardjieva's study of 19 Canadian households (Bakardjieva, 2001), these other studies were post-doctorate studies; therefore, they were financed and structured in different ways to doctoral research.

A defining element of quantitative analysis is detachment, or as Palys put it, 'objectivity through social distance' (Palys, 1997). The present thesis takes the opposite approach. It relies on qualitative research techniques and in essence aims to achieve the contrary to Palys assertion – searching for subjectivity through social incorporation. The subjective is incorporated because an in-depth analysis and study of the household is required to yield meaningful data. Subjectivity in a research study can lead to the use of small-scale empirical samples. This is evident in the studies by Bakardjieva (2001) and Morley (1986), which both relied on small numbers of respondents to provide rich and meaningful data.

Conducting a research project based primarily on qualitative methods is, in short, characterised by hard work and perseverance. There are several fundamental concerns associated with this type of research – none more so than securing access to the body of respondents, access to the context of research (in this case the private domestic sphere), access to their personal stories of use, their histories, their background and private details. The effort involved in trying to foster relationships with respondents, along with the effort that goes into building trust between the researcher and possible respondents is very time intensive, and sometimes, not effective, as potential respondents change their mind regarding taking part. But when successful the data resources are rich, varied and extremely valuable. Later in this chapter, I will address each of the research concerns in greater detail.

5.3 Discussion of qualitative and ethnographic techniques

The present thesis is reliant on qualitative and ethnographic methodologies to provide data on the domestication, use and consumption of the internet as a technological artefact in the household setting. The household setting is arguably the most private area for individuals. Therefore, to gain access to that social space, a methodology that is sensitive to the user, the household, and the user's space, is required.

Ethnography, according to Shaun Moores, involves:

...producing detailed interpretive descriptions of social life – usually of everyday activities which are situated in specific settings. Those accounts have traditionally been based upon a period of observation spent in the locales under investigation, and on informal conversational interviews with informants ‘in the field’ (Moores, 1996:28).

Hammersley and Atkinson (1995) believe that ethnographers are engaged in the most basic form of social research, namely, participating in people’s daily lives, watching what happens, listening to what is said, and asking questions to throw light on the issues that are the focus of the research.

Ethnography is a socially active process in which accounts of the world are produced through selective observation and theoretical interpretation of what is seen, through asking particular questions and interpreting what is said in reply, through writing field notes and transcribing audio recordings, as well as through writing research reports.

The present thesis can also claim to be reflexive in nature. Reflexive ethnography represents a rejection of the idea that social research is, or can be, carried out in some autonomous realm that is insulated from the wider society and from the particular biography of the researcher, in such a way that its findings can be unaffected by social processes and personal characteristics. Thus, reflexivity, according to Hammersley and Atkinson (1995), implies that the orientation of researchers will be shaped by their socio-historical locations, including the values and interests that these locations confer upon them.

The fact that, as researchers, ethnographers are likely to have an effect on the people who are studied does not mean that the findings are not valid. The issue of representation is one of many challenges facing the practice of ethnography. Hine (2000) speaks of the challenges concerning objectivity and validity from the analytical sciences. She claims that methodologies such as ethnography are vulnerable to criticism from practitioners of methodologies such as surveys,

experiments and questionnaires. Ethnography is vulnerable because of the lack of formulae for judging the accuracy of results, and in the way it offers little prescription to its practitioners. Compared to approaches such as surveys, which come with a full armoury of evaluative techniques, ethnography and other popular qualitative techniques make up for the lack of evaluation and representation with valuable insights into the richness and complexity of social life, which is impossible to ascertain by other methods. Hine states that ethnography is appealing for its 'depth of description and its lack of reliance on *a priori* hypotheses. It offers the promise of getting closer to understanding the ways in which people interpret the world and organise their lives' (2000:41).

5.4 The home (domestic setting)

It is important to consider the site of research because it directly influences the empirical research process and sets the context for the domestication and consumption of internet technology. Hirsch & Silverstone (1992) comment that the domestic domain of kinship, family and household is a key site where consumption and interpretation processes unfold in all their complexity.

In a book dedicated to the notion of 'home', *Home Territories*, David Morley (2000) traces the conception of the idea of home, house and domestic space, both theoretically and historically. As an ethnographic researcher, Morley had previously conducted several in-depth studies into the use, consumption, domestication and interpretation of media technologies, in particular television. Morley researched in detail how ICTs have come to be embedded within pre-existing domestic routines. By referring to several interpretations of the notion of 'home', Morley makes sense of the home as a constructed place, both geographically and virtually. He borrowed Agnes Heller's conception of the home to make sense of what 'the home' actually means:

...integral to the average everyday life is awareness of a fixed point in space, a firm position from which we 'proceed'...and to which we return in due course. That firm position is what we call home...'going home' should mean: returning to that firm position which we know, to which we

are accustomed, where we feel safe and where our emotional relationships are at the most intense (Heller in Morley, 2000:24).

Silverstone *et al.* (1992) regard the home as a site of exchange, both economically and morally, where products/goods, both material and cultural, are consumed. What this means is that we need to understand the household as a moral economy, that is, as a part of a transactional system, dynamically involved in the production and exchange of commodities and meanings. Different families will draw on different cultural resources, based on beliefs, biography, or the culture of a network of family and friends. As a result, families will construct a (more or less permeable, more or less defended) bounded environment – the home. Therefore, Silverstone concludes that the moral economy of the household is grounded in the creation of the ‘home’. However, this says virtually nothing about the home itself.

Morley (1986) asserts that the home can be a site of struggle and separation between household members, and within these struggles, media technologies play an important role, both as artefacts causing the struggle in the first place and as artefacts offering a possible distraction from the struggle/aggression. Eric Hirsch’s (in Hirsch & Silverstone, 1992) study on one household’s tensions arising from the placement of the husband’s computer in the living room, where it was perceived to be impinging on the joint living space by the wife, is one example. In Morley’s own work, *Family Television* (1986), the remote control became the contentious artefact in the household, although it was inherently bound up with the television.

Although Morley’s work (1978, 1986, 1992) focuses more or less on television and its impact on domestic dynamics, it may also be applied, with some translation, to how the internet becomes embedded within pre-existing domestic routines.

Morley’s work (2000) gives a crucial grounding in how the home can be conceptualised. As previously stated, the home is central to most people’s lives; therefore, it is important to document and analyse any changes that are experienced in that domain. The entry of an ICT into the home setting brings changes, often implemented by the user to accommodate the new artefact and make it fit into the surroundings, in other words to ‘domesticate’ it.

The aim of the present thesis is to engage with the site where key factors shaping our contemporary culture seem to converge – the domestic domain of family relations and the ever-increasing presence of ICTs. It is crucial to conduct this investigation using a sensitive methodology that will embrace the subtle intricacies of the household setting.

5.5 Methodologies

As described earlier, ethnographic methodologies are distinctive research processes, originally developed within the disciplines of anthropology and sociology. Ethnographies involve extended periods of participant observation, and emphasise descriptive writing in field notes and the final ethnography. The goal is to produce a holistic description of a culture.

Very few media audience studies, even those using ethnographic or qualitative methods, have measured up to the normative standards of ethnography proper. The term ‘ethnography’ has been used very loosely to indicate any research that uses qualitative interviewing techniques. Many of the most influential audience research projects, such as Morley’s (1986) study of lower-middle-class London families, or Ann Gray’s (1992) study of video cassette recorder use, were not called ethnographies by the original researchers, but were labelled ethnographic in secondary accounts. While ethnographies are based on long-term and in-depth fieldwork, most audience research has been based on brief periods of contact with the informants, in some cases less than 1 hour. In addition, while ethnographic methods have traditionally been used to study whole cultures, media researchers study only one aspect of a culture (e.g. television or internet use) and attempt to relate it to social identity.

In many ways the present thesis is similar to previous research in the area of cultural studies of media technologies. It is focused on one aspect of culture – the internet. It is informed by a small sample of respondents. Contact time with the informants varies from 1–3 hours of actual interviewing time in the informant’s home, but these data are supplemented by several months of unrecorded conversations on ICT use in general and on ICTs in home life and society.

5.5.1 Sampling

The participants in the present study were drawn from a range of sources. Most of them were recruited during a series of basic IT courses that I taught as a part-time information technology instructor with the City of Dublin Vocational and Educational Committee. This teaching involved instructing mixed parent-group classes in computer skills, including internet skills, keyboarding skills and general computer knowledge. Before, during and after the classes, I was able to meet and talk with the mature students, mostly women from working-class backgrounds who live in an area of north Dublin, which is particularly noted for its social problems. The women (and few men) who attended the classes had young children attending the school in which the classes took place. The school runs these classes as part of its home/school liaison scheme, which is aimed at helping parents with subjects such as computers, Irish language, cooking, and some leisure activities, such as yoga, aerobics and art.

The respondents were under no obligation to take part in the study and no public references to the research were made during class time. Because I was able to meet and develop relationships with the participants during class time, I felt it was appropriate to approach them outside class time to ask them to take part in the study.

Not all respondents were recruited in this way. I unsuccessfully attempted to recruit potential respondents via an online chat room visited by Unison internet set top box users. However, this proved to be fruitless as no one replied or expressed their interest. A second attempt to recruit a body of respondents was made early in the research process, whereby a single housing estate in the northern suburbs of Dublin City was targeted. Contact was initiated via a letter explaining the nature of the study; however, this also proved to be fruitless as no one expressed an interest. Therefore, recruitment via the computer classes seemed to be the only entry point worth pursuing. In addition, I engaged in a selective process of snowball sampling.

5.5.1.1 Research problems

Gathering respondents can be a frustrating and unrewarding task. For this project, I found my role as an IT lecturer especially conducive to generate a potential body of respondents. This was achieved by communicating with them, recruiting them as respondents, and building a level of trust required to be able to build a picture of their internet use. This process involved getting to know the respondents, making sure they were comfortable with me as a researcher on one hand, and in my role as their teacher on the other hand. This level of relationship was necessary in order to achieve the trust and confidence of the respondent and facilitate their telling of stories about how they shape the internet according to their own personal characteristics, history, education, class, household configuration and so on.

It is a long and arduous process to present yourself as a researcher to a body of potential respondents and to build from there a basis of trust and friendship required to culminate in data rich in personal experience, realities and lived histories of those who are mostly represented as figures in other, large-scale studies.

Ethical implications for such research might be considered as compromised due to the nature of the teacher/student relationship. However, this is not a true representation of the actual process of research as it was conducted. The classes were delivered in true pedagogical tradition. The relationships with the students were formed before, during and after the classes. Mention of the research or inquiry into the suitability of the potential respondent was conducted outside of class time to prevent any ethical conflicts between the teacher and student of the IT course.

Description of Respondents

The research sample is presented in appendix A to familiarise the reader with those who took part in the study. Each household, the number of household members and their ages, a description of the household configuration, occupation of

household earners and an indication of the household social class²⁷ is presented. Names have been changed to protect their anonymity.

It was through the relationships established in the classroom that I was able to recruit the majority of my sample. When a certain level of trust was reached, I found I was able to employ the snowball effect amongst those who were already a part of the study, thus finding more respondents who 'fitted the bill'. Those who had not yet decided whether to take part or not found the decision easier to make once they had grown familiar with me. It is my opinion that this level of trust was vital in achieving in-depth interviews with the families. In Dublin working class areas, the number of potential candidates with home computers and internet access was assumed to be quite small. Therefore, non-random sampling was useful to target persons willing to take part in the study. There was also difficulty in gaining entry into the field and, due to the personal nature of the study, which is set in the homes of the respondents, this was deemed to be the most suitable means of selecting my sample.

5.5.2 Interviews

Hammersley and Atkinson (1995) state that ethnographers do not usually decide beforehand the exact questions to ask in interviews and do not necessarily ask each interviewee exactly the same questions, although they usually enter interviews with a list of issues to be covered. Instead of seeking to establish a fixed sequence covering relevant topics, ethnographers tend to adopt a more flexible approach, which allows the discussion to flow in a way that seems natural. Ethnographers do not necessarily restrict themselves to a single mode of questioning; for example, on different occasions or at different points in the same interview, the approach might be non-directive or directive, depending on the function that the questioning is intended to serve. These approaches may be decided on as the interview proceeds. In all of these senses, ethnographic interviews are closer in character to conversations than are survey interviews (Hammersley & Atkinson, 1995).

²⁷ The social class of the respondents were based on the primary earner's occupation (according to the classification of occupation in Chapter four) and education.

The interviews took place in the homes of the respondents and were carried out on a semi-structured model (see Appendix A for a sample interview questionnaire). I found semi-structured interviewing to be useful in situations where broad issues may be understood, but the range of respondents' reactions to the issues is either not known or suspected to be incomplete. Where possible, couples were interviewed together, but joint interviews were not carried out in all cases. However, joint interviews were definitely necessary in households where space was limited – it would have been awkward and unjustifiable to ask other members of the household to wait outside or in another room while I conducted a single-respondent interview. Where appropriate, I made the decision to interview households together, with the potential result that answers given by one member of the household could be substantiated and expanded on by the other members. Joint interviewing also helped to construct a sense of support and relaxation in an environment in which the respondent felt comfortable and safe – this was particularly relevant to younger members of the household. I felt respondents to be more forthcoming with information when a situation was created that they felt to be relatively routine and where they were not under interrogation.

5.5.3 *Time-use diaries*

Having so far succeeded in getting access to the respondents and their lived histories and stories via interview, I decided that the empirical process would benefit from providing an alternative data source to complement the interviews. I wanted to be able to capture a sense of how my sample allocated their time amongst the range of media available to them - during the periods of rest and work at home. I wanted to gain an insight into how the internet was used and was fitted into the overall media network.

I decided to utilise the notoriously difficult technique of time-use diaries. During the literature review, I came across several researchers who employed the same technique to reveal rich and interesting data from the sample. My understanding of time-use diary technique entailed the respondent completing self-recorded diaries, before or after use.

Self-completion diaries have a number of advantages over other data collection methods. First, diaries can provide a reliable alternative to the traditional interview method for events that are difficult to recall accurately or that are easily forgotten. Second, like other self-completion methods, diaries can help to overcome the problems associated with the collection of sensitive information by personal interview. Finally, they can be used to supplement interview data and provide a rich source of information on respondent's behaviour and experiences on a daily basis.

The diaries were 'structured' in the form of a detailed log, as opposed to 'free-text', where events are recorded as they occur. The date and time of use was recorded along with the activity and time spent doing the activity. In this way, the respondent was asked to keep a detailed record of how they allocated their time to media use during the day. The diary consisted of a 7-page A4 booklet. The inside front cover page contained a clear set of instructions on how to complete the diary. A model of a correctly completed diary page accompanied the instructions. The pages were ruled clearly, with enough space for the respondent to enter all the relevant information, such as what the respondent was doing, at what time, where, who with, to what purpose, and so on (see Appendix B for a sample time-use diary).

Problems experienced with time-use diaries

I found the experience of employing such a technique a trying and testing one, as the researcher is depending on the respondent to accurately complete the diary in a diligent manner. Although each respondent was asked to complete a time-use diary, not all respondents did so. Most of the respondents completed the task, while a few respondents partially completed the diary and several chose not to for different reasons (the most common reasons for choosing not to complete the diaries were a lack of time and forgetfulness)²⁸. The completed and partially completed diaries were gathered and analysed and used to compile the evidence presented in the next chapter.

²⁸ Those who completed the diary expressed a level of surprise at their personal media use and their consumption practices overall.

5.5.4 Case-studies

As was discussed in the previous chapter, there are many social factors exerting crucial and shaping influences over the ways users construct and maintain their relationships with internet technologies. These factors, particularly those identified as social characteristics, will be examined in the following chapters. The intention is to devote special attention to four factors: (i) gender; (ii) social class/economic factors; (iii) household configuration; and (iv) age; as these factors were considered to be potentially active and instrumental in shaping ICT use. Chapter four endeavoured to provide a contextualising illustration of this potential influence on media and new media technologies.

Much of the literature considered in Chapter four highlighted different relationships between users and new media technologies, building on the notion of interpretive flexibility suggested by proponents of the SCOT perspective on society and technology (Bijker, 1995). Basically, the concept of interpretive flexibility expresses the plurality of meanings associated with media technologies and how each user individually constructs and makes internet technology relevant and significant in their everyday lives, according to their respective personal codes and characteristics.

The case-study chapters (seven to ten) are designed to analyse, in an in-depth fashion, the proclivity of these four factors to influence the use and consumption of end-users. Each case-study chapter has a dual purpose. First, each chapter begins with a general analysis of the potential influence of one of the four social characteristics. The aim of this part is to provide the reader with an analysis of the shaping effect of the agent across the sample. Second, a particular case-study is examined in detail. Each case-study is of one specific household, chosen because it has exceptional features associated with the shaping social characteristic. For example, in the case of household configuration as a shaping factor, the household of Mairead Mulhare, an unemployed, separated, mother of two is examined as a case-study. In this case-study, it is noticeable that Mairead's use patterns are shaped by her relationship to the technology and the technology has come to supersede her face-to-face societal relations. This is one example of the agency of

social characteristics influencing the ways and modes of relationships with ICTs. Each of the four chapters (seven to ten) is provided to give the reader an insight into each hypothesised influence.

5.6 Conclusions

This chapter was intended to give the reader an insight into how the project was undertaken, the processes by which information and data were gathered, and the ways in which the respondents were recruited to take part in the study. Quantitative methodologies do have advantages, but these would not have been sufficient to extract the type of data required to build a picture of ICT use in the domestic setting. This is particularly true in the present study, which is focused on the construction of meaning and significance of technologies, how social factors influence this construction, and how everyday life is both shaped by and shapes ICT use in the home.

Instead, a methodology focusing on the sensitivities and intricacies of domestic internet use was preferred to large-scale data gathering techniques. Interviews would provide both a deeper insight, but also an overview of current trends, it was decided to use these as the primary research method. Once this decision had been made, the research design had to react to the “specific circumstances” of the research project. This involved gaining access to a sample who were deemed suitable, gaining a level of trust and confidence from the respondents to gain access to their private spaces and histories.

One drawback that should nevertheless be mentioned is the fact that ICT use was not researched via observations or field research of another kind, but simply derived from the interview material. The time-use diaries were designed to supplement the interviews to produce a tangible data source to complement the data obtained via face-to-face discussions. The ethnography of ICTs examines the use of different media and communication devices in a socio-cultural context. It thus combines use as well as the ICTs as such, since it is in the actual uses and the communication situations that the meanings of ICT use emerge. It takes into consideration the everyday environment of the user and is able to locate use within interactions.

Chapter Six

‘Behind the statistics and figures’: a discussion of the general findings

- 6.1 Introduction
 - 6.2 Key variables
 - 6.3 Trends and patterns
 - 6.4 Time use of users
 - 6.5 Conceptualisations of the internet
 - 6.6 Four types of users
 - 6.7 Active agents promoting domestication and consumption
 - 6.8 Chapter conclusions
-

6.1 Introduction

This chapter is the first of five chapters concerned with examining and presenting the empirical evidence of the present study. The key questions, discussed in Chapter one, focus on user engagement and experience with the technology, specifically, how the patterns and habits of daily life are shaped by the use and consumption of the technology, and how the technology becomes meaningful through domestication. It is important to describe the audiences for new media as ‘users’, as discussed in Chapter three, rather than ‘viewers’ of visual culture, film and television, or ‘readers’ of literature. The respondents consider themselves both as users of the technology and as part of a content-consuming audience.

In this chapter, the problem of interpretation is examined in terms of the meaning associated with the technology – the meaning of any given text is not securely encoded for all audiences to decode in the same way. As discussed in Chapter three, the meaning of a text, in this case the technological artefact, will vary according to the nature of its audience and circumstances of reception.

This chapter argues that the conceptualisation of users as the audience for content is socially constructed, a concept that was explained in Chapter two. In Chapter four, several factors were identified as influencing the ways that technology becomes meaningful to respondents and the ways the artefact fits into existing social relations in everyday life and the networks of the domestic domain. This chapter provides a discussion of the kinds of users that exist in the sample, the performance of functions and uses (what kind and when), and what influences user

choices and decisions. Here I present evidence from a range of sources, including interview material and time-use diaries.

The key research questions and concerns identified in Chapter one relate to questions surrounding new media in everyday life. What do new media mean in everyday practices? Are new media instrumental technologies, tools to be used, media to be consumed or toys to play with? How are new media absorbed into the space, time and dynamics of everyday life? Essentially, do new media transform everyday life?

In this chapter, a generalised picture of the sample as a whole is presented. Throughout this chapter, we see a typology of users emerge, created through the use of the technology and how the users themselves conceptualise the artefact through its associated significance and meaning. In chapter five, the respondents were briefly introduced. The following section seeks to further the understanding of the sample by incorporating certain key characteristics from which to draw some general conclusions.

6.2 Key variables for analysis

Table 6.1 summarises some characteristics of the respondents and their households. The following list describes the variables and includes questions to be explored.

- The name for each household, along with the number of persons in each household (which is not equal to the number of respondents taking part in the interviews) and the gender of all household members.
- The make up of the household – the number of people living in the house and their relationships with each other.
- The principle use/function of the technology – users tend to conceptualise the technology in terms of uses and functions. For example, when asked about the principle function the technology served, users commonly responded along diametric lines – as for either information (browsing the internet for hobby/personal interest or topical, related to their daily life) or communication.

- The principle user of the technology – important in multi-user households, this variable indicates the principal user, their age and gender.
- The mode of use – modes other than the desktop personal computer, including the Unison Set Top box and laptops (Apple and PC) were found to exist in the sample.
- Use patterns and practices – levels, times and duration of use, as well as access, are shaped by the circumstances of the user and other variables, such as the location of the technology.
- Income – An approximate household income was provided by the respondents.
- Class – the calculation of this variable is based on education, income and social capital of the respondents in the household. This classification is based on the Irish census occupation category, which is used to identify social class.
- Motivation for acquisition – the motivation of the key instigator of the purchase of the technology was recorded.

Key to table:

- **Mode:** PC – Personal Computer
- **Gender:** M / F – male/female
- **Class:** LM – Lower middle class, M – Middle class, W – Working class, UM – Upper middle class
- **Motivation:** SP – Social pressure, KUWJ – Keeping up with Joneses

Household Name	No. in House	Gender Composition of household	Household Composition	Principle use/function	Principle User	Mode	Use	Income In Euro	Class	Motivation for Acquisition
1. O'Donnell	1	M	Single	Info/email	Donal O'Donnell	PC	11pm; most nights	40000	M	Education/Work
2. Mulhare	3	F,F,M	Single parent family	Comm/email/surf	Mairead Mulhare	Unison	Variable; daily	13000	W	Prize
3. Boland	4	M,F, M,F	Co-habituating	Surf	Mark Boland	PC	Sporadic	30000	W	SP/KUWJ/children
4. Marlon	5	M, F, M, M, F	Married	Info	Jenny Marlon	PC	2 times p/w post 6pm	22000	W	Education
5. O'Connell	4	M, F, M, F	Married	Info	Jenny, Alan	PC	Sporadic	30000	W	KUWJ/SP
6. Lawlor	6	M, F,M,M,M,M	Married	Info	Deirdre	Unison	Sporadic	25000	W	Prize
7.O'Rourke McDonald	2	F,F	House-share	Email/Comm	Jean O'Rourke	Apple LapTop	Variable; daily	47000	M	Education/Work
8. Smith	1	M	Single	Email/Comm	Martin Smith	PC	Variable; daily	10000	LM	Education/interest
9. Loughlin	3	M,M,M	Single parent family	Email	Nicky	PC	Variable; daily	35000	M	Interest/education
10. Keller	2	M,F	Married	Info	John Keller	PC	1 hour p/day	76000	U/M	Work
11. Moran	1	F	House-share	Info	Alison Moran	PC	2 times p/w	40000	M	Work
12. Murray	2	M,F	Co-habituating	Info/email	Ken Murray	PC Lap Top	3 times p/w post 6pm	30000	LM	Work
13. Benton	3	M,F,M	Married	Info	Sean Benton	PC	2 times p/w	36000	W	KUWJ
14. Houghton	2	F,F	Divorced	Email	Karen Houghton	PC	Variable; daily	20000	LM	Education
15. Dooley	4	M, F, M, F	Married	Info/email	Des Dooley	PC	2 times p/w post 6pm	70000	LM	SP
16. Ryan	4	F,F,M,M	Separated	Comm/info	Joanne Ryan	PC	2 times p/w post 6pm	15000	W	Education

Table 6.1 Characteristics of the sample by household

6.3 Trends and patterns

This section is concerned with analysing the results presented in Table 6.1. It draws on general trends and patterns emerging from a cross-sample analysis.

6.3.1 Factors influencing purchase motivation

In seven of the 16 households in my sample, education was identified as a key motivation for purchasing the technology. This factor requires examination as it serves to give some understanding of why the technology was acquired and how its purchase was justified in a significant proportion of the sample. Education as a purchase motivation was most prevalent in working class households. In several instances, the parents were early school leavers, leaving in their mid-teens, despite the fact that in Ireland it has been quite common for a high proportion (82%) of second-level students to complete their Leaving Certificate (National Economic and Social Forum Report 24; Early School Leavers; http://www.nesf.ie/esl_no_24.pdf). The rationale behind these purchasing decisions is the improvement of both the parents' own and the children's education.

6.3.2 Social pressures influencing purchase

Wider social pressure experienced by the parents is also bound up with education as a motivating factor. A 'push' force by society makes computers and the internet vital pieces of equipment to possess. This is coupled with the more self-inflicted pressure of 'keeping up with the Jones'. In such cases, the internet/computer is not considered to be a luxury purchase, but rather is associated with educational and self-promoting qualities.

With this discussion in mind, the following direct quotes highlight the reasons, justifications, fears and motivations experienced by respondents as they sought to rationalise the purchase of the technology. These quotes also show how the internet is conceptualised as a major redeeming technology among this working-class segment of the sample – it is perceived as a technology to aid the attainment of better grades at school and to increase the likelihood of getting jobs for the unemployed.

In the Boland household, Sandy states:

He wanted to get one, and for the kids, cos everything is computers now.

Her husband, Mark replies:

That's the way everything is going to go. By the time they are our age, if they haven't learned computers they won't ever be able to do anything. They'll never be able to get a job or anything like that. It's just the way society is going, everything is computers.

The Marlon household supports this view; Jenny asserts:

I think kids need to know it for them, because in a couple of years time that's all it's going to be, and that's all it's going to be in the workforce. The computer's for the kids. Whether they're going into the mechanics of it, like fixing things, or whether they are going into office work, they are going to need computer skills. It's not that it is pressure, but if you look in the paper, see how many jobs are in the paper, what's their requirements. You look and you'll see the majority of them will ask for computer literacy. What's the point of them learning computers in school for an hour and that's it for a week, when you can come home and do more stuff with it.

The above quote indicates the pressure parents feel to acquire a computer.

Similarly, in the Lawlor household, Deirdre states:

It's important to keep up with what's going on, especially where the children are concerned. Like if they are going to be using it in school, I don't know if they would be using the internet, but I know that they are using computers. They need to know for the future because, if they are going out to jobs or courses or college, they are going to need to know how to use it.

This is also evident in the O'Connell household, where Karen explains:

It's for education, but it's for ourselves too. I think we knew we had to get one at some stage, it was just a matter of when...I'd say they [the children] do about an hour a week so we'd said we'd get one for home as well. You weren't up to the times if you didn't have one. We did feel pressure but it was something in the pipeline that we wanted.

In the Houghton household, Betty recounts the pressures exerted on her, first, to purchase a computer and, second, to get connected to the internet:

It's an everyday use now, it has to be, because the college has forced me. That's what they do, they force you to communicate online with them. And I suppose being in communications what the hell am I doing in communications if I don't know how to use the latest technology. My reasons for doing communications was to force me to use the technology, to be able then to go and get a job anywhere – be it any sort of job anywhere that I would have the access.

Betty continues to outline how the combined pressures of education and society coerces households into thinking that having a computer is a must for modern living.

I knew I had to have a computer for the girls, and I felt very guilty and very pressurised to have the computer here even though I am struggling to pay for it. It's not a luxury, it's a necessity – it's like I'm struggling to have a car outside – I need a car, and everybody in this area has two and three cars, and it's a necessity. I feel no guilt in having it, whereas I could do without a VCR now rather than a computer, and that's basically it.

The quotes presented above come from working class households. Each informant speaks of certain pressures from external sources, such as society and educational institutions, as the motivation to acquire the technology. The internet and computers are perceived to have a transformatory effect on households once acquired. However, the technological competency required to experience the full potential of internet or computer functions is often the missing element.

It is noticeable that many of the respondents have sought out ways and means of improving and developing their expertise. In some cases, respondents (in particular the female working-class informants) attended purpose-run courses by schools in their vicinity. Other respondents undertook formal training in programmes such as the European Computer Driving Licence (ECDL) in order to realise their potential and bring some knowledge and technological competencies into the domestic sphere, both for themselves and for their children.

6.3.3 *All work and no play*

Although it is not overtly evident from Table 6.1, gaming is relevant due to its relation to the above themes. In households with young children, the parents were adamant that the technology should not be used as a games machine. This is often in contrast to the interpretation of the technology held by young household members and, more often than not, games were played on the computer, and the internet was used to search for games and game 'cheats'. Those members of the household who regarded the computer as a games machine were commonly of low technological competence. Interestingly, in addition to the computer functioning as a games machine, there was often a dedicated games console in the home.

Robin Marlon, aged 13, explains his consumption of the internet in association with gaming and the PlayStationTM. He says, his use was primarily:

...for cheats and that or Wrestling. I'd usually go to gamecheat.com...

When asked about his computer/internet experience, Robin explained how his formal education at school associated computer training and games.

A course in school...the teacher showed us how to use pictures and open stuff and close stuff (did you show your mum?)...yes, she didn't know much of it, Daniel went too. We played games and typed.

Gaming was not just the domain of young household members – one respondent (Judith Ryan) spoke of locating the computer in the bedroom of the eldest daughter to try to discourage the father from using the computer as a games machine:

...because when my husband is here you couldn't get him off it, so I put it in her room to stop him going near it. He'd play games on it.

These observations are closely related to the previous points regarding motivation for purchase and the influence of education. The internet, in most cases, was accessed through the computer and was initially acquired for educational purposes.

However, the use tended to shift in its interpretation over time from a strictly educational resource/tool to include gaming.

Game playing is regarded as a lower-status function of the computer, compared to other uses of the technology. This finding is especially evident among working-class households where the stated purchase motivation was education. An example is the Boland household (Sandy Boland):

Adam just wants to play games on it, but we won't let him as he has a PlayStation. It's not for games, and I would just say, 'Do that line in that book – type that', but he would get bored of it, just to get them to do it. I don't know what they do at school, like what does he do?

Mark Boland:

We'd prefer him to use the keyboard, get him using the keyboard, get him to type or use the mouse.

Sandy Boland:

Like he has a PlayStation for games, well he does get to play games on it [the PC], I'm not saying we never let him.

Mark Boland:

I'd prefer him to make better use of it.

This finding is comparable to Livingstone's study on young people and the media (Livingstone *et al.*, 2002), in which the authors conclude that games and entertainment are seen as inferior uses of the computer. In some cases, the children or younger members of the household possess a greater technological competency than the parents. This plays an important part in the conceptualisation of the technology as either an education-related tool or a games machine. If the parents cannot distinguish the artefact as one or the other, the identity of the technology becomes unclear. Although the artefact may have been acquired with the pre-

defined intention to be a tool for learning, it assumes a different identity through use. Essentially, the biography of the technology evolves through use.

6.3.4 *Influence of traditional media technologies*

Many households in the sample stated that their internet consumption had been influenced by television consumption, and to a lesser extent by other media. The internet reproduces some popular genres from television (and radio) broadcasting: sports, science fiction, home shopping, news and so on. Television plays a crucial role publicising the world wide web and computer use. Television programmes contain many references to computers and the internet, and the respondents had picked up on this development.

Some respondents claimed to have been inspired by the traditional media to use and consume the internet. As an example, they referred to the email-reply option, which is used by some television and radio programmes to encourage user interaction with the content producers and media personalities. Another example is the website address of a programme, which is commonly displayed at the end of the broadcast as another enticement to engage in consumption of the internet.

6.4 Time-use diaries

It is important to realise that not all household members claimed to use the internet in a meaningful way. There may be internet access or a computer in the home, but that does not necessarily mean that every household member had successfully negotiated the technology's entry and place in their everyday lives. The central tenet of the present thesis is that ICTs may mean different things to different people, and these meanings may change and come into conflict. However, it must also be accepted that certain household members may choose to resist the ICT altogether. In fact the results from the time-use diaries indicate that some household members had not domesticated the internet to the same extent as other household members. Twenty nine respondents recorded how many times they had accessed the internet, the purpose of their consumption, and what times of the day they were most likely to access the internet. This data is shown below.

6.4.1 Weekly use of the internet

Internet Sessions per week		
Times	No. Respondents	
0	4	14%
1	8	28%
2	2	7%
3	7	24%
4	3	10%
5	1	3%
6	2	7%
7	2	7%
Total	29	100%

Table 6.2 The number of internet sessions per week by respondents

Analysis of the time-use diaries shows that the internet was accessed by 86% of respondents (25/29) for a minimum of one internet session, during the 1-week log period. The greatest relative number of respondents accessed the internet one day a week for a minimum of one internet session (8/29; Table 6.2). The second highest rate of access was three days a week for a minimum of one internet session (7/29; Table 6.2). Two users claimed to have accessed the internet every day during the 1-week period, and two users claimed to have accessed the internet six days out of seven during the 1-week period.

Interestingly, the internet is accessed by most users only once a week. Eurobarometer surveys (2001, 2003) indicate that in the EU as a whole, 3 in 4 users use the internet every day or several times a week.

Although my sample is small, some comparison might be made between my data and data from large scale quantitative surveys. In Ireland, 45 per cent of those surveyed in the MRBI (Aug, 2002) study claimed that they accessed the internet up to five times a week, with the majority of users accessing the internet between one and three times a week. What begs concern is the number of users, who didn't access the internet at all during the recorded week 26% (4/29; Table 6.2). This figure forms the third largest portion of the users in the sample who kept a time-use diary. However, the time-use diaries were kept for a 1-week period only and all of the informants claimed to access the internet sporadically (i.e. they were not committed users and would not have logged onto the internet daily). One point

worth making here, is that although the technology is in place to provide easy access to the internet, there are more obstacles to cross than just access problems.

6.4.2 Daily use of the internet

Time	9am	10am	11am	12pm	1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	9pm	10pm	11pm	12am
No. of resps	5	8	2	1	1	1	1	7	3	11	10	13	5	7	12	3

Table 6.3 Popular access times use based on weekly time/use diaries

Table 6.3 illustrates the number of respondents who accessed the internet at specific times during the day based on the one week log of internet use. The data presented here reinforces the 'after-six' rule which most households claimed to adhere to during the interviews. It literally means that households tend not to use the internet until the early evening, when internet service providers dramatically reduce their tariffs.

Martin Smith:

I look forward to checking my email after six o'clock when it goes down from 4p to 1p a minute – that threshold is important. It's 75 percent cheaper when you have an income like I have.

The Marlon household also had to pay attention to monetary matters while consuming the internet. Jenny states:

...from six o'clock until half nine they can use it for internet because that's cheap rate.

Jenny had to ensure that the internet was used only after six o'clock, and her son Robin confirms this. He states:

No, I'd have to ask my mam – sometimes she says 'no you have to wait until six o'clock and you can go on it then for fifteen minutes'.

The same pattern is evident in the Ryan household. Judith explains that her household observes the same restraint when using the internet. She states:

Well, yeah. Well we try, in that say if they ran in at 5.55 pm saying ‘mam, can we look for something on the net?’, and I’d say ‘just wait for a bit till after six o’clock it’s cheaper then’.

The second point of note is that the table highlights that the most popular time of the day to use the internet is eight o’clock at night, and the second preferred time is eleven o’clock at night. First, the cost of internet access considerably lessens after six o’clock in the evening. Second, the ability to get connected becomes easier later into the night. Fewer people are trying to connect at this time and, for households with children, it is after bedtime, when an adult user’s time online can be uninterrupted.

6.4.3 What the internet is used for

Table 6.4 is a summary of the respondents’ reported uses of the internet during the 1-week data collection period.

Reported uses of internet (from time/use diary)		
Function	No. Respondents	Percentage of overall use
Email	22	76%
Interests	9	31%
Education	8	28%
Travel/flights/holidays	5	17%
Surfing the web	4	14%
News	3	10%
Sport	2	7%
Car/Insurance	2	7%
Music downloads	2	7%
Chatroom	1	3%
Health information	1	3%

Table 6.4 Main functions/uses of the internet

Email is by far the most popular online activity for all respondents thus 76% (22/29; Table 6.4) of respondents who completed the time/use diary reporting this use. It is identified by Nancy Baym as the internet’s ‘killer app’, the use of which is the best predictor of whether new users will stay online (Baym, 2002:62). Primarily used for person-to-person contact, email also promotes communication between

users and public administrators, educational institutions and so on. Many respondents testify to habitually checking their email several times a day, and the first thing they do when they log on to the internet is check their email.

When information is required on any given subject, respondents testify that the internet is their foremost resource. When talking about the information they searched for on the internet, informants would simply point to everyday exigencies as their major impetus for access and an influence on the nature of their consumption. For example, day-to-day events such as ill health, interest in the media stories, sports results are all reported as the motivations to access the internet for information but also form their own topic with 7% (2/29; Table 6.4) and 3% (1/29; Table 6.4) claiming to access the internet regularly for this function.

Educational uses of the internet include school and college research and electronic communication is often used to collaborate on school/college projects involving group work.

Holidays research, travel and flight tickets was the fourth largest use of the internet with 17% (5/29; Table 6.4) of respondents claiming to use their internet time to search/research/book flights or holidays online. The abundance of cheap airline tickets, as well as the plethora of websites dedicated to online travel and travel guides, has seen a massive rise in uses of the internet connected to travel. This is associated with the notion of 'mobile privatisation', which was referred to earlier in Chapter five Williams (1974) understands 'mobile privatisation' as a form of activity centred on the home (as users engage with radio or television in their domestic space). However, according to Williams this is not simply about retreating to a private space, because along with media consumption and use comes a kind of mobility experience – an imagined experience, not possible for previous generations, where users can visit places virtually. Users may be physically at home consuming the internet, but mentally they may be virtually anywhere in the world.

David Morley adds that 'communication technologies can function as disembedding mechanisms, powerfully enabling individuals (and sometimes whole

families or communities) to escape, at least imaginatively, from their geographical locations' (Morley, 2000:150). Morley also implies that the notion of mobile privatisation is important. When a person's situation is particularly constrained, such escape becomes all the more important. The respondents' use of the internet for travel and tourism purposes supports William's notion of mobile privatisation.

Here, it is possible to extend and amend the notion of 'mobile privatisation' as it has been developed and applied to earlier generations of communication technologies in the home. In their use of new ICTs, users are not merely engaging in a 'imaginative' or 'virtual' escape from their private homes or geographical locations, but are also, from the comfort of their 'private home' space, actively engaging in the planning, selecting, purchasing, and other transactions required to arrange or make a 'real escape' to far distant spaces.

The internet was also used by the householders for finding information about health and sporting interests, and for computer-mediated communication such as chat-rooms, internet relay chat and message boards. Downloading music, despite the ethical ambiguities, was a function of the internet that many respondents utilised.

The findings of the present study were quite similar to various quantitative studies. For example, in the Irish Central Statistics Office (CSO) study *Quarterly National Household Survey Of Home Computing 2000* (CSO, 2000), education was found to be a major uses of the internet in the home. However, the CSO study did not include questions about the use of email in their questionnaire. As another example of similar findings, research from the Eurobarometer found that email, online news and online travel information were the most frequent uses performed by a majority of European 'cybernauts', with other popular services including improving one's knowledge, seeking health-related advice, finding job advertisements, and booking seats for shows and events (Eurobarometer, 2001).

6.5 Four types of users

During the empirical analysis, four internet user profiles emerged, each with similar properties, characteristics and qualities: talkers, searchers, workers and

dismissers. The intention was to identify a style of internet use common to each group and to use this as a map to revisit the sample and to draw conclusions about internet usage as a whole.

The sample was a diverse group of people (see Table 6.1), spread across class, gender, background, employment and household configuration variables. In addition, there were only a small number of young users in the sample. Consequently, I decided to apply the user profile method only to the adult users from the sample.

6.5.1 *Talkers*

The talker category consisted of people who considered the internet to be a medium for communication, and were somewhat dependent on it at the expense of other communication media. A shared trait highlighting this dependency was the maintenance of a wide circle of friends and acquaintances via online electronic communication. Another trait shared by talkers was their engagement with a mode of conversation solely reliant on text. This form of communication supplemented their real-time discourse.

One of the first actions of talkers, once they were online, was to check their email. The feeling of connection with friends and other people was the drive or motivation behind talkers' internet use. 'The web' to talkers is associated with a network of friends and the ability to be in contact and be contacted. Surfing the web for pieces of information held little attraction for this group. Because talkers are relatively seasoned web users, the novelty of the internet and available information had worn off. The information sought by them consisted of updated accounts accessed in the fewest clicks possible. In addition, talkers were experienced computer users with knowledge of cost-saving measures to ensure their participation online was cost-efficient, maximising their use.

Joanne Ryan:

Yeah, well if we were organising anything we would do it through email. You can send it around how many people you want instead of ringing up everyone.

A another example of a talker was Jean O'Rourke. She had several online personas working together simultaneously. She was conducting her doctoral studies via an online message-board system, designed by the university for a global student base. On email, she maintained a wide network of friends and work contacts. Jean O'Rourke noticed a different side to her personality when she communicated online, believing that her personality is suited to electronic communication because:

I'm working on it and education is on it, my friends are on it, everything, my whole lifestyle. My whole lifestyle is suited to the internet, it's all about personality because I have always been very adaptable, floating type of personality for the internet is great. The philosophy or the psychology behind the internet is very similar to my own, so it just happens that we are very compatible. It hasn't shaped my life and I haven't adapted to it, it's just my personality. I've always been a type of person that wants to do a million and one things. I prefer the fact that the internet has not only allowed me to do the PhD but also to work and not to be tied to anyone place and that's why I like the internet.

Martin Smith found electronic communication to be a suitable replacement for traditional communication media:

Email – being able to keep in contact with people that previously I might have intended to keep in contact with by ordinary mail but I know I wouldn't have. I have definitely kept in touch with people and a lot more people who live abroad mostly by email that I would have done if email didn't exist, and phones as well; it saves me having to use the phone. I don't like speaking to people on the phone anyway, it saves me having to use the phone. I can be more considerate and at the same time keep in touch with people where maybe before I wouldn't have.

Martin Smith prefers this style of communication because he can save money and converse in his own time rather than on the telephone. He states his dislike of telephone conversations, and how the maintenance and expansion of his network of acquaintances has benefited from online communication.

In the next two excerpts from an interview with Mairead Mulhare, we can see how the web has begun to serve a purpose in her life that is more than just an information or communication medium. The first excerpt deals with her uses of the web. It clearly highlights how her use is shaped by communication.

I just put it on and go into a chatroom or my brother would send emails or I send him back replies or stuff. He's in Australia at the moment, in Perth.

However, in the second excerpt it is possible to recognise that the web has had a transformative or empowering influence in certain aspects of her life. She speaks of the lack of company in her life and how this has become a driving force behind her use of the web as a communicative medium. She explains:

I don't get the opportunity really to talk about anything, because I am just here all the time. I don't have a job. I had a job but I don't any more. It's mostly talking with my family and stuff, and with the courses and that I am only starting to really talk about different things and getting to know other people and talking to other people so, I've always sort of been alone, a lone sort of person, you know just having my husband or my family just here. I'm just sort of coming out into the world. I never had any confidence, really. I wouldn't speak up about anything or if I had a problem, everyone would be pushing me, saying 'Go on say something', I'd go 'no'. I'd just let everyone else speak...I can be funny, my sister she does be on as well, and she says that I'd have her in bits, the things that I'd come out with. I don't know where it comes from. It just comes out of my head, I'd just write it down what I am thinking or whatever comes out. She'd say it to me, 'How do you come up with things like that?'. It just comes out I don't know why...That's starting to come to me as well, face-to-face with people too.

In the excerpt, Mairead speaks of how her online communication has helped her to develop another side to her personality, one that lay undiscovered during real-time interactions. The uninterrupted message flow of online communications can make it an attractive means of expression. For talkers, the internet has become a major, if not defining, technology in their lives. Also, the uninterrupted flow of thought during message composition is vital to those who prefer to conduct communication through electronic means.

6.5.2 *Searchers*

This group is characterised by heavy use of the internet for research and topical interest purposes. Some searchers saw the internet and its wealth of information as a type of safety net. Although some searchers were well educated, the majority of those in the sample were not, and for them the web somehow compensated for a lack of education. It can be compared to a set of encyclopaedias where interest and information required in one subject is easily available. The prime motivation for getting access to the internet and getting online for searchers is educational. The computer and the internet are seen as tools of education. In addition, current information of topical interest is accessible online and there was a sense of 'keeping up with the Joneses'.

Jenny Marlon is typical searcher. She explains that the internet allows her to:

...look at stuff, to find out information, to find out things like, for the kids to learn things or for them to find out that at a touch of a button they can...To realise that this small thing (*touches the PC*) can get to other countries and it's in my home.

However, Jenny goes further to explain what the internet means personally to her:

For me it's for learning. Learning to better myself. From the internet as well as the PC. Studying, doing the courses with yourself, I have no education, I left school when I was 14 or 15. I want this. Like even sometimes when I'm down there and I can't spell stuff and I'm trying to do this. It's to better myself.

This quote highlights the added benefit of having the technology in the home. More than just a tool for the children to better their prospects for future employment, the technology has had an affect on Jenny's life in terms of her own personal development and learning. She states clearly that she wanted *this*. The technology is as much for her education as it is for her children's education. She speaks of *bettering herself* by making use of the technology, doing computer courses and using the internet to find out specific things. Her conceptualisation of the technology has been framed by the fact that her education is limited. Having left school relatively early as a 15-year-old, Jenny sees knowledge of the ICT as a

medium for improving her employability. Therefore, she regards the computer as a tool – a tool for office work and an information retrieval tool.

The communication function is not as attractive to searchers for a variety of reasons. One important reason is the lack of networks of acquaintances with email addresses. This can be a major barrier to seeing the web as anything other than a tool for information research.

6.5.3 *Workers*

Workers frame the technology as a work tool that has both information searching and communicative features. It functions as a tool or aid to assist work practices. The research aspect of the technology is used to further workers' interest in subjects or topics pertaining to their work. Workers were generally from the teaching or academic professions. Even email was seen as a useful tool for workers mainly in the context of work practices.

Workers surfed the web mostly for items relating to work, seldom for personal or recreation purposes. This group work with computers on a daily basis; therefore, their propensity to use the computer for leisure is constrained by the work environment, although they do share the characteristic with other profiles.

John Keller was a worker. His reasons for purchasing the technology are characteristic of this category. He explains:

I read a book *Future Shock*...and I didn't want to suffer from it. I decided in my line of business it wasn't optional...and anybody who didn't go with it was illiterate.

John sees access and competency in the technology as an *absolute necessity*. His use and consumption patterns are shaped by his conceptualisation of the technology as a work tool, which can be seen in his assertion:

I don't bother browsing the web anymore...I would browse a couple of newsgroups but they are only general...it's a bit tedious to browse the web...for me, it's a tool for work...email is

a convenience, most of what I do in messages is email with attachments...the computer for work is absolutely essential...the internet is a very convenient library.

Donal O'Donnell regards the technology in the same manner:

I suppose, it's a multifunctional device, I suppose. It's a tool for working on things for school – creating documents or whatever. I would use it for research, some people would use it as an entertainment centre for playing games, but I don't. I'm not a gamer the way a lot of other people are, so, I suppose it is more of a device than anything else...log on and find specific information, but I still think that it is the same as a reference book in the library in the corner, it should be used that way, anyway.

Nicky Loughlan makes a similar assertion:

Research...is the main reason for me. I have to learn about new pieces of software, I have to write tutorials out so I have to check what other people have written on it and work it out from there on what I want to write about it.

Mary McDonald supports this interpretation of the internet. She explains:

Yes, it is special in that it is not home-related but work-related than leisure-related. I only have mine since November so it is a bit of a novelty as well...because everything I do would be, well it wouldn't be just work-related it would be project- or college-related...I guess you would use the internet for leisure sometimes too, I would associated it with work or college...it would be 90% more to do with work...if I don't have to sit in front of the computer in work all day I would probably look at it differently.

Considering the responses it is clear to see how workers conceptualise the technology and how their interpretation is well-defined. There are elements of talkers and searchers in workers, especially in Nicky Loughlin's case because of his use of the medium for communication purposes. However, when asked to define what the technology means to him, Nicky's response places him firmly in the worker category.

6.5.4 Dismissers

The name of this group suggests their general approach to the internet as a technology or tool only. Dismissers are characterised by a lack of interest,

education and technological competence to become comfortable users of the technology. Although some members of other categories have characteristics consistent with those of popularly defined excluded groups such as 'laggards' and 'late adopters', the characteristics of dismissers are somewhat fragmented.

The reasons stated by this group concerning their failure to 'get connected' are wide and varied. This thesis argues that social characteristics, such as their gender, their age, their social background and their upbringing, each exert an influence on the process of domestication and how the internet is interpreted and understood. It is not possible to categorise this type of non-user as a homogenous group as each individual shapes his own relationship to the technology according to his own personal characteristics, in the same way one cannot pinpoint one specific factor, such as age, as being the only prohibitive factor in non-use. This thesis argues strongly in favour of a holistic approach to the analysis. To illustrate this approach, the following members of this group outline their personal reasons as to why they are classified as dismissers in this study.

Judith Ryan works daily with computers; however, despite her basic computer competency, she has found the domestication of the technology as problematic:

Well, I actually use computers in work so I think I see enough of it during the day. I actually don't go near that computer at all... I just think that I couldn't be bothered when I come home from work to start looking at a screen again.

Her views are somewhat shaped by her use of the computer as a work tool, but she dismisses domestic internet uses because:

I could do without it, I couldn't care less, work-wise or other wise I'd rather pick up the phone.

For similar reasons, Reg Loughlan can be classed as a dismitter. His fears about the computer are in reaction to a dislike of the technology, brought about by an innate fear of it and the pace of change it forces. He explains:

I'm afraid I might do damage to that machine upstairs as well, trying to get in to the internet I might do damage so I won't touch it. I'm afraid to touch it...I haven't a clue about the internet, so it doesn't mean a thing to me. It's very advantageous to the lads here, nothing to do with me...I mean, I wouldn't dream of going upstairs and turning it on. I have no interest in it.

This case is analysed in-depth in Chapter ten.

The dismissers highlighted here are an illustration of the individual reasons influencing the non-use of the internet at home. Generally, a mixture of fear and disinterest shape dismissers' attitude to the internet.

6.6 Conceptualisation of the internet

In the previous section, 6.5, a typology of user was presented founded on the respondent's main use of the technology. This section will examine the user's conceptualisation of the internet (that is what it means to the user) and examine how this conceptualisation was constructed and how it might shift in the future. The distinction between this section and the previous section, is that the former discussed what the internet was used for, while this section discusses what people think about the internet and how they make sense of it. This distinction is important because the interpretation or meaning of any given text or technology is not securely encoded for all audiences to decode in the same way. However, as will become apparent later on in this section, two strong themes emerge from the analysis. On the one hand, one interpretation conceptualises the technology as merely a tool, a functional information retrieval system (searchers). On the other hand, there are those who regard the internet as a collective communication medium, used for keeping in touch with friends, family and the outside world (talkers).

The internet is conceptualised as a place and as a tool, in so much as the internet represents a place – cyberspace (where culture is formed and reformed). Second, it can be regarded as a cultural artefact or a tool for information retrieval. Meaning that the internet can be thought of as a product of culture, a technology that was

produced by particular people with contextually situated goals and priorities, which is then recontextualised and interpreted by users.

In the section that follows, I will draw on excerpts and examples from the empirical data to address these themes, with the aim of framing the technology from the viewpoint of the domestic user. There have been many conceptualisations of the internet from marketing and manufacturer perspectives, but it is important to understand what the *end*-user really makes of the technology. User perspectives gathered from marketing or manufacturer surveys may be tainted by associations with the technology, or biased because data have been gathered on only one aspect of the technology or from a shallow perspective. The domestic end user forms an intimate relationship with the technology, works and interacts with it on a regular basis in different contexts, and therefore potentially regards it differently to people replying to market research surveys.

The idea of the internet as a communication device is perhaps the most interesting as it relates to a discipline called computer-mediated communication (CMC). This section will demonstrate how CMC among users is socially shaped, both in use and non-use, that is, it will examine the reasons why some users engage in CMC and why some users are excluded from/or choose not to participate in the CMC experience.

In much the same way as previous chapters of this thesis, this section will draw on the notion of “interpretive flexibility” (Bijker, 1995) to explain how technologies can mean different things to different users, or alternatively how similar meanings of technology have been constructed and associated with technologies by users exhibiting similar social characteristics. Silverstone (1996) maintains that ICTs become meaningful through use, and their meaning and significance will change through its lifecycle.

6.6.1 The internet as a library/information tool

One framing of the internet was as an electronic tool used mainly for research and information retrieval. The digital library is a resource, a multi-functional device that aids ‘modern living’ and a tool to make life easier. This framing ranks highly

in the order of categories of internet uses and functions in many surveys and reports (e.g. MRBI, 2002; Eurobarometer, 2001). The following examples highlight this trend among members of the sample.

Those who lacked education were the ones who associated the internet with education and information retrieval to a greater extent than respondents who had third level education. This was acknowledged by many of the respondents who claimed to have left school in their mid-teens. It was also re-enforced by the fact that their prime motivation for purchase was for their own or their children's education. The internet was seen as a tool to aid and promote education in the household and as a 'safety net' in the case someone in the household wanted to find information. For example, the following participants indicated how the internet had become a dependable tool, and in one case, Jenny Marlon stated that her reasons for purchase were based on this sense of security derived from having access to the internet:

To find out information, to find out things. I know that if I wanted to know something and I can't find it anywhere else that I'll be able to find it on the internet. It's always there, and anything that I wanted to find it will be there.

Similarly, Mark Boland also had this association:

It's handy. To not have to get up and out to get information, like I'm looking at a new car now, and all I have to do is go upstairs.

Likewise, Deirdre Lawlor explains:

My idea of it was to access information that if something cropped up like a problem or a disease or something like that I read that you can access these sites pretty easy and quickly and find out all the information you need to know – that's my reason for having the internet in the house...it's like an encyclopaedia...I'd use it as an encyclopaedia if I need to know something, I'd go and look for it.

The burden associated with information research in public environments (e.g. public libraries, commercial outlets, public service departments) is removed by

having access to the wealth of information available online. This view is supported by other respondents:

It's like having a good set of books, it's nice to have access to all that information, and I would use it from time to time to find out specific things and do specific things (Alison Moran).

The internet is an enormously big, very convenient library, for reference for materials and so on (John Keller).

Because of their limited education, some respondents associated the quest for information in the public sphere as cumbersome and sometimes embarrassing. Jenny Marlon reflects this as she speaks of instances when going into shops:

Like, it was the way they looked at you, by looking at you, 'You don't have the money to buy this', you know that sort of way.

The internet is a convenient tool. Users can access content and information on topics without the burden of leaving their home. In this way, the internet acts as a 'security blanket'.

In another sense, the internet was conceptualised as a tool because it offers users functions that have not been realised by other technologies. For example, an 11-year-old respondent conceptualised the internet as a 'window to the world'. He stated:

It's my window to the world...because you can talk to people in Australia and see news from all around the world...it's very important because I am always watching the news.

He perceived the technology as a tool to allow him access to information and people around the world, as a tool to expand his understanding of the world and as providing the opportunity to become global while remaining local. His interpretation of the internet as a window to the world was an expression of his reliance on the medium as a technology which allowed him to access information.

It was a pastime or hobby for him, as well as a supplement to his traditional media consumption.

For others in the sample, the conceptualisation of the internet was largely educational. In the following excerpt, Betty Houghton explained how she related to the technology:

Because I needed it for college and Karen needed it for school and Emma needed it for college. So it was educational, nothing about as a leisure thing to me, education comes first, because of the background I came from...Karen calls it 'mammy's new toy'. Internet is education and contact with the college to me in order to achieve my goal of getting a degree and then to get out of this poverty trap.

Betty obviously viewed the internet as a tool specifically linked with college and school work. It is a tool, a device that she saw helping her current social situation. Her reference to it as a tool to help her escape the poverty trap she had found herself in since her divorce was significant.

6.6.2 The internet as a communication or collective medium

The internet as a collective medium is significant because computer-mediated communication can be asynchronous or synchronous, and both of these modes create new social spaces with new social relations and practices. Examples of asynchronous forms of communication include mailing lists (discussion forums organised by topic and distributed to subscribers through email), newsgroups (publicly accessible discussion forums organised by topic, which are similar in form to mailing lists, but do not require email subscription), and message boards on the world wide web. Examples of synchronous computer-mediated communication include chatrooms, multi-user domains (MUDs), and instant messaging (such as MSN or ICQ).

Computer-mediated communication has, as Don Slater argues, 'posed the possibility of entirely new relationships and identities, constituted within new media, and in competition with ostensibly non-mediated, older forms of relationships (Slater, 2002:534). It follows, therefore, that we must approach this

new mode of communication as having a separate identity with separate codes and practices.

Many respondents observed that if members of their families or close acquaintances emigrated or moved away, they tended to maintain sporadic or no contact due to the expense of phone calls and the inconvenience of letter writing. However, because computer-mediated communication can dramatically reduce the costs associated with communication across distance, email had begun to assume a greater role in their communication portfolios.

For example, Donal O'Donnell commented:

I probably wouldn't have bothered to pick up the phone and ring them and say, 'Why don't you come over?' But because we had the ongoing communication, I think it was easier to say to them and they were quicker to respond as well...it's cheaper effectively, I mean, particularly for America, the way the phone rates were here, you wouldn't be ringing your cousins in America every second week. But you can log on for the price of a few pence and send them a message.

Similarly, for Jean O'Rourke:

I have a friend in Germany. It's great because it costs so little to talk that long to her, when I was talking to her on the phone, it was too long, and plus the fact that you can rant on about yourself because nobody is interrupting you and because you are offline, you can write, and write in [Microsoft] Word, you can log on, paste your email and send it off and I can talk to her everyday now and do that very fast and she can get back to me at the same time.

Computer-mediated communication can be created and shaped to suit personal characteristics. Jean attested that computer-mediated communication suited her personality better than other forms of expression because she could think about her responses in her own time by composing the email offline. She elaborated:

Because you can get so much information across straight away and you have plenty of time to think about it once you get it, and send it out again, and I've always liked writing more than anything else, so it's the best means of expression for me, so I can write away.

In another example, Joanne Ryan spoke about how the overlap between social relations in online and offline communication could sometimes become blurred. She told of an instance when her school friends set up an email ring, but the transfer of communication from one social context to another resulted in a deterioration of the friendships because of the absence of physical cues. She blamed the lack of face-to-face communication for affecting the dynamics of that circle of friends.

You don't know what people really mean...and because we don't speak face-to-face as much as we could.

This subsequently resulted in the eventual collapse of the ring, as some of her friends fell out with one another.

While the absence of physical cues can sometimes have a negative effect on the course of communications, it can also serve to promote or enhance communication. Baym (2002), in a review of computer-mediated communication, asserts that the reduction of physical appearance cues, along with the evidence of status and attractiveness they bear, creates a kind of invisibility or anonymity that opens the potential for a multiplicity of identities, a high degree of privacy, and a lowered sense of social risk or accountability. Mairead Mulhare participated in computer-mediated communication in an attempt to communicate with people with similar interests. Since her separation from her husband, she had tried to find adult company by accessing a number of chatrooms and message boards. (This type of communication was shaped by a number of factors which will be described in greater detail in the next chapter.) As her economic position did not permit social interaction on a wider scale, she found herself home alone with her two young children. Thus, the internet provided a conduit for communications:

At the moment like being here, being a lone parent, I can't go out socialising as much. Like chatting with other Unison users in the evening, it has become good, for getting to know other people...they can't see me...you can talk when you want, or just turn it off.

The sense of invisibility or anonymity is expressed by Mairead was quite an important feature as she was anxious about her appearance. The fact that she could engage in communication with other users while not being seen appealed to her. In addition, the sense of privacy was appealing to Mairead – she could talk when she wanted to and not be forced into dialogue. She also felt a lowered sense of social risk or accountability as she was able to end conversations immediately if she did not wish to continue, by switching off the power supply or clicking out of the chatroom.

Therefore, computer-mediated communication served different functions for different respondents – it could be viewed as an alternative to face-to-face communication or it could compliment existing modes of communication.

6.7 Active agents promoting domestication and consumption

The findings in this section come from respondents who took part in a series of IT/computer classes provided by the author. The course was organised and located in various primary schools in their area. Each school ran a variety of courses and classes for the parents of the children attending the school, ranging from cookery to dance classes. The computer skills course was a popular choice among the parents. The classes ran during term time and lasted for an hour and a half, one day a week. They were located in the school itself, taking advantage of the computer equipment and other facilities in the school. As a further incentive, free childcare was provided by the school. The majority of people taking the course were women.

The objective of the course was to familiarise users with the technology. The content of the course demonstrated everyday uses of the technology, such as designing household budgets using spreadsheet applications or using the internet to conduct electronic research or communication.

Through teaching the course, I was able to construct relationships with the respondents and it was through these relationships that I was able to recruit them for the present study. Each respondent personally owned a computer or had access to the internet via a set top box prior to their participation in the course; however, their computer/internet use tended to be minimal or non-existent prior to taking

part in the course. Thus, the course could be seen as a catalyst for their eventual domestication of the computer/internet. Unfortunately, time-use diary evidence is unavailable prior to respondents taking the course (the time frame for the time-use diaries was a 1-week period after the interviews process); however, there is no reason why respondents' testimonies as to their usage pre- and post-course would be less valid as a result. This evidence was also backed up by information gathered from the in-depth interviews.

The following analysis of participants' time-use diaries illustrates that courses, such as the basic IT course described above, might be considered a catalyst for domestication. Apart from one respondent, all the women used their computer or the internet during the week they kept the diaries. They all stated that prior to the course, their use of the technology at home was non-existent due to unfamiliarity and fear.

Sandy Boland

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Internet	0	0	0	0	0	0	0
Television	90	30	60	60	120	180	180
Books	0	0	0	0	0	0	0
Radio	20	0	10	0	30	10	0
Newspapers	30	30	30	30	30	0	60
Video	0	0	0	0	0	120	0

Table 6.5 Weekly Media Use (mins) - Sandy Boland

Sandy Boland, the only respondent who failed to show any influence of the course in her time-use diary, outlined why her use and incorporation of the technology had been affected by the interference of her partner. The conversation below describes how the technology had become both a source of frustration for and alienation to her:

Sandy Boland: If I went to do something on the computer and I called him if I couldn't do something and he'd come up, he'd sit down on the chair and then I couldn't get him up. Then I would say 'every time I go to use that you want it', then I'd walk out of the room and leave him there.

Mark Boland: That's because every time you use the computer I'm getting called.

Sandy Boland: Then the minute I get off the chair you sit down and use it and I'm left standing there saying 'get up' like...I wouldn't have been bothered at all with it when we got it, I didn't have a clue about computers. I'd call you to put it on then I'd get bored real easy with it as well, even when I was doing the course. I'd turn it on and then get fed up. I haven't really the interest in it. Sometimes I find it easier to put pen to paper. I suppose if I was more well up on it. If you make a mistake you'd be there for ages trying to get it right, sometimes I wouldn't be able to get it right either, I can't remember everything...He knows more than I do, they always had a computer in the house, we never had one, they always did.

Conceptualisations of the internet were also influenced by participation in the course, as the next three cases illustrate.

Jenny Marlon

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Internet	50	30	30	0	0	0	0
Television	150	100	165	150	240	0	0
Books	0	0	0	0	0	0	0
Radio	45	15	20	10	20	0	0
Newspapers	0	0	0	15	0	0	0
Video	0	50	0	0	0	0	0

Table 6.6 Weekly Media Use (mins) – Jenny Marlon

I don't think of it as something special, maybe I would have beforehand but seeing it now, I think it is just there, maybe at the beginning I did, I thought it was great or something special, but probably because I am used to it now it's just another part of the place.

Karen O'Connell

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Internet	120	0	0	0	0	0	0
Television	35	180	120	30	0	0	0
Books	0	0	0	0	0	0	0
Radio	100	10	0	0	20	0	0
Newspapers	0	0	0	0	0	0	0
Video	0	0	0	0	0	0	0

Table 6.7 Weekly Media Use (mins)– Karen O'Connell

To me it's nearly like the Hoover, stereo, but yet it is special even though when you buy something within weeks because you have worked for it and you have bought it and are delighted with it, suddenly it loses its novelty like everything does. I found the computer still lost the novelty of being a wonderful thing. But I find it a God send for me, the knowledge is still there, I just think there is so much you can do with it.

Mairead Mulhare

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Internet	120	260	244	270	125	140	180
Television	560	560	300	300	360	560	300
Books	0	0	0	0	0	0	0
Radio	0	15	60	30	0	60	60
Newspapers	30	30	30	15	20	30	60
Video	0	0	0	0	0	0	0

Table 6.8 Weekly Media Use (mins) – Mairead Mulhare

It's special definitely. At the moment like being here, being a lone parent I can't go out socialising as much, like chatting with other unison users in the evening it has become good, for getting to know people. It gives me more confidence really, I don't really have many friends. It's just mostly family, I have a couple of friends that I see or go out with, this way they can't see me, you know that way, you can talk when you want or just turn it off if you get into, I'm not very clever, one of these sort of conversations, but it is good...It's my boyfriend and my friends rolled into one.

From the above evidence, it is possible to observe how the internet has increasingly become useful to the respondents, in terms of their overall media usage in the home. Each respondent indicated some level of internet use as a result of attending the IT course. This thesis argues that these courses promote domestication because of the ways the course translates the artefact into something useful, meaningful and personal to the student. Each student brings with them a set of resources, symbolic and material, which aid or hinder this process of domestication of the internet. Material resources, such as access to the hardware, and symbolic resources, such as motivation to attend the course, are crucial to the overall success of the domestication process.

As stated in Section 6.3, education seemed to be a prime motivating factor influencing the appropriation and domestication of the internet technology. Many respondents pointed to the feeling of security provided by the computer and, more importantly, the internet. For instance, easy access to information compensated for their lack of education having left school at an early age. The technology was regarded as a gateway to new opportunities for the respondents – it could improve the education of their children and themselves. In some cases it filled a social role in their lives. The perceived pressure from societal sources – implying that future employment or survival may depend on technology and the domestication of the

technology – was the prime motivation for many of the respondents to become familiar with internet technology.

6.8 Conclusions

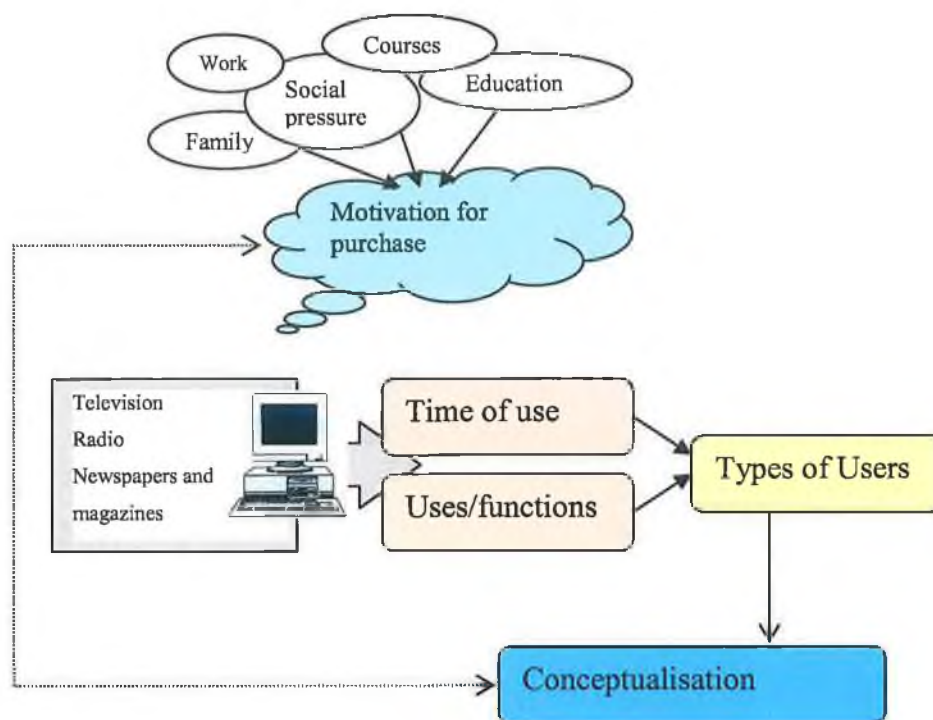


Figure 6.1 Factors influencing ICT consumption

In conclusion, the inter-related factors influencing ICT consumption and domestication presented in the present chapter are illustrated in Figure 6.3. First, this chapter identified five social factors that stimulated the purchase of the internet. A combination of social pressures, such as education (including their children's), employment or doing the computer-course, influenced the acquisition of the internet technology.

Second, this chapter identified different styles and patterns of use across the sample, which allowed me to generate a typology of different users based on their use and conceptualisation of the technology. Conceptualisation and interpretation of the technology is linked back to the motivation for purchase as many respondents began with clear intentions of the purpose the technology was supposed to fulfil, even though the technology also opened up new interpretations.

Third, this chapter traced how traditional media also shaped the ways the internet was used in the home, as did economic factors (e.g. use after 6.00 pm and use of email as a cheaper communication option).

Interestingly, those respondents who used the communicative functions of the internet seemed to conceptualise the internet differently to those who used the information functions. This is a significant theme emerging from the analysis – it confirms that new technologies have ‘interpretive flexibility’, such that the technology means different things to different people, and whether artefacts ‘work’ or ‘don’t work’ depends entirely on who uses them and how they use them (Bijker *et al.*, 1987). An individual’s relationship with the technology can therefore be said to create and shape personal circumstances, and to be created and shaped by them.

Finally, this chapter zoomed in on 4 cases which illustrated how the process of domestication can be influenced by external factors, such as the IT course mentioned above. It showed how such factors can act as a catalyst for domestication once several conditions are met: 1) provision of free childcare, 2) the course is run in a convenient location, 3) the curriculum of the course is tailored in ways to attract, appeal and interest the student. On the last point, it is useful again to point to the notion of interpretive flexibility, where the artefact does not translate in similar ways to different people. For someone, the computer may translate as a work tool. For others, it may be regarded as an entertainment medium and so on. Once the conditions above are met, then the likelihood of domestication occurring is increased.

Chapter Seven

‘Another toy for the boys?’ - Gender as shaping factor

- 7.1 Introduction
 - 7.2 Male and female relationships to the internet
 - 7.3 Gender and the conceptualisation of the internet
 - 7.4 Access to the artefact
 - 7.5 Motivation issues
 - 7.6 Section conclusions
 - 7.7 Case-study
 - 7.8 Chapter conclusion
-

7.1 Introduction

One strand of literature in the field of ICT consumption implies that gender has a critical influence on the ways users construct and shape their use of and relationship to a technology. The common theme emerging from these studies (for example, Morley, 1986; Gray, 1992, Faulkner & Kleif, 2003) is that women seem to be marginalised with respect to new technologies and men are assumed to display a natural affinity to all things technical. However, in contrast, it is useful to note here that Berg’s (1994) study of Minitel users in Norway found no definitive gendered usage patterns. This observation led Berg to challenge the notion of gender as a category.

Berg (1994) suggested that not only the technology but also gender is open to flexible interpretation. The current thesis suggests that gender is shaped by everyday life and it is this interpretation of gender that is relevant when discussing domestication and consumption of the artefact. Patterns of media consumption are disrupted by the introduction of internet technology into domestic spaces, however smooth the appropriation of the technology. In turn, the introduction of internet technology shapes the dynamics of the household and begins a redefinition or re-negotiation of the meaning of gender to the user. The point is not that some kind of gender equality is created, but rather that common assumptions of a standardised pattern of male and female use of, and relationship towards new technologies, are being challenged.

The social dynamics of the household are structured along lines of gender, age, control, economic power, and so on. The literature has argued that, in addition to

daily life in the household, technology in itself is a gendered practice. I focused primarily on who does what with a technology and for what purpose. I focused on the way gender is related to the use and meaning of information and communication technologies. The key question is how gender shapes or determines the use and meaning of ICTs in the household. Since the relationship between technology and user is a mutual relation, this question can be reversed to how gender is shaped in practices of ICT use.

The aim is not to determine the 'differences' between the ways men and women use ICTs. It is more important to determine how gender shapes practices regarding technology as ICTs and vice versa. This might lead to the conclusion that sometimes gender is an important factor shaping the use and meaning of ICTs, and sometimes it's not. The question is how the use and the process of making ICTs meaningful is determined by gender patterns and relations in the household and in society as a whole. And, the other way around, how do ICTs shape gender relations in the household?

The research agenda outlined in Chapter one aimed to test the agency of gender on technology use. What follows is an attempt to describe and analyse the agency of gender on the ways the respondents construct and maintain their relationships to the technology.

7.2 Male and female relationships to the internet

The principle user was defined as the person exerting a significant influence or control over the usage of the artefact. In the sixteen households, a breakdown of the principal user of the technology reveals that there is little gender difference, with male users only marginally more common. In eight out of the 16 households the principal user of the technology was male. In seven out of the 16 households the principle user was female. In one household, everybody used the technology to the same degree.

7.3 Gender and the conceptualisation of the internet

A related observation can also be made regarding the proclivity of both male and female users to interpret and conceptualise the internet artefact in homogeneous

ways. Both male and female users tend to think of the internet in a similar fashion. Table 7.1 highlights the uniformity of functions and uses proclaimed by both male and female users. There were no households in which uses differed according to gender. In fact, if the main use in the household was information retrieval, communications or both, *everybody* used the technology for this purpose.

Women may be just as enthusiastic about technologies as men and integrate it just as closely in their lives, but not necessarily into the same fashion as men. Both male and female users find ways and means to incorporate the technology according to personal and individual codes and factors. This is illustrated in Table 7.1, which presents the household users and the main function of the artefact.

Household name	Use/function	Female users	Male users
1. O'Donnell	Information		1
2. Mulhare	Communications	1	
3. Boland	Information	1	1
4. Marlon	Information	1	1
5. O'Connell	Information	1	1
6. Lawlor	Information	1	
7. O'Rourke/McDonald	Communications	1	
8. Smith	Information & communications		1
9. Loughlin	Information & communications		2
10. Keller	Information		1
11. Moran	Information	1	
12. Murphy	Information	1	1
13. Benson	Information		1
14. Houghton	Information & communications	2	
15. Dooley	Information & communications	1	1
16. Ryan	Information & communications	1	1

Table 7.1 Internet use by gender within households

Table 7.1 suggests that there are relatively few disparities between female and male functions and uses of the technology. As discussed in Chapter six, the respondents tended to have a dual conceptualisation of the internet as a tool either for information or communication practices. Each respondent, when asked about their uses, expressed interest in communications or information retrieval as the principal function of the artefact.

7.4 Access to the artefact

The location of the artefact is central with regards to access issues to the technology (Table 7.2). If the technology is placed in the bedroom of one of the younger children, the right to attain entrance or time with the technology may be compromised.. However, in the majority of cases, the artefact was positioned in a public location – commonly the living room – and access to the technology was not jeopardised.

Location of the artefact in home across the sample	%	Households
Communal Area	56	9
One particular Bedroom	38	6
Office/study location	6	1

Table 7.2 Location of the artefact in the home

However, access is not the only issue. In the Ryan household, the lone parent, Judith, associated computers with work. She works as a civil servant and is heavily dependent on computers in her job. Her lack of motivation to develop her relationship with the technology is shaped by her external daily life:

I actually use computers in work, so I think I see enough of it during the day I actually don't go near that computer at all

Judith deliberately placed the computer where she couldn't see it. Because the computer was bought for her daughter's education and because she wished to deny access to her ex-husband, the computer needed to be out of sight. In addition, Judith has taken on a traditional role in the household, which, in her mind, does not include the computer. She states:

I probably had to iron or something...it's real life down here.

On first glance, it may appear that Judith is excluded or self-excluded from constructing a relationship with the artefact in the home. Her above quote suggests

that housework and 'real-life' issues must take precedence over her relationship with the internet. However, taking her social characteristics into account, her relationship with the technology has undergone some prior shaping and definition from her interaction with it in a work context. In her case, the difficulty is how to conceive of the technology as anything other than a work tool.

7.5 Motivation issues

Judith's case illustrates the barriers to use, which may not be influenced by gender per se. The technology itself is not the root cause of her choice not to use it, rather it is her conceptualisation of it as a work tool and the social environment in which the artefact is immersed. The motivation to use the technology is absent but the skills are not. The barriers to use are influenced by other social factors.

This section will focus on the influence of gender on motivational issues. In the Boland household, user motivation to consume the internet is visible, but the technical skills and competencies to do so are absent. Sandy Boland expresses her frustration when she attempts to engage with the technology. Her computer literacy is basic and this feeds her frustration. It also precludes her from interpreting the technology as something other than an unwelcome object in her house. Sandy uses the computer and internet very rarely. During the times she does, she finds herself getting into difficulties and is resigned to ask her husband for help. She attributes her lack of knowledge and ineffective use of the computer to the fact that:

...computers don't do anything for me.

This quote indicates that her interest is curtailed. It also goes some way to indicate her low self-esteem associated with her low level of education, her employment situation, and her standard of living. The computer was hailed by her husband as a 'saving' or redeeming technology, one that would help their children in the employment market in the future, and 'that everything is computers now'. The fact that Sandy struggles with the technology must have a negative influence on her levels of self-esteem. The artefact does not represent a way of bettering herself or her situation, but instead it poses problems and obstacles for her.

Sandy believes quite strongly that her husband has an inherent affinity for computers and knows everything about them for two reasons. First, because he is a man and should know about things like that. Second she points to the fact that her husband:

...always had a computer in the house.

This quote suggests that he has superior knowledge and competency. A masculine gender identity is constructed by stressing notions of technological competence. On the other hand, stressing a lack of technological skills and refusing to develop them can be a strong expression of a feminine gender identity as some theorists have discovered (Turkle, 1988).

The notion of technology, for Sandy, is associated with masculinity and she struggles with its domestication. However, her rejection of the technology could also be viewed as stemming from her personal low-self esteem.

The engaging and interactive nature of the internet is related to the ability of the user to select content. This attribute ensures the technology can be used for different things by different users. However, while the choice of content may be topical and changeable and defined by personal selection, the use patterns of the technology are similar across genders.

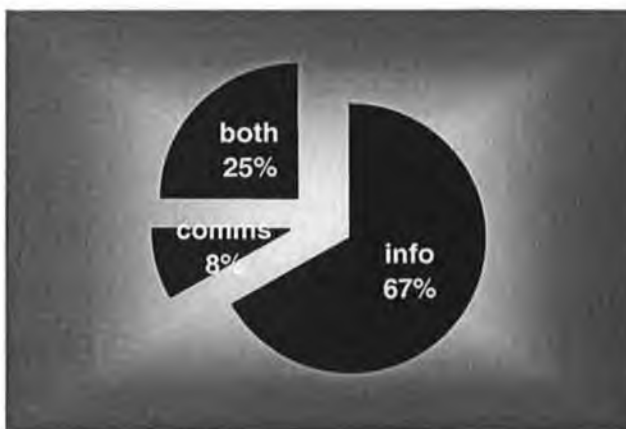


Figure 7.1 Male uses of the internet



Figure 7.2 Female uses of the internet

From Figures 7.1 and 7.2 it is evident that the internet is used primarily by everyone for informational purposes. This umbrella term encompasses most uses and functions, such as surfing the web, topical interests, health issues, and so on, but does not include communication functions.

In terms of conceptualisation of the technology as an artefact, both male and female respondents viewed the technology as an information or communication tool, a work or leisure tool. There seemed to be no conceptualisation of the technology as a boy's toy or a male technology. Gender differentiation was minimal to non-existent.

Respondents in the sample were reluctant to attribute the influence of gender over their relationship or use. Instead, they pointed to a range of factors, with gender playing a token role, if any. On the whole, no explicit gender differentiation or exclusion from the technology was detected during the fieldwork.

7.6 Section conclusions

No one standard or uniform relationship was detected in my gender analysis of the empirical data. The male users both consumed the medium and conceptualised the artefact in a number of ways. The same can be said about the female approach to

the technology – no one typical feminine user was identified. What this suggests is that gender alone does not offer a clear and consistent way of identifying users. By gender alone, it is not possible to categorise the respondents. The social shaping of technology perspective suggests that marrying a number of factors together gives a more grounded and credible interpretation of the complexity of the user's relationship to the technology. This was also evident in the current thesis. The evidence presented here indicates that it is an oversimplification to suggest that a standardised or uniform response to the technology is negotiated by gender alone.

So, what does this tell us about the affect of gender on the use and consumption of internet technologies in the home? It is apparent from the analysis of the use, consumption and domestication of the internet artefact that no singular gendered pattern is evident. In addition, gender cannot be accepted as a stable category common to female or male users. The present thesis advocates a more grounded approach to the use and conceptualisation of internet technologies. I suggest that a marrying of factors such as gender and age, or gender and household configuration, or economic/class factors are influential in the shaping of relationships to technology. Only when these factors are considered collectively can a user's pattern of use begin to be meaningful.

7.7 Case-study – Gender

This case-study is intended to portray the gender differences between two users in order to assess their engagement, relationship to and interpretation of the technological artefact, the functions they use it for and the manner in which they use it. These users inhabit the same social environment – they are a married couple with two children and live in a working class housing estate in north Dublin. They grew up in the same area.

Alan O’Connell works as a truck driver for a retail distribution company. He is 36 years old. Karen O’Connell, is a homemaker and does some part-time work for the school parent/teacher board. She is 34 years old. Karen took part in the classes taught by the researcher. Both have an education to Junior Certificate level. Their children did not take part in this case-study of the household as they were minors.

To look at the household in depth, I will assess the alternative conceptualisations of the internet, the ways in which the internet is domesticated by each respondent, and the manner in which it is used and for what purpose. The interviews with the two respondents were conducted simultaneously, but there was ongoing interaction between the female respondent and the author during her time as a student.

The respondents use the internet in the same fashion, but their conceptualisations of the internet differ slightly. They use it for different functions, and have different motivations for use.

The first section of the current chapter demonstrated no major differences between male and female use. This case-study reinforces this finding and shows that, while differences exist, they are not typical or traditional gender-based differences of ICT use.

7.7.1 Domestication

The domestication process in this household was a relatively smooth and fluid one. Both respondents were influential and active in the acquisition and appropriation of the technology. The research and purchase experience was a process in which they both participated, and culminated in a dual effort by both respondents. The reasons

for appropriating the internet were negotiated between Alan and Karen – they both *wanted* the technology for two reasons. First, Alan describes it as a purchase for the children.

Mainly for the children, for education purposes for the children.

And second, it was bought for ‘keeping up with the Jones’ reasons. As Karen explains:

It was to keep up with the times really...it’s for education, but it’s for ourselves too...you would feel a sort of pressure in a sense because they are within your reach, and it is the computer age now, you weren’t up to the times if you didn’t have one. We did feel pressure, but it was something in the pipeline that we wanted. The pressure was there to start buying, then people saying the amount of craic they were having, be it educational or fun or games or whatever.

Alan also expands on his reasons for becoming familiar with the technology. He states:

The reason I took up the ECDL was when the kids would be going into stuff they’d ask me, “Dad what do I do here?”, and I wouldn’t know and then you would be getting these messages. Being a father figure and when they come and ask you stuff you’d like to be able to give them some sort of an answer. You can’t go, ‘D’oh’, all the time.

They chose a combined package offering the latest peripheral devices, such as printer, and scanner, which included software. As their experience and knowledge was limited, their choice was influenced by the advice of friends and the sales staff. The price of the package was not the determining factor in their decision to acquire the technology. Karen explains:

I think we would have spent anything. If it was two grand for the lot we would have got it. Price did matter, somewhat, but it was more what we got with it.

What can be ascertained from this section is that the computer was acquired under some kind of social pressure exerted by a number of sources. First, it was seen as a tool to aid the children's education and also the personal development of the parents. Karen explains the areas from which the sense of social pressure emanated. She refers to friends who had computers, and pressure from media sources enforcing the 'computer age' ethos, where those without computers were seen as being 'out of touch' and perhaps 'negligent' by not providing a computer for their children. This is also emphasised in Karen's assertion that they would have paid whatever it cost to acquire the artefact and peripheral devices. To compound this feeling of social pressure, Alan also undertook instruction in computers to ensure they could make full use of the computer.

7.7.2 *What role does technology play in their lives*

Both respondents see the computer as a work tool, while the internet is seen as an information source. The types of information each respondent required was shaped by their 'everyday' life, in that Alan may look for something specific and topical, while Karen would search for topics and subjects she may have an interest in. Her interest could have been a leisurely/factual matter or a topic, which required immediate attention, such as a health matter.

Alan, meanwhile, would use the technology fleetingly, to log on and log off as quickly as possible, to find the specific information he required, such as the price of a car or car insurance. When that was achieved it would signal the end of his interaction with the technology. Gender literature would suggest necessity as a stereotypical feminine approach to the technology and functionality as typically masculine (Livingstone, 1992). Karen's use of the technology would suggest otherwise, as she sometimes speaks of using the technology just as a leisure pursuit, to log on and see what's there, as a means of passing the time. In other words, Karen would approach the technology in a *flaneur* type perspective. This can be detected in the following quotes:

Karen: You are better than me, if you need stuff you'd go into town into one shop and buy it and home again. I'd be dithering everywhere – saying I must see that or if I see one thing it will lead to another it won't stop there – and it's 'Look what I found' I do enjoy it...I'd be on it everyday, be it for Free-Cell or looking around... and hours just go like that because you are so enraptured.

Alan: I hate the rooting part.

Karen: That's me.

Alan: I expect to type in 'Welly boot' and see 'Welly boot'.

Karen: ...in your size, colour and all.

Alan: Instead, there's loads, and by the time I come to what I am looking for I'd be worn out then.

Karen's conceptualisation of the technology implies a close parallel to the notion of the flaneur, in this case a cyber-flaneur. Karen's surfing through cyberspace echoes the personification of a flaneur, with her unrestrained, unmotivated clicking through websites. What the city and street were to the flaneur, the internet and the web are to the cyber-flaneur. Goldate (1997) characterises the cyber-flaneur as one who strolls through information space, taking in the virtual architecture and remaining anonymous. Furthermore, the cyber-flaneur is a decipherer of virtual reality and hypertexts, s/he is the voyeur of the post-information age. Comparable to the traditional coining of the term, by Charles Baudelaire and Walter Benjamin, the flaneur is a transitory figure who is partly real and partly literary. He was social type who flourished in the second half of the nineteenth century and frequented the arcades of Paris. His activity was that of *flanerie* – to stroll the streets and observe the bustling life of the modern city. The Flaneur would mingle with the crowd, endeavouring to remain anonymous, seeing and being seen, but not recognised. Karen's use of the internet to wander through sites is akin to strolling through the streets, to window shop, to look and read, but move on with no pre-defined destination.

Instead of something inherent within the technology itself, that is the black box of a gendered technology, the current thesis suggests that users shape their interpretation of the artefact according their own personal predefined values. These values are derived from other media and 'everyday-life' and engagement with

technologies. As can be concluded from the above excerpts, Karen's interactions with the technology compare with her everyday values and actions. She uses an analogy between internet use and shopping to distinguish between her use and her husband's. She states that she prefers to spend time looking, browsing, engaging with the content (be it products or internet content) while her husband would approach the same situation in a more fleeting way.

7.7.3 Internet use

Use of the technology is shaped by economic and household composition factors. Alan highlights that use of the technology takes place in the evening or early night for two reasons. First, because of the 'six o'clock rule', where internet access is cheaper after six o'clock in the evening. Second, because their use of the technology is uninterrupted by their children when the children have gone to bed.

They wouldn't have been around when we were at the internet. We'd wait until they had gone to bed, especially the cost factor would be one of the things – you'd be waiting until after six before going on the internet. We, the odd time, leave it before to see a Barbie site or whatever, or a wrestling site, so maybe Saturday.

Alan displays the 'only when needed' relationship to the internet. He states:

I wouldn't have a great interest in it, if I wanted to do something on it and somebody was using it, it wouldn't bother me not to use it. The only thing I have used it for was insurance, car insurance when we were buying a car. I was using it to go through the different dealers, which I found very good. The Toyota site was very good.

Karen: I think given more time I'd use it a lot more, you need time between homework and they are still young. The benefits of it far outweighs the negatives of it, I would be big into researching things that would come up. It's brilliant to have to go on to find something, it's instant information – information is knowledge or whatever.

Another theme emerging from the case-study is that Karen would view the technology as empowering, as giving her access to information that otherwise may not have been accessible to her, and as expanding her development as a person both in an everyday context and in a work context. However, Alan sees the use of the technology as a burdensome activity.

Karen: I'm in and out of it, the *amount* of knowledge that I've got out of it, so I would really have and not have at the same time a lot of knowledge about it. But I find it a God send for me the knowledge is still there, I just think there is so much you can do with it.

Alan: It doesn't appeal to me at all. I know there is different things for different people, but I find if I sit at the computer for too long my neck hurts and my eyes burn when I sit at it for too long.

7.7.4 Interpretation of internet

Use of the internet is influenced by the way it is interpreted and thought about. In this section the respondents were asked whether they regarded the internet as a special kind of machine or another machine for the home. The intent was to probe how the internet was perceived, if it retained a special kind of status in the life of the respondent, or what sort of significance it held for them. They responded:

Karen: I regard it as both if I can say that. To me it's nearly like the Hoover, stereo, but yet it is special.

Alan: It wouldn't have that much importance. You couldn't connect on to it, it wouldn't make any difference...It saves you going to the library to get books to look up stuff. We wouldn't really use it that much.

Alan in this quote attempts to associate his lack of use to Karen's, although she testifies to heavier usage than Alan. Moreover, Karen sees the internet as a kind of unifying medium, one which draws the family together in shared experiences. She attempts to compare its usage to that of traditional means of information gathering. The newspaper, to Karen, doesn't allow for mutual, reciprocal interaction between users, whereas the internet allows for this. She explains:

Karen: You'd be sitting behind a paper. I could never deal with a man behind a paper. It's a unifying thing.

Alan: Just conversation wise, we'd be talking about what the different sites were, music stuff.

Karen: Even for more with conversation, you can generate a conversation...it's a conversational thing saying I found this or that, or I'm after finding this, have a read. It has had a good impact. There something else there, it's another little thing to discuss.

Although there is a difference in use, both respondents have noticed that the internet has increasingly become a topic of conversation. Karen notices that this is a good effect of the internet, in some ways a justification for use. She compares it to use of another medium, newspapers, which is considered a solitary activity.

7.7.5 *Effects of use*

Transformations in the domestic lives of users and changes to the patterns of everyday life soon come to be recognised by the user themselves. Karen remarks that her daily patterns have changed to accommodate use of the technology. This is a voluntary decision as her leisure patterns have shifted in order to conciliate her new found use of the internet. She points out that some of her pastimes and exercise patterns have seen alterations.

I suppose, before I used to go out for a walk I'd go out for a couple of nights walking, but I find that Mary too would often be on her computer, but she would have something from work that she would need to get done, and we wouldn't be able to go. Definitely in that sense I notice I'm not as fit because of it.

Alan has not developed a relationship with the internet to the same extent as Karen, nor has he accommodated the internet to the same level. This is due to a number of reasons. First, Alan remarks that he feels somewhat uncomfortable when using the computer.

Alan: I find on the computer, you are never totally relaxed because you are constantly moving on to the next thing or looking for something to come

through. Where with the telly you can just turn it on, sit back with the remote control, if it was boring you could just switch and switch, but with the internet you are constantly monitoring it or going back and forward and all that kind of thing.

Karen: An odd time it could be half twelve, but on Saturday night where it wouldn't be too bad to stay up late and you say I'd better knock this off, and I'd suddenly look and it would be 12.20 'Oh my God!'.

Time-use diaries suggested that, during the 1-week log period, Karen used the internet more than Alan, although there was a crossover in use, which suggests collaborative use.

Karen notices the effect of use on her 'daily life' in a more holistic way than Alan. Alan speaks of the individual times of use and how it affects his well being, at one specific moment in time, while Karen notices how the internet influences areas of her life, such as walking or on her health as a whole.

7.8 Conclusion

What can be drawn from this case-study is that there is no singular conceptualisation of the technology. It can be said that traditional gender stereotypes pertaining to mature media use are transferred onto new media technologies; however, the internet, as an artefact and media space, embodies interpretive flexibility where it can mean different things to different people regardless of gender. It is simplistic to say use and consumption of the technology is determined by sole factors or that a user's relationship with the technology can be forecasted or anticipated by his or her gender.

I want to stress that I do not use gender as a fixed category or as an explanation of gendered patterns and discourses. Gender is constructed in practices and discourses too. Gender is not an identity that is inextricably linked with a person. I would rather speak of gender definitions and positions. Gender definitions articulate what is considered as feminine and masculine in society. They are produced and reproduced in particular practices and discourses in society, and they

assign different roles and behaviour to men and women. The extent to which people adopt these gender roles and behaviour depends on the way they identify these definitions. A user can position himself in terms of gender definition, but it is possible to also reject this position and take up, for example, the opposite gendered position. Dominant discourses, however, make it very difficult to take up another position. If we translate this concept in light of this chapter, it means that the use and meaning of ICTs are not simply predetermined by fixed gender meanings or categories. Rather, gender identities and definitions are in part constructed and reconstructed in particular practices of use of ICTs in the household.

In this chapter, I have shown that gender as a fixed category was not responsible for the shaping of use and meaning, but instead that elements of gender, that is, traditional stereotypes transferred from mature media to the internet, were influential, but only when considered within the range of social factors described in Chapter four.

On a cultural or symbolic level, notions of masculinity and technology are strongly intertwined, as demonstrated by the literature. Technological artefacts are not mere objects – hardware – but also carriers of meaning, such as cultural notions about what it means to be a masculine or feminine. These notions can be very powerful and decisive in shaping everyday life experiences and practices. Technologies can be seen as symbolic expressions of a gender identity. However, my findings argue against gendered use of the technology –there was no singular feminine relationship to the technology and there was no singular masculine relationship either. It is not as easy to draw conclusions that all men use the internet in the same way and for the same reasons. Each of the men in the sample have their own particular way of using the technology, as do the women. It is an oversimplification to testify that technologies are gendered and that they foster a homogeneous affinity to the artefact. The current thesis argues that not only must the respondent's gender be taken into account, but so must the wider social characteristics investigated in this research piece.

Chapter Eight

‘It’s all about the money’ – Economic and social class as shaping factors

- 8.1 Introduction
 - 8.2 Justification for purchase
 - 8.3 Mode of access
 - 8.4 Location of artefact
 - 8.5 ISPs
 - 8.6 Case-study
-

8.1 Introduction

Traditionally, the consumption of mature media technologies was facilitated by a number of crucial features – many of an economic nature. Such factors included relatively low cost technologies, unproblematic access, minimal skills required to operate and user-friendliness, and the typical location of the artefact in the home was in a family space, so consumption of the technology was seen as a family practice.

With regard to internet technologies, consumption practices are influenced by a range of other economic factors. These can mean that the technologies are unattractive and can prohibit access. For example, the cost of the technology may be prohibitive. At the time of writing, the typical computer package available from retailers (i.e. the all-inclusive package including printer, scanner, software and internet-ready capabilities) is in the region of €1000 for a standard unit. The price and cost of internet technology has decreased of late, which has led to a dramatic increase in the numbers of domestic users. However, as previously alluded to, the early adopters of the technology were middle class, urban-based males. This is no surprise as the costs involved in getting the necessary equipment and access to the web were quite excessive.

Likewise, access to the skills required to operate the technology are potentially restrictive. In the current sample, a number of respondents spoke of the courses required and expense involved in attaining the skills to operate the computer and the internet.

For instance, Donal O'Donnell states:

I just had to convince myself that it was worth spending the money. I had spent nearly £700 paying for the course and then I had to find the money for the computer, so it took a while to convince myself.

This quote highlights the cost involved in achieving the level of competence necessary to operate the machine.

8.2 Justification for purchase

As a result of the high levels of cost involved in the purchase of internet technology, a certain burden of justification is required by the user, either individually or mutually by the respondents involved in the purchase decision. The sense of societal pressure experienced by certain respondents, discussed in Chapter six, is one particular influence in the purchase decision.

The justification for purchase process shapes the purchase experience. In working class households, respondents speak of the economic pressure of affording a computer. For example, Jenny Marlon describes her purchase experience as a '10-minute' process. Because her purchase decision was hinged upon the amount she could afford. The specification of the model bore no influence on her decision. In her case, it was solely price. She explains:

We literally went to the ESB and asked what deals did they had, It didn't matter if it was a £1500, it was what I had to repay a month, even if the package was better and there was a fiver in the difference, but I looked at this and it was a decent package. It was mostly the repayments. It was a 10-minute job, it literally was. I went to the person behind the desk I asked her and she showed me, and she took out books and said that works out at such a such amount and that works out at such an amount, and that's the way I worked it out.

This excerpt from the interview with Jenny Marlon indicates what influence cost bears for her on the purchase of the technology. Because of the initial payment or commitment to acquire the technology, this can put off many potential users. Prices of units have continually lowered as more technically advanced computers have become available.

However, unlike Jenny Marlon, other users did not share the same experience in paying the initial price for the computer. For example Donal O'Donnell:

But I paid more for it than I would have paid for something off the shelf in the shop. So, I suppose, price really wasn't, in the finish...specification was top.

Karen O'Connell concurs with this sentiment. She says:

I think we would have spent anything, if it was two grand for the lot we would have got it. Price did matter somewhat, but it was more what we got with it.

In the same vein, John Keller describes his purchase experience as not being restricted by access to finances. He says:

The truth of the matter is, I made so much money last year I had to burn some of it for tax purposes otherwise I'd just be giving it all away, don't get me wrong, I'm no worse off than anyone else, I just hadn't had time to buy anything and I had most of what I bought, this is a Pentium 2 400MhZ, so by rule of thumb I got off the net, you don't upgrade unless it has gone to four times or whatever the processor speed. And it got that, so it was time. but that's only because I had the money, this is quite adequate for what I want, more than adequate, I had spare cash lying around.

To respondents like John Keller, economic factors do not impose any restrictions on the choice of computer model, nor on his patterns and modes of consumption and use.

For other users who are not as financially well off, the restrictions brought about by costs of access plays a large role in their patterns of use and consumption. This trend is particularly evident in the case of Mairead Mulhare. She explains the lengths she goes to achieve optimal internet use. She says:

I sometimes get a bit carried away then, and everything else then gets left, so that's why I take the card out. {Why do you take the card out?}to save on the amount of phone bills that was being used. I've been using it a bit too much so I have to cut back, so that's why I have to take the card out which means that it doesn't work, you can't access it. So it's only at the

weekends now that I'd use it more. I'm using it about six or seven hours at the weekend which would be about an hour and a half if I was using it during the week, it would probably work out the same, it's just that I can spend longer at it then without using it during the week.

The '6 o'clock' rule, discussed in Chapter six, addressed some of the measures taken by the respondents to ensure maximum financial efficiency of their online activity. Also, mentioned was the change in sleeping and eating patterns – some respondents reported getting up earlier in the morning before peak hours, or going to bed later to achieve cheaper online access. In another case, one respondent takes drastic actions to ensure her use stays within the limits of her budget. Mairead Mulhare explains how the Unison operates using an access card. She explains how important it is to her to have access, but for that access to fit into the pre-existing economy of the household.

8.3 Mode of access

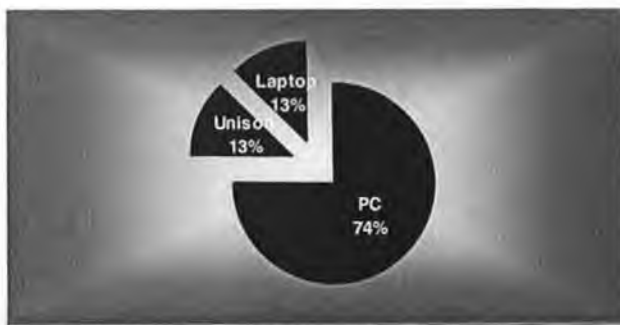


Figure 8.1 Mode of Access

Figure 8.1 illustrates that the majority of the sample access the internet via a personal desktop computer. Access issues are important in that they are significantly determined by economic factors. Personal computers are bought not only for internet access, but for their computing capabilities. The majority of the sample purchased PCs costing between €1000 and €2000. The Unison users were fortunate as both were won as prizes and did not cost the respondents any money at all. While the two laptop users paid €1000 and €6000 for their laptops. Access to the internet is by no means an inexpensive matter. As discussed in Section 8.2, financial concerns play a large role in the justification of purchase process.

8.4 Location of artefact

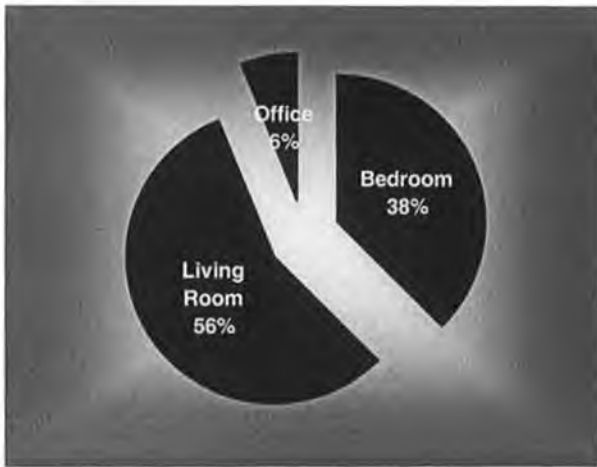


Figure 8.2 Location of the artefact in the home

The location of the internet in the household is an important indicator of a household's conceptualisations and meanings of the artefact. Figure 8.2 illustrates that the living room or family space is the most popular location for the technological artefact in the home. However, it does not give a full picture of the household by class approach to locating the internet in the domestic sphere in the current sample. Figure 8.2 is a class breakdown of the location of the artefact. The results suggest that placing the artefact in a family space is a middle class characteristic. This section of the sample were less likely to place the internet in the bedroom.

Half of working class households placed the internet technology in the bedroom (4/8), half of them placed it in a family space (4/8) –no working class household placed the artefact in a separate room designated as an office or study.

In middle class households, it is noticeable that the popular decision is to locate the internet in a public space within the home (6/8 public and 2/8 bedroom). The reasons for locating the internet in this position are varied, but in all cases it is associated with how the internet is conceptualised. In certain instances, the internet was seen as another machine for the home and could therefore be expected to be positioned alongside other media technologies.

In Table 8.1 it is noticeable that lower class households tend to use the internet more for informational purposes. For these households, the internet is a compensatory technology because they feel they lack an education. In Chapter six, education was identified as a major shaping influence on the motivation for purchase, and this is reflected in the manner of use as well. However, the rationale involved in the locating process is also mirrored in the conceptualisation of the internet. The internet is used by middle class households for a range of features and is displayed publicly. The internet is used mainly for information purposes by working class households, but is more likely to be located in one of the bedrooms in the home.

	Information	Communications	Both
Working class	5	1	2
Middle class	2	2	4

Table 8.1 Class breakdown of internet functions

Cultural capital, referred to in Chapter four, a concept developed by Bourdieu (1984), is useful in this case. It aids the comprehension of the context of use and how the consumption of specific cultural forms mark people as members of specific classes. In addition, cultural capital can also aid the understanding of class-based approaches to internet use. In the evidence presented above it is possible to argue that class shapes internet use and the context of use. It is possible to make this assertion because a pattern of lower-class use and their location of artefact is identified – these households are more likely to place the internet in the bedroom and use the internet for information retrieval functions.

Middle class households tend to display the technological artefact in highly visible spaces, compared to lower class households who tend to locate the artefact in covert spaces, concealed from public view.

There is a contradiction in that lower-class households, despite regarding the internet as an object of educational value, typically placed the artefact in an concealed location. These lower-class households tended to regard the internet as a tool and a source of valuable information. Middle class households did not regard

the internet as an object of educational value to the same degree as lower-class households and tended to place the object in areas in the shared family space.

8.5 Internet service providers

Internet service provider payment plans are tailored to the heavier users, with enticements of cheaper rates for increased use. The respondent use patterns were influenced by a number of factors. First, they were influenced by the type of employment the respondent was engaged in; second, the type of work; and third, the type of income the respondents received. Many respondents, regardless of class and occupation, testified to composing emails offline with the intention of saving money. They would only log onto the internet to send the emails and to check for new emails, which were saved to be answered in an offline capacity. Three respondents from different households claimed to have changed their normal daily routines, such as sleep patterns, to make the best use of the designated cheap rate times offered by ISPs. Again, an interesting case is that of Mairead Mulhare. She testified to removing the internet access card from her Unison set-top box to give it to her mother in order to restrict her internet access and to save money. She stated that she used it more at the weekends since becoming aware of the internet charges, so that she could use the internet for longer and for cheaper.

8.6 Section conclusions

From the previous sections we see that several patterns related to class and economics emerge. The first pattern relates to working class households and their tendency to locate the artefact in one of the bedrooms in the household. In addition, the primary uses of the internet reported by these households centred on information and functional aspects of the technology. While middle class households, on the other hand, tended to locate the artefact in public spaces, such as a living room, and these households reported mainly multi-functional uses of the internet, such as communicative aspects and information uses. From the evidence presented above, it is possible to conclude that economic factors play a very influential role in the ways users conceptualise and use the internet. Class contributes to the ways the internet is used – in the ways certain respondents from similar class backgrounds display similar characteristics as users

8.7 Case-study - economics

This case-study is intended to portray a household whose ability to participate in the information society, and to consume new ICTs, is strictly regulated by its available income. The respondent, Martin Smith, is by virtue of his present economic position, part of the working class section of the sample. This case-study provides an important insight into the influence and shaping effect fostered by a restrictive income bracket, based on what we have learned from the first section of this chapter.

8.7.1 *Background Martin Smith*

Martin Smith is 35 years old, unemployed and lives alone in a bedsit in the north inner city centre area of Dublin city. The flat is located on the second floor of an old-style Georgian building, at the rear of the building. The street has seen extensive urban redevelopment in the last decade, and is home to numerous ethnic groups, including African, Romanian, and Turkish families. Martin Smith has lived there for a number of years since returning from England, where he attended university. On entering the Georgian house, which has been divided into six flats, the notion of shared living space becomes apparent, as bicycles and uncollected post have piled up in the hallway entrance. Typical rental charges for this type of accommodation range between €40 and €60 per week, depending on the size of the accommodation and the number of people sharing.

On entering the flat, the sense of shortage of space is compounded by Martin's attempts to fit all his possessions into the same room. His bedsit is open plan, and there is no demarcation between 'rooms'. The bedroom part is separated from the rest of the room by a large metal shelving system. On the shelves, Martin displays his book, LP records, video and CD collection. Next to this, he locates the television, VCR, music system and amplifying technologies. Directly opposite the shelves, there is a two-seater couch placed directly in front of the television. Adjacent to the shelving system, the computer is housed on a large computer desk with a dedicated computer chair. This completes the furniture in the living area. The small bathroom also doubles as a fully functioning photography darkroom. There is evidence of Martin's interest in photography and creative arts in the bedsit as some of the walls are decorated with examples of his work.. Chemicals in large

plastic containers for mixing and developing photographic negatives are stored around the flat (i.e. under the couch, under tables). A stack of cardboard boxes provide a makeshift wall between the door and the kitchen area.

Martin, at the time of interview was unemployed. Occasionally, he engaged in photographic and video-making work. He subsists on dole cheques, which are allocated to payment of rent, and groceries, among other things. Being on the dole, Martin has ample time to spend doing whatever he likes. He is an aspiring film maker and spends a good deal of time shooting video footage and using editing software packages on the computer to create short films. His experience as a film-maker/photographer was attained through a diploma and a degree course in media production, both in Ireland and England.

When attempting to explain his employment situation, Martin notices the confusion between his working time and his leisure time. He notices that ICTs have become central in mediating private and public worlds and in changing the boundaries between them. He states:

My leisure time and gainful occupational time overlap. I don't know where the boundary is. I don't have designated times. The lines are blurred because I don't have a regular job – like I am working sometimes and other times I am working while not getting remuneration. I still regard it as work. Work doesn't have to mean getting paid sometimes that work is of my own free-will because I enjoy it. So you could say that was my leisure time – printing photographs – some people classify that as a hobby. I classify that as work whether I get paid for it or not.

This quotes serves to explain how Martin conceptualises his situation between working and leisure. His situation is a self-imposed existence. He seems content to live off State benefits and a restrictive income.

8.7.2 Appropriation

As highlighted in the above section, Martin Smith attended university in Wolverhampton in England for 3 years. It was during this period that he acquired a PC. The reasons he states for purchasing a computer were:

Because I was in college at the time and I wanted to be able to do video-editing at home, because we didn't have enough computers in college. We had to book them and we didn't get much time, so I wanted to have access to it at home.

The computer was a significant burden on Martin's finances, as he was a student living away from home. However, it was evident that a computer was necessary to his academic performance in the course. Therefore, it was necessary to find a suitable model at a price he could afford. He outlines the factors that he took into account when deciding on and justifying the purchase.

Price, but also capacity. The size of the processor and the size of the hard-drive mostly...I did quite a bit of research. I looked into the possibilities of building it myself. I priced components from various small outlets. It seems quite common that there are a lot of places that set up small offices, selling components, so I priced a lot of them and made comparisons. I didn't price many complete units, but I found one of these places that sold components and put them together as well, and I priced the components that it would take to make a computer and found out that it was cheaper to buy it already assembled by them. I could have possibly assembled it myself. So, I wasn't casual about it. I never went into Dixons, because Dixons would never be the cheapest or best value. So, I went into the shop, I think, I just saw it passing by in Birmingham. He gave me a quote – a list of all the components – sound card, video card, hard drive, processor, CD-ROM, and I took it home and looked at it, and then I phoned them and they delivered it.

From the above quote, it is possible to draw a conclusion that price was a major determining factor in Martin's purchase decision. He spent the greatest amount of time among all the respondents in the sample researching the cheapest possible means of assembling a computer. This was important to him, because the cheaper he could get it the better for him in the long run. Therefore, he could not afford the luxury of walking into a dedicated computer stockist such as Dixons and simply choosing a computer from the shelf.

Computers had gained in importance for Martin since his first encounter with them. When asked to describe his early encounters with the technology, Martin states:

I would have first encountered a PC in any consistent way when I went to college in Colaiste Dhulaigh. It was a back to education course. It was trying to rehabilitate dissolute people back into the mainstream. I was never in that big a need to be re-socialised, but I signed up

for it anyhow, and that was the first time I started using PCs. But I didn't really get much instruction in using them. You were kinda left to your own devices.

From this quote, it is interesting to discover how Martin describes his first encounters with computers. Computers are seen to be 'enabling' technologies, used by third level education institutions to 'rehabilitate' people back into work and what Martin terms the 'mainstream'. However, the instruction on how to use the computers was limited. This first meaningful encounter shaped his perspective on computers and helped to frame his understanding and interpretation of the technology. These first opinions on computers led him to conceive of the technology in the following ways:

I would say that I would have been anti-computer. I would have dismissed them, I would have said that I had no need for a computer in my life, I saw no benefit and I had no interest really. So I kind of dismissed it as an unsocial device which kept people introverted. I had no interest until I was shown what it could do, after I had gone to college.

This interest in computers had first been instilled into Martin in secondary level school. Computers were in the early stages of being introduced into schools in the mid-eighties, and it was from these early experiences with the technology that Martin began to construct a relationship with ICTs and began to assign them meaning and significance. However, his first experiences with the technology weren't ideal to base a long and lasting relationship upon:

Yeah, one bad experience when I was in school. I think I was in fourth year in the year before the Leaving Cert. They got computers for the first time ever, you know, it was a big deal because they got a computer, an Apple Mac, and the only thing you could do with it was programming; because they had only one computer they wanted to reduce the class size to something more manageable. They basically cut the class in half. What they did to do that, they had an aptitude test and the people who did the best in the aptitude test got to use the computer and do computers, and the others didn't. I did well in the aptitude test and got to do rudimentary programming with the Mac. There wasn't anything else; there weren't any packages. It was really boring, and even when you succeeded it was very, very simple. We weren't really impressed.

His initial encounter with the technology was shaped by a number of factors which were different to the settings and contexts of experience of the other respondents in the sample. The first influential factor was that of the social environment where Martin first encountered computers in a meaningful way. Martin learnt how to program a computer in an institutionalised environment where creativity was kept to a minimum. The second factor is context. Because there was only one computer in the classroom, it meant restrictive time limits on its use. These early experiences with the technology had a shaping effect on how the computer was perceived and interpreted by the user. Martin outlines the fact that, apart from 'rudimentary programming' uses and functions, the computer seemed rather restricted, until he 'was shown what it could do'. Therefore, a need to become more familiar with the technology was created when he attended university. Computers, before then, never held any attraction or gained his attention.

The main reason he states for wanting to have a computer with internet access is not for educational needs, but for communication resources. This is what distinguishes the internet and computer – each is used for a different purpose. The desire to stay in contact with one's globally dispersed extended family and friends 'at the cost of a local phone call' is a major impetus behind the adoption of the internet in the home. He stated:

Email – being able to keep in contact with people that previously I might have intended to keep in contact with by ordinary mail, but I know I wouldn't have. I have definitely kept in touch with people and a lot more people who live abroad, mostly by email, than I would have done if email didn't exist, and phones as well; it saves me having to use the phone. I don't like speaking to people on the phone anyway. It saves me having to use the phone. I can be more considerate and at the same time keep in touch with people where maybe before I wouldn't have.

The understanding behind the above quote incorporates many studies conducted in the area of the telephone (Moyal, 1990; Livingstone, 1992). It is interesting as the findings reported here add to the conclusions presented by these authors in their respective studies. Livingstone advocates the phone as a functional tool, used to make arrangements, or representing the interruption of work into the domestic

space (Livingstone, 1992:122). Martin Smith outlines his dislike of using the domestic phone:

It's terrible to say that maybe I could do without the phone, and not talk to my friends and keep the radio. I'd be inclined to think like that, but that's not nice is it?

Although communication is very important to Martin, as highlighted by his use of email, only certain modes of communication appeal to him.

8.7.3 *Objectification*

Martin placed the computer in the main living area of his flat, connected to other peripheral devices.

I have the computer set- up in the centre of the room. But the room is divided slightly...I would give the computer a less prominent position if I had a platform to put my bed on. I don't necessarily want it to be there but it has got to do with the way light falls on the screen as well, you don't want it to be facing the window – so that's one of the reasons why it is where it is.

The location of the technological artefact is bound up with aesthetic and symbolic codes. This process of domestication involves choosing where to put the technology and deciding how to use it. It also relates to aesthetic considerations or strategies for displaying technologies, as well as functional requirements. Martin, by virtue of living in a bedsit, was severely limited in terms of space and potential locations for the PC. The location of the PC as it stood was possibly the only location for it, given spatial limits.

The location of the PC does not have any real implication for use, because Martin lives alone. But in terms of the media network established in his house, Martin is in touching reach of all media available to him. This fact has implications later on when his consumption patterns are discussed.

I bought a computer desk specifically for the computer. I didn't move it around to fit the computer in, but I moved it around to make it more functionally aesthetic. It fitted in very easily. I have the computer connected to the amplifier. I could never see the need or reasoning behind having special computer speakers because they are all substandard, because

it is very easy to connect your computer to your amplifier. It's like your stereo or CD player, it connects in the same way.

So it is not only his consumption of ICTs that are converging, but also he is using technologies not associated with the computer, such as the amplifier. This aspect will be discussed in greater detail in the next section.

8.7.4 *Incorporation*

Martin explicitly states that he associates the internet with communication and interaction. He makes the distinction between passive and interactive technologies, and the fact that he is able to be creative through his use of the internet and computer. He states:

No, I don't see it really in the same light as that (TV), I view it differently from those TV, stereo. It's a more utilitarian device in a sense that when you use a stereo you are a passive listener, when you use a TV you are passive viewer. When you are using a computer you can be an active user. When you use a computer you can actually be creating something, even if it is just writing an email, I consider that to be creating something. I don't really write letters but I compose them, but writing anything is a creative experience. Using a computer to do that makes it different than using a stereo or TV. It's that interactivity, and then there is the internet connection – it is a communication device then as well as a computer.

The main theme of this case-study is to portray the shaping influence of finance and economics/income on the consumption of internet technologies. Martin Smith is by far the least economically well off participant in the sample. His income is far less than the other households in the sample. So much so that internet use features heavily in monthly out-goings from his available income. He states:

If you exclude the rental, I'd say about half my telephone bill. I find it expensive, ludicrous, even though it is 1p a minute and that doesn't sound like anything...Rent would be the most important expense in the sense that you need a roof over your head. In the winter I'd say heating is next – electricity. I'd get rid of the internet before any of the others, let's put it like that. I'd wipe it out. I'd find other ways. I wouldn't stop using the internet; I'd find other ways to use the internet that were less economically taxing. I have done it before.

It is clear from the above excerpt that he places a very high level of importance on the internet and the fact that he has access to it from his home. Although, if the internet was unavailable to him at his home, he would find alternative ways to access the information he craves.

When you are addicted to information, when you are the type of person who reads everything in the newspaper, and suddenly when you have on your desk access to all the encyclopaedias in the world, in the sense there is more information in the world on the internet than all the information in the world, when you are that type of person, it is very difficult to restrain yourself from over-using it.

This excerpt is very significant as it helps to explain how Martin began to form his relationship with the technology. He reverts back to his early childhood to find a reason or to explain the fact that he has become 'addicted to information':

It's from my childhood. I'm being a bit flippant there, but it is probably true in a way. It is where I come from. Coming from the countryside, there wouldn't have been anybody living near me around my age. So you are left to your own devices for your own entertainment. I don't know when it started, but I would spend a hell of a lot of time reading. Earlier it would have been books and later it would have been newspapers, so it is just an extension of that.

Another factor that is not mentioned much when discussing influential factors of ICT consumption is a user's upbringing. Martin mentions that his upbringing has shaped his interest in media, which has been extended to new ICTs.

He speaks of the most influential factor shaping his consumption of the internet as 'cost', cost in terms of paying the dial-up costs of internet access and the telephone rental bill:

Cost of it does mostly. I'd consume a lot more if we had un-metered access in this country, which we should have, like they do in the UK. They can get telephone rental plus unlimited internet access for about £15 a month. We pay £15 a month for telephone rental alone. Time, as well, sometimes I have to leave it at that because I have to go somewhere or do something else.

Another interesting point is that he identifies 'time' as having an impact on his use.

I look forward to checking my email after six o'clock when it goes down from 4p a minute to 1p a minute – that threshold is important. It's 75% cheaper when you have an income like I have.

This quote gives an insight into how Martin rates the importance of the cost of consumption. Although living on his own, his communication with his friends is limited during the day as the majority of them are in work. He finds himself waiting until six o'clock in the evening to check for mails from his friends and acquaintances, which he looks forward to with anticipation. However, the important detail contained in this quote is that there is a threshold to observe. The difference between paying three times as much for daytime access is a line, which Martin does not cross regularly. The actual cost of consumption plays an important role in Martin's consumption patterns.

8.7.5 Conversion

The overall changes to the pattern of daily life is explored in this section. It is concerned with how the consumption of the internet influences or affects or even shapes the daily life of the consumer/user and how this is reflected in the relations with 'outside life' external to the home. In essence, how does an activity which takes place in the *private* convert into the *public*, or how it is represented in the public sphere? Email plays a large part in Martin's life, so much so that he admits to sending and receiving emails every day, and whether or not he was in the country or somewhere else, he would still find time and money to check his mail. He states:

I use it virtually everyday. There are very few days that I don't. No matter where I am anywhere in the world, I'd check email at least once a day.

Martin has noticed that his internet use has impacted on his use of traditional media. The use of more than one ICT at any one time has become common in the domestic scene. It is also very evident in this particular case-study. 'Consumption convergence' argues that media networks are 'coming together', or becoming hybridised in the domestic sphere, which has brought about a convergence in the consumption of media content. Within this notion, the stress is on the confluence

of media technology networks, on social factors, and on synchronicity. As described earlier, the layout of Martin's living space has been instrumental in bringing about a sort of 'convergence' in his consumption practices.

I might have the television on. I mightn't necessarily watch it, but I might have it on while I'm in the room, but while I'm on the internet I wouldn't. I'd have music on, the TV could be on as well, in the background, but only because I haven't got a TV programme. I've only got about four channels. I don't have any British television stations, and I get a British newspaper so I don't know what's on TV ever so I might leave the TV on in the background while I'm waiting for something to come on, like news, while I'm on the internet. And music on at the same time. The TV would be turned down, everything's on – radiation central!

The core significance of consumption convergence is highlighted in this one quote. The ubiquity of media forms available in the one space brings about the convergence of consumption of media content. The confluence of media networks such as television, print media, radio, and internet, all on the go at the one time, provides Martin Smith with a whole host of media options with which to engage.

An important influencing factor is that of household configuration. Because Martin lives on his own, there is no one to dictate or influence his consumption patterns. Also, the internet has been seen as an instrument to facilitate solitary living. Martin states:

But it makes it easier to be home alone, in the same way as the TV does. It's another option as regards something to do when you are home alone and you can't think of anything to do, you could use the internet. But that applies to everything else you have in your home – music, TV. But it's another one. It's an extra option, so it makes it easier for sure.

The portfolio of ICTs available to Martin provides some welcome distraction from the mundanity of everyday life in the flat.

Most recent literature on the gendering of technology concentrates on the academic conceptualisation of how this phenomenon has come about (i.e. Wajcman, 1991; Spilker and Sørensen, 2000), as discussed in Chapter five. However, it is interesting and worthwhile to investigate how these perceptions of ICTs as

gendered artefacts are constructed and conceived in the eyes of the users themselves. Martin indicates that he believes the internet is a gendered technology and attributes this to age-old traditional distinctions of females as technological incompetents. He states:

I think that the internet is more, at the moment anyway, a male-oriented device. I think that, because in the same way women say they wouldn't know how to set the video recorder.

Martin's rationale here is perhaps flawed and reliant on traditional conceptualisations of gender-technology relations. It is incorrect to assume the same technological competence across genders for one technology or another. His next quote is more intriguing as it presumes that the internet is gendered because of an inherent colour scheme. Ann Gray (1992) attempted to conduct a survey of user perception of technology as gendered by asking participants to associate a certain technology with a particular colour. This resulted in pink irons and blue electronic drills. Here, if the same logic was applied to Martin's response below, it would presume that the internet is considered a male technology.

Blue, blue, blue, everything is blue, everything on the internet is blue. TV is less blue. I'm talking physically anyway, so many internet sites are blue, as in coloured. I mean Hotmail is blue, a kind of blue, one of its trademark colours is blue, and another email site that I use is blue. Most internet sites have got blue in them. It's a signifier in a sense. I know it is sort of a nursery rhyme but it definitely means something.

The fact that he associates the internet with blue, and signifies blue to be a 'male' colour, has informed his opinion that the internet appears to be a male technology.

The household has rarely been regarded as a space for public discourse. Typically, it was regarded as a place to rest and recuperate before the next work-shift, and rarely as an arena where public debate can be engaged in. However, with the emergence of new media technologies, users can discuss and debate issues of a public nature from the comfort of their home via the internet. Martin Smith readily admits to engaging in such debates, becoming actively involved in debates in the media. He referred to one particular instance where he emailed a radio talk show to voice his opinions. He stated:

I once wrote an email to Pat Kenny in response to a particular issue that irked me and he did read it out. He read it out the next day. He didn't read it out that day, and he would have had time because he would have received it. It was either the day after to two days later, he read it out. I heard it. Well, it was a bit of an anti-climax because I would have expected it to stir up some sort of response to what I said. I would have expected some kind of controversy, some sort of return battle to start, but I don't think there was one comment in anyway on what I said.

User participation in the public sphere may not have had the desired outcome Martin wanted. But the choice to become involved and speak personal views have been provided by new ICTs available to domestic users.

8.8 Conclusion

The aim of this case-study was to portray how a user, who constitutes a very small percentage of Irish domestic users, has appropriated and domesticated the internet and deemed it meaningful in his life. The prime influencing factor was his limited income. He identifies cost as the major factor shaping his ICT consumption. He believed his consumption practices would be greatly transformed if he had unmetered access to the internet. Several social factors, apart from economic factors, have also been influential in shaping his consumption routines and preferences. First, his upbringing is deemed, in the context of this study, to have an influence on his media consumption. Martin was raised in rural country-household, and it was here, where Martin developed an interest in the media, perhaps as a reactionary measure to his perceived isolation. As he grew older, this interest has been transformed into what he terms 'an information addiction'. Second, household configuration, and the fact that Martin lives alone, has been influential in shaping his consumption practices. He asserts that having access to the internet has 'made it easier to live alone'.

Above all, Martin must ensure he can consume the internet as cheaply as possible. First, he was adamant that the computer he bought was the cheapest he could possibly afford, but with the advanced specification that he required. This involved a lot of footwork to ensure he was getting the best deal, instead of opting for the easy option of walking into Dixons and simply choosing a model from the shelf.

Second, his use is restricted to 'cheap' rate, which begins after six o'clock in the evening.

This case-study illustrates how household income can shape the use and perception of the internet. If the technology can only be accessed at certain times for defined periods, then it assumes a different interpretation than if it was available at any time to the user. The fact that Martin looks forward to using the internet in the evenings shapes his perception. This perception is also based on the fact that Martin regards the internet/computer as a special type of technology, one that enables creativity and communication. He feels that he could not do without the internet. If he didn't have it at home then he would:

...have to go out of my way to get internet access elsewhere, which I could do and that would be inconvenient, but it would save me money and that would be a good thing.

As illustrated throughout this case-study, the internet performs significant functions in Martin everyday life, for both functional/instrumental activities, such as his creative hobbies, or for its communicative features. However, as is clearly evident from Martin's experience, the ability to access the internet cheaply and in a meaningful way is paramount. His financial situation proves to be a determining feature of his use and consumption. The domestication and eventual use of the internet in this case-study is very much socially shaped. This case-study provides an important insight into the ways certain factors, such as household configuration, economic factors and a user's upbringing collude to shape consumption habits and patterns.

Chapter Nine

‘Houses, households and homepages’ – Household configuration as a shaping factor

9.1	Introduction
9.2	Breakdown of use
9.3	Analysis of data
9.4	Section conclusions
9.5	Case-study
9.6	Conclusion

9.1 Introduction

The purpose of this chapter is to assess what sort of influence, or agency, the configuration of households has on both the domestication and consumption of the internet. Just as Morley (1992) found the television and the remote control to be a source of tension and conflict in his seminal study of domestic consumption of ICTs, this chapter seeks to assess if the internet is, perhaps, a perceived as a source of conflict between family members and household dynamics. Morley found that the conflict centred on the holder of the remote control because this person had the control and the final decision over what to watch. The internet, by mere virtue of the individualistic nature of the mode of use, may provide sources of conflict between family members, for example, over its use or the location of the artefact. This chapter also addresses how the internet fits into the media matrix in the domestic environment in the case of one particular household, and how the internet can substitute for household relations in the absence of face-to-face contact.

This chapter addresses in more detail if or how the household configuration of the sample influences the mode of access, the consumption and use of the internet technologies in the households. Table 9.1 indicates the types of households in the sample.

Type of household	Name
Single households	O'Donnell Smith
Broken/separated households	Mulhare Houghton Ryan Loughlin
Married	Marlon O'Connell Lawlor Keller Benton Dooley
Co-habiting	Boland Murphy
House share	McDonald/O Rourke Moran

Table 9.1 Types of household in the sample

As can be seen from Table 9.1, the sample was based on an assortment of various different household configurations. Further investigation into how household configuration influences domestic use of the internet reveals that single and broken households tend to be daily users of the internet, compared to multiple-person households, who tend to use the internet more sporadically.

Household name	No of members	Main uses	Times of use
1. O'Donnell	1	Info/email	Post 11pm; most nights
2. Mulhare	3	Comms/email/surf	Variable; daily
3. Boland	4	Surfing	Sporadic
4. Marlon	5	Info	2 times per week post 6pm
5. O'Connell	4	Info	Sporadic
6. Lawlor	6	Info	Sporadic
7. O'Rourke/McDonald	2	Email/Comms	Variable; daily
8. Smith	1	Email/Comms	Variable; daily
9. Loughlin	3	Email	Variable; daily
10. Keller	2	Info	1 hour daily
11. Moran	1	Info	2 times per week
12. Murphy	2	Info/email	3 times per week post 6pm
13. Rachel	3	Info	2 times per week
14. Houghton	2	Email	Variable; daily
15. Dooley	4	Info/email	2 times per week post 6pm
16. Ryan	4	Comm/info	2 times per week post 6pm

Table 9.2 Household, use and time of use breakdown

It is no surprise that the data suggest that increased levels of use and patterns of internet use are relative to the number of people in the household. This means that

the fewer the people in the household, the greater the time spent accessing the internet.

Single households, broken households and house shares display a higher propensity to access the internet than married or co-habituating households (comprised of more than one person and in particular with children). This point has been alluded to in one of the previous case studies, where being 'home-alone' (living alone) is facilitated and expedited by access to media, and especially the internet, due to its interactive nature. In the previous chapter, Michael Smith emphasised how new media play a role in the daily lives of single people. Likewise, as we shall see later, Mairead Mulhare supports this assertion by claiming her status as a lone parent is facilitated by her online activities. Her reliance on the internet as a communication medium promotes her conceptualisation of the internet as her 'boyfriend, and my friends rolled into one'.

9.2 Breakdown of use

The majority of households in the sample access the internet daily (Table 9.3). However, what becomes apparent is that those who frequently access the internet are drawn from households with relatively few occupants, in this case separated households. Those in this category also tended to use the internet for mainly communication functions as opposed to information retrieval purposes.

Daily		2/3 times per week		Sporadic	
<i>Household</i>	<i>Constitution</i>	<i>Household</i>	<i>Constitution</i>	<i>Household</i>	<i>Constitution</i>
Houghton	Separated	Marlon	Nuclear	Boland	Nuclear
Mulhare	Separated	Murphy	Co-habit	O'Connell	Nuclear
O'Rourke	House-share	Benton	Nuclear	Lawlor	Nuclear
Smith	Single	Moran	Single		
O'Donnell	Single	Ryan	Separated		
Keller	Empty nest	Dooley	Nuclear		
Loughlin	Separated				

Table 9.3 Frequency of use among households

Most daily user households (57%) rely more on the communicative aspect of new media. The rest of the households (43%) use the internet for both informational

and communicative functions. Half of the households that used the internet 2-3 times a week did so for information, while the other half tended to use the internet for mainly communication purposes. Households accessing the internet sporadically displayed no communicative elements to their online activities as 100% used the internet entirely as an information resource.

This is an interesting point as it confirms several findings across other chapters, in that irregular users have not constructed the same kind of relationship as regular users have. The relationship in question here is one based on conceptualisation of the internet as a communications medium – as in when the internet is thought of as a means to communicate with people, users use it more. This is reflected in the above section, where it is noticeable that communication users invest more time in online activities compared to information users. Those in between display traits from both extremes.

9.3 Location of the artefact



Figure 9.1 Location of the artefact in the home by household

Figure 9.1 shows the location of the artefact in the households, but it does not tell the full story. The following section presents further analysis and investigation, giving an in-depth picture of how household configuration influences the location and use of the internet. Chapter seven concluded that gender did not seem to influence the decision to locate the internet in the household. Household dynamics and economic factors were more influential. The following section will analyse the influential role played by household configuration on the type of functions the internet is used for and the decision where to locate the internet. It examines the sample using a matrix of variables to place each household in a grid on the basis of

their primary uses and location of the internet (Figure 9.2). This exercise seeks to tease out comparisons and contrasts between households exhibiting similar characteristics.

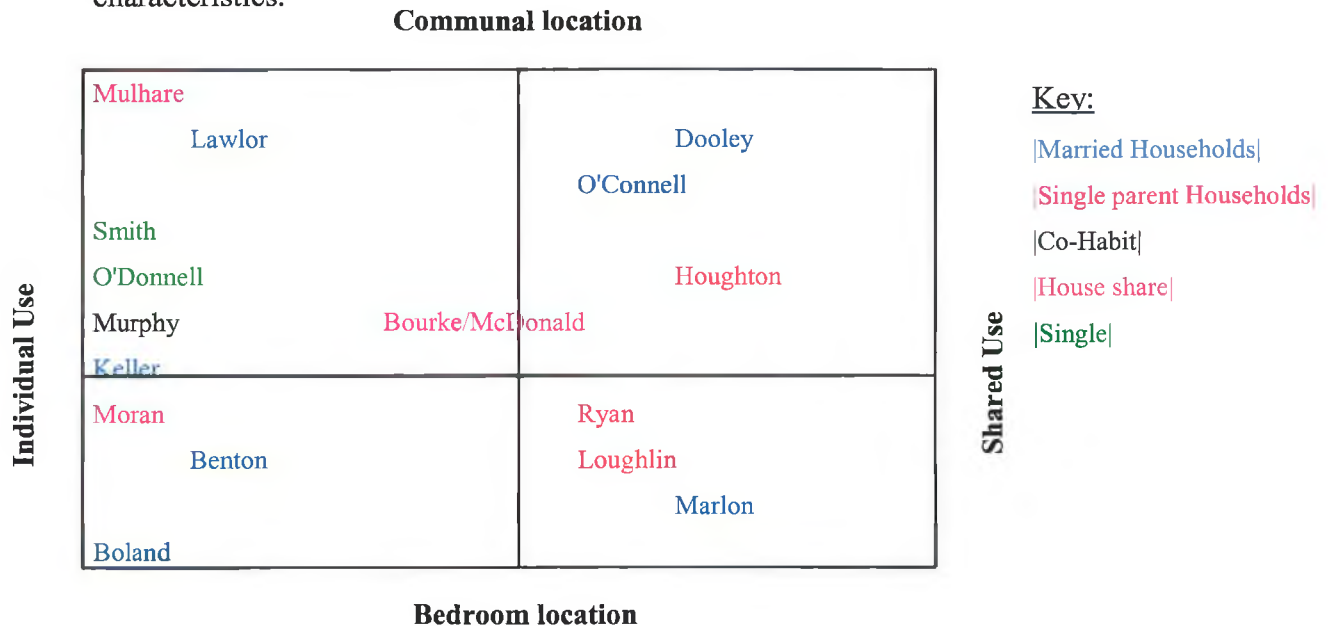


Figure 9.2 Matrix of ICT location in household by use

9.3.1 First quadrant: communal location and individual use

In the first quadrant of Figure 9.2, the most obvious similarity between the households is the absence of children and young users (Figure 9.3). The households that do have children have very young children. Locating the internet communally depends on several factors: first, is loneliness. Respondents, from single or separated households, speak of how the internet facilitates living alone or without adult company.

Communal location

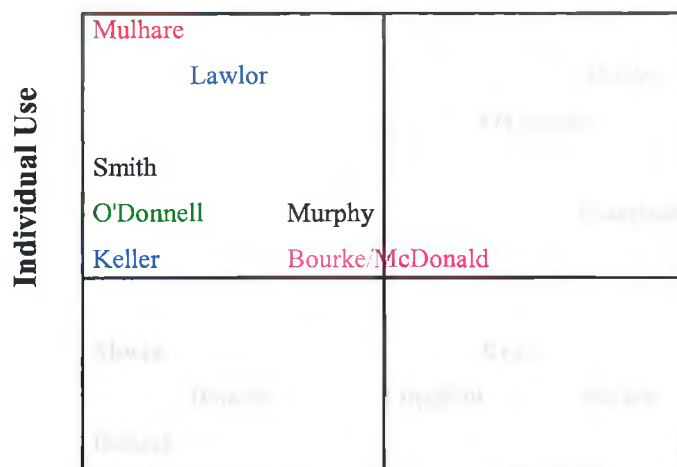


Figure 9.3 First quadrant: communal location and individual use

Martin Smith speaks of the internet as a way of making living alone easier:

It makes it easier to be home alone

While Mairead Mulhare has come to place a huge amount of importance on the internet as a source of companionship and company. She reveals:

It's my boyfriend, and my friends rolled into one.

The above quotes are indicative of this quadrant's approach to the technological artefact. The internet for this group is more like a friend rather than a tool.

9.3.2 Second quadrant: communal location and shared use

The second quadrant (Figure 9.4), encompasses the communal and shared use of the technology. It is comprised of households with children who are active users of the technology, although this use is heavily monitored and supervised. For this level of supervision to occur, the artefact must be located in communal areas of the household. The shared family spaces accommodate the artefact and bring the consumption of the internet into spaces typically inhabited by mature media like television and radio. Use of the internet is moderate, with some households claiming daily use, but there is frequent to average use among members of this quadrant during the week.

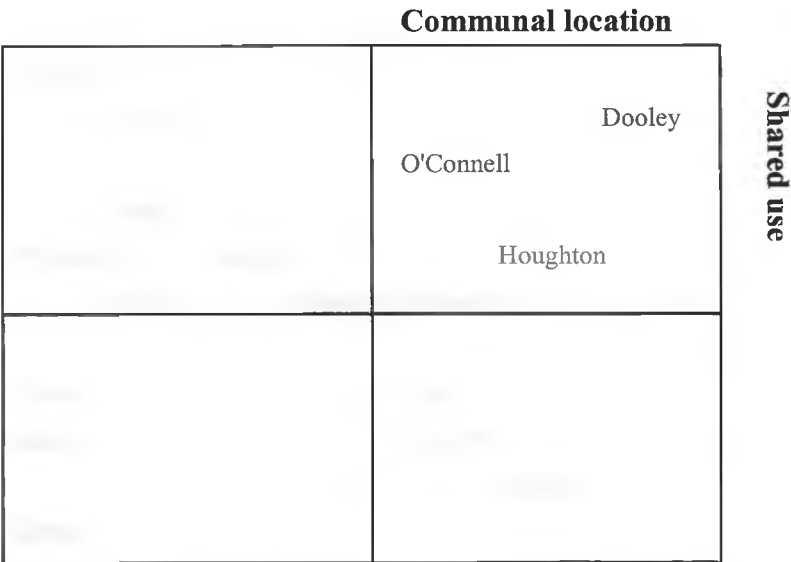


Figure 9.4 Second quadrant: communal location and shared use

Rules and regulations are enforced by the households. Participants in my sample with young children and adolescents using the internet in the home were concerned with the type of material that the children could potentially access. The majority of parents took measures to prevent their children from accessing and consuming unsuitable material. For example, in the Dooley household, Mary talks about the effort she and her husband made to ensure their son, Tom, viewed suitable material while consuming the internet. When asked about the decision to monitor their son's consumption, Mary states:

First of all, you know if someone could do something we could all see it, when you are passing it by, and of course the safety aspect...I certainly have picked up on the vibes that you read about, and that's why it is here and not upstairs, at least if it is here and someone is playing you can keep an eye on him.

Des states:

He hasn't used the internet yet...well he hasn't got the skills, like typing or spelling, no he hasn't been using it on his own yet...Anytime Tom uses it has been with me, more me doing it and he watching.

Similarly, Karen O'Connell ensured her children's access was safe.

They don't know the password. But I would have a big concern if they were older, if they were clicking around and dipping into the bad end of the internet, the different sites or whatever, I would have concern then. But because they are so young we won't have a problem for a couple of years, because they are still only six and eight. And we monitor a lot, I wouldn't have then sitting on the computer for an hour or more.

Alan, Karen's husband, justified their decision to locate the internet in a communal area because of the specific safety concerns outlined by his wife.

The fact that it is in the main sitting room as well, they don't go on it or we don't leave them on it or anything. You'd know, like if you were here watching television, you'd know straight away because you would hear the phone line.

These quotes indicate the level of fear attached to the internet as a communications medium and also as in a sphere which to display and publicise information and data of any kind. The households in the sample are aware of this fact and have taken precautions to ensure their children are not exposed to such material. It is noticeable the principle users of the technology in this quadrant are the parents as opposed to the younger members of the household. Locating the artefact in a shared, communal space influences the propensity of older, more mature members of the household to use the technology. Also, the main uses and functions of the technology are informational based, in terms of surfing and topical interests. It is also noticeable in this quadrant, that two households speak of their use of the internet as a family activity. In the O'Connell household, they speak about the time when the family congregate around the monitor to share their experiences online. Similarly, the Dooley household speak of times when there has been more than three people reading the same webpage at the same time.

9.3.3 Third quadrant: bedroom location and shared use

The third quadrant (Figure 9.5) is comprised of households with multiple users including children who need no supervision. In fact, in two households there was no parental use of the technology at all. In the second quadrant, a similar observation was made. It was noticed that in some households, parental use was a direct result of the decision to locate the technology in a communal location. However, in the third quadrant, the artefact is located in the bedroom of one of the children in the household.

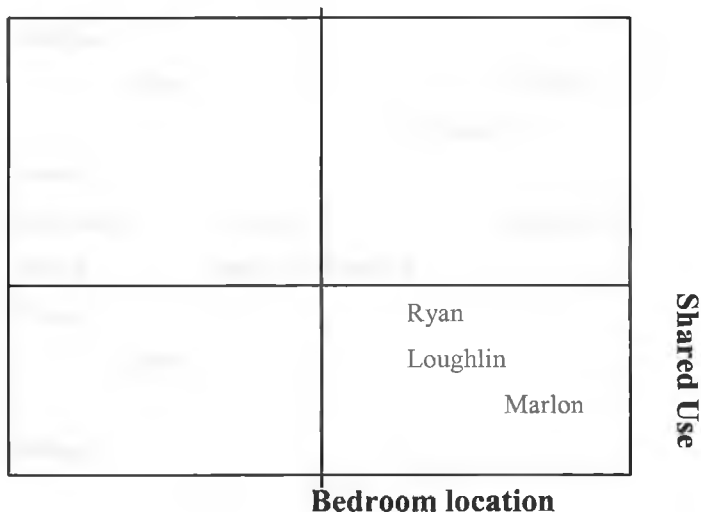


Figure 9.5 Third Quadrant: bedroom location and shared use

The greater the number of household members, and the decision to locate the technology in an exclusive location, means some family members have more access than others. The computer and the internet is seen as a younger person's technology in this quadrant. The decision to locate the technology was made by the parents of younger teenage children in two cases, and by the son, who had purchased the computer himself, in the third household.

One household speaks of locating the computer in the bedroom of the eldest daughter to try to discourage her father from using the computer as a games machine. The location of the artefact was seen as a barrier to use because it was isolated location and invaded personal space. She states:

...because when my husband is here you couldn't get him off it, so I put it in her room to stop him going near it. He'd play games on it...

Reg Loughlan, also saw the location of the computer as a barrier because he described the location of the artefact as being 'upstairs' signifying somewhere out of sight and in isolation. He states:

I mean, I wouldn't dream of going upstairs and turning it on, I have no interest in it

These quotes serve to illustrate how the location of the artefact plays a vital role in the ways users make sense of the technology.

9.3.4 *Fourth quadrant: bedroom location and individual use*

This quadrant (Figure 9.6) contains two kinds of households – two married households with young children and one house-share. In both married households, the technology is accessed only by the male partner. Their use is infrequent and sporadic. In very rare occasions, the female partner may use the technology, but only with help from their male partners. The children have no need for supervision as they are too young to use the computer/internet and the technology can be easily and without hassle located in the bedroom of the parents.

Individual use		
	Moran	
	Benton	
	Boland	

Bedroom location

Figure 9.6 Fourth quadrant: bedroom location and individual use

In the house-share, the two household members are not related in any way and thus are entitled to locate the technology in private spaces along with personal items. The technology is not seen as another piece of furniture for the home, nor is embedded in the public media network in the shared living space. The moral economy of this household is very much fragmented, possibly two separate moral economies between the two members of the household. The use and consumption of the technology is determined by the opening up of a private space by one member of the household. The use and interaction time is further compromised as the relationship with the technology is restrained due to its location.

9.4 Section conclusions

The purpose of this first section was to examine whether the make-up and configuration of households proved to be an influential factor shaping the location of the artefact, the use and consumption patterns of the households who were involved in the study. The matrix of households (see Figure 9.2) categorised the households according to the location of the artefact and the primary user of the technology. From this matrix, it was possible to conclude that households with similar configurations were more likely to locate the artefact in similar positions and conceptualise the artefact along similar lines.

Therefore, those households who placed the internet technology in a communal location and tended to have one dedicated user were made up of mainly single households, house-shares and only one married household, or in other words, households with the least number of people. The households located the first quadrant tended to value the internet as a communications technology more so than anything else. In these households, access to the technology was unproblematic.

In the second quadrant, it was easier to draw parallels between the households constituting this quadrant based on shared use and communal location. The households making up this group tended to be families who regarded the internet as a collective medium where the family could participate together. However, it was used mainly as an information resource.

The third quadrant was comprised of family households again, however this time, there were multiple users involved and the internet was located in the bedroom of a household member. In this group, we see primarily young users and only one household where a parent is an active user. From this, it is possible to conclude that households with young family users tend to locate the internet in a bedroom of a sibling.

The final quadrant was comprised of households who located the internet in the bedroom also, but had only one dedicated user of the internet. The technology was then located in the bedroom of this user and the other household members did not participate in use. A common trend displayed by these households was the influence of aesthetics and space. The households located in this group all testify to actively deciding to locate the internet in a bedroom for two reasons. First, because it was the private domain of the only active user in the household, and second, because space was an issue and the internet simply 'didn't look right' in any other location.

Each household outlined their reasons why they choose to locate the internet in a specific location. This decision was based on the significance, meaning and conceptualisation of the internet. When the internet is regarded as a communication technology it is more likely to be located in a public space. Conversely, those households who regard the internet as an information resource or

as a tool where more likely to locate the internet in private location, such as a bedroom of a family member.

The difficulties in assessing the agency of gender as a social shaping factor, referred to in Chapter seven, were not found in my exploration of household configuration. The constitution of the household was more significant in terms of use and consumption of the internet artefact.

A noticeable trend emerged related to the frequency of use and the number of people in the household, in that larger households used the internet less. What this tells us is that the internet is a social artefact and the number of regular users has an influence on how users conceptualise the internet, how they use it and what they use it for.

The visualisation of households in a matrix of use and location was a useful exercise. Each quadrant highlights the commonalities between certain households with similar characteristics, such as the types of functions they used it for and where they located it. It was apparent that the internet came to mean different things to different users. Individual users find 'their' *internet* and domesticate it into their lives accordingly.

9.5 Case-study: household configuration

As on the previous case-studies, one particular household will be explored in depth in order to assess how the composition and configuration of the household is influential in shaping the use, consumption and conceptualisation of the internet. This particular household is a lower working class household and this case-study provides an in-depth account of how a separated mother of two fits the internet into her everyday life, within the economic restraints of being unemployed and responsible for the welfare of two young children.

This case-study provides valuable insights into a household which would usually be located in the late adopters/or non-users of the internet, due to the economic restraints of available purchasing power (i.e. the computer/Unison which could be seen as a luxury purchase and difficult to justify). However, significantly, the

profile of this household is not the stereotypical profile of heavy users and early adopters (young, urban, white, middle-class males).

9.5.1 Mairead Mulhare Background

Mairead lives in an area of north Dublin known widely for its social problems. She lives in one of seven tower blocks that house the majority of the residents, although the towers are soon to be demolished and replaced by a new housing redevelopment plan. The area is associated with poverty and drugs, particularly in media representations. However, the residents don't always agree with this image. From the outside, the flat block is grubby, unpainted, and graffiti stained. There are bars across the windows and balcony area to protect lower ground flats to give added protection.

Mairead lives on the ground floor of her flat block. She used to live on a higher floor in the tower block when she was young, but when she married, she qualified through the welfare system for a ground floor flat with her husband. Her flat was bright, well heated, and nicely decorated. She has recently redecorated the flat with the help of her mother. The sitting room where the interview took place was furnished with a three-piece suite, which complemented the pastoral colours of the wallpaper and linoleum. This suite of furniture takes up quite some space in the room. In the middle of room there was also a coffee table, on which sat the keyboard for the Unison. The television unit, with VCR and set-top box, faced the couch. The flat had three bedrooms, a bathroom, kitchen and balcony area.

Mairead lived with her two children, a boy and a girl, aged three and seven. She had recently split from her husband after being married for ten years. Mairead described it as an amicable split, saying they separated because they had grown apart. She views her present marital status as married but living apart. Her husband lives across from her in the next tower block. Her family also live close to her. Her mother lives about 70 feet away, in a house. Mairead normally visits her mother every day after collecting her two children from school. It is in her mother's house that she would meet and talk to adults her own age (apart from chatrooms). It is also there where she, her mother and sister would meet and exchange magazines, books and papers. Although she has friends in the area,

Mairead says that these days she doesn't get out much to meet them because it is difficult to get a babysitter. Family are the only real friends she would see on a regular basis. One of her friends, from a few storeys above, has access to the internet at work, and they would compensate for their lack of face-to-face communication by emailing each other at regular intervals. Her brother has recently moved to Perth, in Australia, so she sometimes keeps in contact with him via email. He would ring at the weekends, but it is hard to co-ordinate a time that is suitable for them to chat online due to the time difference. She admits that her sister and brother would communicate more together, as they were closer.

Since it was difficult to get out and socialise with her friends, Mairead feels the Unison set provided her with an outlet to the 'real world'. She has been able to make some friends via the chat-rooms. She said that she found it easy to communicate with people through email, as she was able to be herself and felt comfortable being funny or putting forward her point of view. She said that she feels she had become more confident and less shy in herself since opening herself to the chat-room environment. Since the split from her husband, she felt increasingly lonely, and with two young children her opportunity to socialise has been curtailed. Unison chat rooms provided her with an alternative to friends and company. She was delighted when people sent her emails and showed an interest in her views, hobbies and recreations.

Mairead is unemployed, but once held a job. She left school after the Inter Certificate exam. This is a year before achieving a Leaving Certificate, which is a preferable qualification for employers. Her present income is roughly 250 EUR a week, mainly of welfare payments. She is 31 years old and married her husband when she was 21, quite an early age in contemporary Ireland.

9.5.2 Appropriation

Mairead Mulhare came into possession of the Unison set-top box through winning a competition in her local Spar shop. She had no experience of the set-top box prior to obtaining it through the competition. She could be deemed to be at a disadvantage because computers are more widely owned than Unison set-top

boxes. Mairead has had experience of using the computer in her son's school, which runs a variety of courses for the parents of the children.

Mairead found the set-top box to be a convenient substitute for the computer in terms of internet access. It was particularly convenient to her because it is relatively small and cheap. First, space was a problem. In her flat, the only living area which was common to all household members was the sitting room. It would have been difficult to locate a computer in this space. Therefore, the set-top box was an ideal alternative to the computer. Second, Mairead's income of €250 was too low to afford a computer. She says:

It's handy if you can't afford the computers. You know, they are very expensive anyway. That's (Unison) £300 really, like if you won it in a competition or something like that, it's great.

User friendliness was also a feature of this ICT. She remarks:

It was easy enough to learn to use it. You usually get instructions. You get an instruction book, you just go along, you learn as you go along...you, don't really need to know keyboard skills to know how to use it. It's all there, so. It's good in that way...the only thing with it is that it has its own browser and stuff. You can't download the big corporations, like Microsoft and stuff like that. You can't download any of their sites so that's the only (drawback)...I installed it myself.

Mairead stated that it took about a week to get used to the controls and functions of the set-top box.

The introduction of a new medium to the media network requires a re-negotiation of relationships with traditional media previously established in the home. Simultaneously, new media rely on old media to present, position and legitimate an unfamiliar or novel technology to the domestic media network and to the user/consumer. This is particularly relevant to this case-study. The assimilation process of domesticating the internet into the Mulhare household is highly reliant

on 'old media'. In this case-study, the Unison set-top box is dependent on the television for operation. Without the use of the television, it could not be used because it has no monitor or visual display unit of its own. I have come to the conclusion that using the familiar technology of television makes it easier for households to incorporate the Unison. Because a traditional media technology is used, a relationship has already been forged with the television and it is accepted by the household, unlike the computer. If the computer is foreign to members of the household, its transition from novel technology to accepted technology is more challenging.

9.5.3 Objectification

Mairead described the introduction of the set-top box to the home as a relatively smooth process. As an uncomplicated package, it fitted with ease into the living space. The keyboard was located on the coffee table, and the box itself on top of the television. The only real inconvenience experienced by Mairead was that the Unison needed to be in close proximity to the telephone line and to the television, which limited her options for locating it. Luckily, the phone line was quite close to the television and no refurbishment of the flat or room was required. This point is quite interesting, as it ensures that consumption of the internet must be conducted in the household's principle living space, which has an influence on the use of other previously established media in the room. She remarks:

It's just beside the phone line and the plugs, so it's okay, and there is a good few feet of telephone connection on it so you can put it in any part of the room.

Mairead chose to locate the Unison in the sitting room because the television is a colour television. She has another television, but it is black and white and the Unison doesn't work well with it. Also, the phone connection would be too far away.

The location of the Unison does have implications for the actual time spent using the technology and when and for how long she can use the internet. She says:

Yeah, it does...because it is there. You'd automatically, I mean I come in, just put it on. I'd look up a few things, like things that I'd have to figure out or something like medical problems or something like that. I'd just put it on and go into a chatroom, or my brother would send emails, or I send him back replies.

Due to its location in the principle living space of the flat, and also where the main television is located, use of the internet is influenced by factors other than personal preference, such as the presence of others in the room, or if family members wish to watch the television.

The objectification phase is concerned with the display and location of the technological artefact. In this particular case-study, the Unison is highly visible in the make up of the media network in the living room. It is located with the television and video, as both are in close proximity to each other, but the fact that the keyboard is displayed on the coffee table in the centre of the room indicates that the Unison is a highly esteemed addition to the living room. This set up communicates the fact that this piece of equipment is highly valued in the home. When in use, Mairead puts the keyboard on her lap and it becomes an extension of her body, in the physical and mental sense. It gives her a closer experience with the internet, especially when she becomes emotionally and actively involved with the content of the internet. She regularly enters into chatrooms and conducts discussions and discourses with other Unison users. It is a feature of the Unison set up that there are a number of chatroom options available. The location of the ICT enables Mairead to construct and maintain a relationship with the internet and those in the chatrooms with whom she regularly communicates. Her consumption of the internet would have developed different patterns if the Unison was located in a different location. The household configuration of this case-study is instrumental to how the consumption of the internet is influenced. That Mairead lives with her two young children, who need constant attention and supervision, certainly has an influence on where the technological artefact is located and on the times it is accessed.

Mairead outlines how the choice between using the internet or using another traditional media is made:

It depends if there is good programmes on. You can watch the TV while you are using the internet. You click on picture and picture, and a little box appears in the corner. You can be chatting away or whatever, and you can watch telly at the same time. You are not missing anything really...*(when asked whether the children have an influence on what is watched and when, she replies)*...they can go out to the other room if they get really fed up *(laughs)*. They just go out to the other room and put it on out there.

This remark indicates that consumption of media (both internet and mature media) is an important activity to Mairead, to such an extent that her children are sometimes forced to leave the main room to consume their choice of media. Mairead has a set up of media networks in the living room which satisfies her media needs. The phone is located in the same space as the Unison and the television/video/music system.

The role of the telephone in this media network environment impacts the location and the domestication of the internet in this household. Mairead outlined this relationship:

Yeah, if my mam or sister wants to ring and the tone is engaged or whatever, but they ring back or keep ringing. But if it was really important they'd let me know I haven't got a mobile phone, so they wouldn't be able to contact me

To assess what sort of impact this has on relations between Mairead and those trying to ring her, I probed further:

(Do they get stressed?) Yeah, a little bit, yeah. *(What do they say to you?)* 'Are you on that thing again? Every time I ring you are always on it. Its always engaged. Sometimes when the phone is ringing and I'm online it would come up at the end that the phone is ringing, so you would just go

and turn it off. But it depends on how long it takes to turn it off, if they get fed up. If they hear it is engaged they'd just hang up.

What is evident from this comment is that Mairead's family had begun to notice the extent of her internet consumption and had challenged her about it. This interest had forced her to curtail her internet consumption by handing over her access card, without which the Unison will not work, to her mother during the week. This is both to save money and to reduce the amount of time consuming the internet. She normally gets the access card back at the weekends when she can spend more time consuming the internet for less money than during the week

9.5.4 *Incorporation*

The incorporation stage is concentrated on issues concerning the use and the construction of meaning of the technological artefact to the user/consumer. ICTs generate contrasting meanings for different people, depending on a number of factors, which include age, gender, household configuration and so on.

The most useful way to describe how meaning is constructed by Mairead is to look at how she responds to certain questions on meaning of ICTs. The first question is designed to examine how the internet technology is regarded among other technologies in the home. The rationale behind this question is to ascertain how the ICT rates against other technologies, to assess whether it is thought of as being special (i.e. having special qualities and attributes) or if it is regarded as just another technology in the home (i.e. the washing machine), which provides a function to the user. What I wanted to ascertain was whether the internet *means* something else to the user, as opposed to just being there, another piece of furniture. The question was also designed to ascertain the level of domestication the ICT had achieved.

Interviewer: And how do you think of it? Just as another machine for the house like a washing machine or a microwave or fridge, or do you think it is a special machine?

Mairead: Oh, special, definitely. At the moment like being here, being a lone parent, I can't go out socialising as much, like chatting with other Unison users in the evening, it has become good for getting to know other people. Well, you don't know them but, you know, you have to be careful as well...it's fun...It really gives me more confidence, really. I don't really have many friends. It's just mostly family, I have a couple of friends that I see or go out with. This way (Unison), they can't see me, you know that way, you can talk when you want or just turn it off if you get into. I'm not very clever, one of these sort of conversations, but it is good.

From this quote, four key issues become apparent. The first point is the fact that Mairead realises that as a lone parent she can't go out as much as she used to when married to her husband. Money is tighter and finding a reliable babysitter is normally reserved for important occasions. Therefore, a substitute for socialising is required. This is achieved through the Unison, where she can interact and chat with others, possibly in the same plight as her. With the Unison, there are several topics for users to chat about. Each has its own chat room (e.g. adult chat). Therefore, the alternative to the physical meeting of friends outside the home is the construction of virtual relationships with other Unison users, who post messages and conduct discourses in the evenings and nights from their sitting rooms, via the internet. This arrangement suits Mairead, because she doesn't have to hire a babysitter and leave her children. She also saves money by staying in during the week. It also helps her situation in that she reveals that she doesn't have many friends and relies on her family to provide a recreation break from her life on her own with her two children. This quote indicates that the internet means more to Mairead than just an information retrieval tool. It means that she can communicate with people again. She realises that: 'It is a bit sad that you can't be sitting with them, you know, and be outside instead of just sitting in your sitting room, sort of talking with them'. This is big realisation for her as she accepts her position and that her situation prevents her from partaking in activities which require money and to be apart from her young family.

The second important issue concerns the notion of confidence building. Mairead declares that using the internet to 'chat' and make new friends gives her a confidence boost. It is easy to see how. Before using the internet, she was dependent on her family and husband for friendship, amusement and distraction. Since then, she has split with her husband, and this in itself would provide a confidence setback. Therefore, being at a low ebb, Mairead needed to re-initiate herself as a person to enable her to take part in conversations where she would have no back-up or support from her husband. Related to this, she makes the following point:

I don't get the opportunity really to talk, because I am just here all the time. I don't have a job. I had a job, but I don't anymore. It's mostly talking with my family and stuff, and with the courses and that I am only starting to really talk about different things and getting to know other people and talking to other people. I've always sort of been alone, a lone sort of person. You know, just having my husband or my family just here, I am just sort of coming out into the world. I never had any confidence, really. I wouldn't speak up about anything, or if I had a problem, everyone else would be pushing me saying 'go on, say something', and I'd be going 'no, no'. I'd just let everyone else speak.

The factors pertaining to the lack of confidence are as follows: not in a meaningful relationship, at home alone, no job, lack of partner, only family for regular conversation. Trying to attribute this new-found confidence to the Unison, Mairead tells that she

...can be funny. My sister, she does be on as well, and she says that I'd have her in bits, the things that I'd come out with. I don't know where it comes from. It just comes out of my head. I'd just write it down, what I am thinking or whatever comes out. She'd say it to me: "How do you come up with things like that?". It just comes out. I don't know why. That's starting to come to me as well, face to face with people.

This insight into how Mairead conducts herself with the people around her and those online is crucial to include in the overall investigation of how the meanings

of technological artefacts are constructed and maintained. If we assess Mairead's social characteristics, we can see how important the internet is to her as a communicative tool and a device for accessing and connecting to a wider community, which is interested in issues and topics other than the interests of her ex-husband or family. It also provides a source of information and exchanges with others, which is instrumental in helping her to achieve a higher level of self-confidence.

The third key point is the ability to end conversations at will. In a self-deprecating style, Mairead claims that she is not very clever and, therefore, has the ability via the internet to withdraw from conversations she finds particularly onerous, or overwhelming, and as we shall see later, offensive or rude. The power to pull out completely from a conversation, or simply remain silent and passive, is quite unnatural in regular face-to-face communication, where it is more difficult to end conversations without causing embarrassment or offence to the parties involved. In real-time engagements, Mairead would normally let others speak while remaining on the periphery of a group of people. The idea of becoming involved in an online forum is an important feature of Mairead's consumption of the internet. The concept of interaction with other users who are interested in the same kinds of things that Mairead is appeals more to her than being involved in other kinds of conversation where her vocabulary or knowledge of the subject may be limited. Using the Unison set-top box, she meets with other users and a conversation ensues where one user introduces themselves, and so on. But, in other forums, Mairead can relax because she knows that whoever else is on the forum doesn't know her 'from Adam'.

They don't know her social factors, such as where she lives, or being separated with two children. Faced with this scenario, Mairead is more at ease and can be herself, which is indicated by her use of humour. She doesn't have to talk to anyone and is perhaps unskilled or ill-prepared when it comes to talking to adults other than her family, who already accept her, and she is comfortable with them.

The following is an example of the types of conversations she joins:

There is another chat room that I'd join in with. It's an American one. It's an Eagles fans, Don Henley. They have a forum page for fans. I joined up with the chat at that. You know, the different time zones, they are usually all on about two o'clock in the morning our time. I wouldn't be on. I'd be asleep at that stage. It's a bit difficult, but I've been reading a couple of the messages and there is a few English fans that were saying the same thing. We must have all been thinking the same, that we should all chat anyway at our times instead of all the others. So, I think that's another thing that's going to be starting up. I wrote back saying that I thought it was a good idea. I can talk to people that are interested in what I like. I can talk about things that I like more than just general.

The type of mediated discourse that suites Mairead is on issues that she feels confident to speak about. Clearly, discourses concerning issues that have particular relevance to Mairead's personal life and interests engage her the most.

In addition, it is easier for Mairead to conduct discourse at home via the Unison set-top box, as she can use it at times that suit her. During the day, while her children are at school, Mairead takes care of the day-to-day running of the home (e.g. washing, ironing) as there is no one else to help her with anything. Her daily routine consists of getting the children ready for school and meeting her sister, who also drops off her child at the same school. The sisters would normally visit their parents' house, which is in the vicinity. There, they would share news, gossip, newspapers and magazines:

Women's mags, Woman's Way or Time mostly. I usually just fly through them. It's usually something about diets. We usually buy those, or something that's going to happen in soaps, we'd buy those too. One a week we buy. They are passed around the whole place.

From this it is possible to ascertain that Mairead's media discourse is heavily influenced by her family and this is why the alternative offer of the internet is such an important feature in her life. In essence, it provides her with an escape from the mundane life of chores and family conversations. Her lack of confidence to converse on topics other than those of a personal interest – soap operas, music – is

regarded by Mairead as a direct result of being not very 'clever'. But she can rely on the fact that by simply switching off the Unison she is able at any time to terminate any conversation. This can be achieved merely by a touch of a button and brings no ramifications to her relationships with those online.

Mairead reveals that she doesn't feel comfortable speaking in public, yet she doesn't seem to be inhibited when conducting online conversations by writing her opinions down on a screen. Being one who wouldn't speak up in public situations, she has found herself adding to and initiating conversations online. The added sense of security (i.e. conducting conversations on topics that interest her from her sitting room) with the bonus of ending any conversation, have all influenced Mairead's continued use of online chatrooms for communication purposes.

The fourth key point is that Mairead is happy that the people she chats to are unable to see her. At the time of the interview, Mairead was having dental problems and required false teeth. As a result, she was quite embarrassed and conscious of how her teeth looked, and this had an influence on her recent lack of socialising. Due to this 'social' factor she needed leisure pursuits to replace the socialising that involved face-to-face contact. Therefore, a social need influenced the media she chose to fill the void. In essence, Mairead Mulhare's internet consumption can be thought of as a *social process*, influenced by the social and consumed in response to a social need. Mairead describes how the online conversations are conducted:

Sometimes you say how old you are and ask them how old they are and describe yourself and they describe themselves, so you sort of get a picture in your head of what they are like. And then, we're usually all having a few beers at the same time, so it is sort of like being out, only that you are not there, so you can picture what they look like. It's weird. It is a weird thing. I think it is anyway

9.5.5 Consumption convergence

Mairead is limited in the space in which she can locate the media. Even so, there is a concentration of media networks in the same location, the sitting room. Mairead states:

...you can be chatting away or whatever and you can watch telly at the same time.

Before she realised the Unison set box had the function described above, she found that:

I do miss out on certain favourite programmes, but I am able to watch them now. I didn't catch on to the way that I could watch the TV at the same time, so I do now. I can watch them whenever.

This quote indicates that the Unison had taken over from some of the media previously consumed. However, the built-in function of the Unison has solved her problems. She claims that other media have suffered since the introduction of the internet to the existing media network in the sitting room.

Before I used to listen to the radio more than watching television, like the walkman. I used to be sitting here with the walkman in one ear and listening to the television at the same time to my favourite radio station and stuff like that.

Again, this quote points to an interesting insight, that consumption convergence actually was clearly evident before the introduction of the Unison set-top box. The fact that she used to listen to both the radio and the television concurrently is testament to the concept. Now with the arrival of yet another media technology to the framework, it increases the chances of experiencing consumption convergence in the household.

9.5.6 Contact with family/friends and social patterns

Given the choice, Mairead would prefer to rekindle her relationships and friendships outside the home. The Unison is seen only as a substitute, and not as a permanent replacement, for these relationships. She testifies:

I'd be gone. No, definitely go out. Because I have completely lost touch with all my normal people that I see. I haven't seen them in two months, so I'd be gone in a flash.

It is possible to ascertain that Mairead would like to reconstruct the friendships lost over the time she has split from her husband. Asked then how another relationship would affect her Unison consumption, she replied 'I wouldn't be on it at all'. From this quote, it is clear that Mairead believes the internet to be a second choice substitute for regular relationships. However, the above quotes are hypothetical responses. At the time of the interview, she was unable to socialise with her friends as much as she liked and she has no partner either. Taking into account her current state of affairs and social characteristics, she conceptualises the internet as: 'My boyfriend and my friends rolled into one'. This quote is crucial to how Mairead frames the internet in her life and what it means to her. In fact, it is her link to the social. Without the internet, Mairead would have to reassess her situation as it stands.

9.5.7 Other aspects of Mairead's use

The most important reason Mairead outlines for having internet access in her home is as follows:

To learn about things and to chat to people in general, looking up things that I want to know about, looking up nice pictures, medical things and how to do things (*referring to her son's medical condition*) He has a muscle disorder, so it's really handy to find out what it was about and symptoms and things you can help with and that sort. I had a lot of information on things. I would, would be wrong, it's bad that way. I suppose I'd sort of be diagnosing him with something he hasn't got, that's about it.

In addition:

Emails, we can talk to each other rather than speak on the phone, keep in touch with family and friends...and my friend Yvonne and people that have the same interests. They see my name in the chatroom and they send me messages, and if I post some message on the fan pages they'd reply. They wouldn't reply directly to me, but through the room itself, and the

room would let me know that someone replied so I can reply back to them and leave a message.

The question of the meaning of the technology, which is central to this thesis, can be explored in a range of ways. During the interview, questions were put to the respondent concerning the influence, role or part the internet plays in their life. In this particular case-study, the respondent answers in an in-depth manner about what the internet means to her and to what extent the internet has become part of her life. She says:

Apart from all the people you'd meet that's really gives me more confidence. I think really.

In a temporal sense, the internet constitutes a large part of her day. She answers:

Mostly evenings and mornings now, I'd put it on. But there wouldn't be anybody in the chat rooms in the mornings, really, mostly in the evenings really, when the kids have gone to bed and there doesn't be many good programmes on in the evening...when I haven't got it on I could do without it, you know, get on with things really...*(can you do without it for long?)* no! I'd have to put it on, I'd have to see if I have any emails or something, I would *(and how often would you check?)* every day, ah! Loads! Every minute.

Mairead experiences a sense of disjunction when the Unison is turned off, a sense of separation from those people and friends with whom she shares a certain affinity. It therefore prompts her to reconnect regularly through the day to rekindle the virtual association and check for messages from those she considers friends.

Mairead's first experience with the Unison provides a useful insight into how the technology becomes appropriated and incorporated through the domestication process. Mairead recalls her first experience of the Unison shortly after acquiring it. She says:

The first thing was, they actually send you an email to say 'welcome' and what's happening here sort of thing, so you sort of learn from there, press collect – it just comes up. The first things I looked up were the Eagles homepage. That's all I'd look up on my brother's computer, and I hadn't been on his computer for a few weeks – that's what I looked up first. I couldn't believe that it would actually come up. And then, I was finding more and more, and as the days were going on I was finding more pages that was linked to it and there's hundreds now.

From Mairead's inaugural encounter with the new technology, she choose to visit a site which she had previous experience of and was particularly familiar with. This is an important feature of internet consumption, which is evident from my empirical data. The consumption of content is influenced heavily by personal interest and events which impact on the daily life of the individual and the household. So, for her first experience of the Unison, Mairead chose to visit a site that she is very familiar with. From her reaction, she seemed surprised by the fact that it was possible to access the site from her own private space. Rather than depending on her sister's computer to access the information she wanted, Mairead has the technology to do it for herself at a time that suits her. When asked about the websites Mairead accessed most often, she replies:

Mostly the Eagles homepage, because they have updates everyday, so I'd check that out everyday. The Unison homepages as well. There is another home page that I go to as well. It is a beach in California. It's like a restaurant but it has a webcam pointing out to the beach front. I check that out because I think it's brilliant, cos it's just up to date, real life, sunshine, people walking past, and it's wishing I was there.

There is a pattern emerging in her consumption of the internet. The Eagles homepage is the main attraction of the Unison, because it is through this page she accesses the chat rooms which mean so much to her. A form of escapism is also engaged in through the accessing of sites from which she can see different sights and views. This also informs her discourse with other Eagles fans on the message/bulletin boards. To be able to chat about an interest via the internet is a source of confidence building. This comes in the form of topics to discuss, a forum for offering opinion, plus the information and data on which to form this opinion.

Therefore, the discourse is inspired by information and data supplied from the one source, and it is through this that Mairead can participate in the discourse, while not feeling inadequately informed.

Mairead has revealed that she 'is here all the time', mostly on her own, with little outside distraction. It has been this social factor that has influenced her consumption of the internet, but this social exclusion has also had an impact on another pattern of internet use, which was mentioned above with reference to escapism.

John Urry has written extensively on how the Tourist Gaze (1990) is constructed and can be related to this notion of escapism. In addition, in Consuming Places (1995), Urry states that 'places are increasingly being restructured as centres for consumption...(and) places themselves are in a sense consumed, particularly visually' (1995:1). Mairead's own sense of place is shaped by her social characteristics, which include her unemployment, shortage of money, absence of a partner and so on. Her consumption of place is culturally, economically and socially bound, with each factor exerting a critical influence on how she sees herself and her relations within the wider society. The internet offers Mairead an escape of sorts, to beaches and sun sets, that would be the content of dreams for her. In her present economic and social situation, the potential of experiencing those sights seems unattainable. Therefore, her only means of accessing sights of this nature would be to use the internet to search for sites providing web cams or streaming video from the exotic places of her dreams. Concerning the concept space/time relations, Mairead can experience the sights of her dreams while sitting on her couch in her sitting room at whatever time she likes.

9.5.8 Compared to face-to-face communication

Mairead outlines how she finds the contrasting kinds of relationships that one can experience with both online and face-to-face communication.

For me at the moment, I can't go out as much as I'd like, so I can't see any of my friends that I'd usually when we'd all go out to meet. So when I'm here I would like somebody to talk to so. We do have a good laugh sometimes...you're getting to know all about other people, you don't

know their backgrounds or whatever. I suppose you learn about people and that. We have a laugh anyway. I'd be the one who'd sit in the background and let everyone else talk. I can do it with this as well, but they'd tell you 'come on, what's the story, where are you – are you not going to answer?'

Mairead is trying to draw similarities between regular communication and online communication by saying that you still get to meet new people, find out about them and have a laugh. She justifies to herself that this communication simulates relationships she is used to in real time. Mairead speaks of the excitement of receiving messages from people she converses with online. It is the attraction of this excitement and the feeling of:

'at the start, it's exciting and you think "oh, my god, somebody is interested in me" sort of thing'

Mairead craved this sort of interaction since the break up of her marriage.

9.5.9 The internet and daily life

The overall changes to the pattern of Mairead's daily life are explored in this section, which is concerned with how the consumption of the internet influences or even shapes daily life, and how this is reflected in relations with 'outside life'. To examine this process, a number of themed questions were posed to Mairead which focused on how this dynamic operation occurs. These were designed to create an understanding of how the internet related back to everyday life and representations of it. Mairead said:

I know the negatives here with me...is with the kids, you know in the evening if I'm on the internet and it's getting to their bedtime. I'd let them sort of be wandering around a bit later than usual, when I'm on this now the time just flies by, next thing of all it would be ten o'clock, they'd still be up. But I can turn it off. When I haven't got it, it's great, everything gets done, the place gets cleaned up and whatever. That's the bad thing about it really...it's only at the weekends or the evenings that I'd put it on, and I'd have my few glasses of wine, so I'd be in the humour for talking

and having a laugh, that's when I'd put it on mostly. The negative, I suppose would be spending too long on it.

Thus, it is possible to ascertain that the internet plays a major role in Mairead's life, to such an extent that it has an influence on daily practices of household chores and her children's bedtime. The times of Mairead's online activities coincide with other social activities, for example going out to meet with friends. In Mairead's case, she uses the internet/chatrooms to replicate the social practices of interaction with people. They perform the same function as a social life.

Mairead has also noticed that her internet consumption has affected some other aspects of her life. She says:

I've been eating more and drinking more, because I'm on it late at night. I'd have something to eat, say about 7pm, and then at eleven or twelve. I'd be starving, because I often say 'I'm starving – I have to eat something to eat,' because I'm usually having a few beers or a couple of glasses of wine, so that would make me hungry.

The most revealing statement by Mairead was 'It's my boyfriend and my friends rolled into one', which sums up the level at which the internet has now been incorporated into her life. It has achieved such a level of embeddedness that she understands it as her link to the social, and it provides contact with the outside world for her.

9.6 Conclusion

There are several significant conclusions to be drawn from the case-study. The first conclusion is that the internet and television has become a comfort and a companion for Mairead. Since the departure of her husband, she has been faced with the loneliness of bringing up her two children on her own. This loneliness is compounded by the difficulty of funding a baby-sitter and the cost of going out with her friends, which makes Mairead something of a prisoner in her own home in the evenings. In this forced isolation, the television and the internet provide company. The experience of both is heightened by the fact that it is possible to

consume both simultaneously. To compensate for her forced removal from society, Mairead has come to depend on the internet to provide social participation, communication and interaction.

The second conclusion concerns the location of the internet. The fact that it occupies such a central position in the living room makes consumption of it easier for Mairead. Unlike households where the internet is located in the bedroom or study, Mairead does not have to leave the living room to log on. If she had needed to leave the room, her use and consumption of the internet would not be as frequent as is reported in this thesis.

This case-study illustrates the social shaping tendency of household configuration on the media technology. Mairead's financial situation was also shaped by the fact that she is a single mother. Being a single mother influences her need for companionship. The internet provides this companionship. Mairead has shaped the internet to fit into her life according to her social characteristics. The internet has come to represent something more than just a technology for Mairead, it has become her *friend*, and her *boyfriend* rolled into one.

Chapter Ten

'Teaching old dogs new tricks?' – Age/generation as a shaping factor

- 10.1 Introduction
 - 10.2 Generational cross sample analysis
 - 10.3 Section conclusions
 - 10.4 Case-study – The Loughlans
 - 10.5 Chapter conclusions
-

10.1 Introduction

In the final empirical chapter, one last factor will be assessed to provide a comprehensive study of the main social shaping factors identified in the conceptual framework. This chapter presents significant and notable findings in relation to *age/generation* as a social shaping actor and how this factor shapes and influences the ways respondents domesticate, conceptualise and use the technological artefact.

In chapter seven, we saw how gender as a social shaping factor, did not appear to be overly influential in the ways it shaped how male and female users consume and conceptualise the internet. It was also pointed out that the gender divide was becoming less of a force, and instead, in relation to new media technologies studies, generational factors seemed to be more significant. As in mature media studies, it was argued that certain users failed to successfully domesticate certain media technologies because of gender factors. This propagated the traditional stereotype that being technologically competent was part of the male identity. However, as generational factors become more influential, they have come to replace the gender gap. With this in mind, this chapter seeks to address whether similar stereotypes are being constructed in relation to age and generational factors.

The first section of this chapter will address the influence of age across the sample as a whole, highlighting the differences in use and conceptualisation between older members and younger members of the sample. The second part of the chapter deals with one household in particular where the generation gap between family members is especially observable. In this case-study, the oldest member of the household, Reg, displayed stereotypical responses to new technology and an aversion to all things technical. As we shall see later on, his two sons have

successfully domesticated and integrated the internet into their daily lives and each of them display an affinity to technical objects. The smooth integration of the internet into their lives is in stark contrast to their father's obvious and emphatic resistance to the technology. The case-study addresses how age and other social factors were influential in the domestication process.

10.2 Generational cross sample analysis

The first section will analyse the use and conceptualisation of six age groups across the sample. It attempts to draw some conclusions based on what users do and if any trends or patterns of age-influenced use emerge. This section will draw on a number of graphics/charts to illustrate the similarities between users of similar ages, if the gap between younger and older users is evident between members of this sample, and to assess whether the age of the respondent is, in fact, influential when it comes to the social shaping of the domestic internet.

The overall household sample, that is all members of all households, consisted of 47 people. The breakdown of how each age group is represented is illustrated in Table 10.1.

Age group breakdown	
Years	No. respondents
0 - 15	17
16 - 20	3
21 - 25	4
26 - 35	11
36 - 40	5
41 - 57	7

Table 10.1 Age categorisation of overall sample

The majority of the sample were located in the youngest age group²⁹. However, during interviews, the parents of the children testified to low levels of use among the younger children. However, two adolescents contributed in the interviews and explained their internet use in detail. The low level of use of those in the younger age category was characterised as non-use, as it was conducted and directed by their parents.

10.2.1 Users up to 15 years old

0-15 years old	
No (individual) use	15
Information	2

Table 10.2 Number of users by function

Table 10.2 outlines the composition of young users in the overall sample. We see there is a high level of non-use among users under the age of fifteen years. Those youths who did use the internet expressed that information about their hobbies or interests influenced their engagement with the technology. As we saw in the previous chapter, their use is heavily monitored and supervised by their parents. This group makes up 17.6 percent of the sample population. In this age group, however, two respondents gave interesting testimony as to their relationship with the technology.

In one case, Robert Ryan was an active user of the internet despite his age (13). He developed his technological competence from watching his sister and learning from her experience. Robert was a heavy reader, and his internet use supplemented his reading as he accessed author sites and book sites online. In addition to reading, his other main hobby was current affairs and news. He was not so much a reader of the press, but more a watcher of 24-hour news channels; he used the internet for instant access to breaking news. When asked what the technology meant to him, he responded:

It's my window to the world, because you can talk to people in Australia and see news from all around the world.

In another case, Robert Marlon used the internet as a supplement to his other hobbies. He states:

Yes, for cheats and that or Wrestling I'd usually go to game cheat.

²⁹ Although, an important point to remember is that not all of those in this age group actually took part in the study, as under 10 year-olds did not participate in the interviewing process.

As an active player of game consoles, Robert Marlon used the internet to enhance his game playing and broaden his interest in certain hobbies. He stated that the internet complemented his game playing:

...because you can get more information on the internet.

The internet clearly embodies a source of entertainment and information to the younger respondents. It is seen as a functional device where pieces of information can easily be obtained. Its uses and functions are seen as beneficial and a welcome addition to the portfolio of media technologies available to them.

10.2.2 Users between 16 and 20 years old

16-20 years	
Use of both information and communication elements.	1
Communication and music downloads	1
No use whatsoever	1

Table 10.3 Use and functions of young adult users

This age group is traditionally associated with heavy users of the internet. This group makes up 6.3% of the sample. It is the only group that mentioned the availability of downloadable music online. Communication features highly in the functions of the internet in this age group. Only one respondent testified to not being an active user of the internet. She explains her non-use as being both related to the fact that she has never had formal education with computers, and her job does not involve computer use at all. She states:

I don't use it that much at all because I am actually terrified of computers...No, I wouldn't know how to, I actually missed out. I am the only person in my age group who has missed out on computers...I play one game because I am afraid if I go any further than that I'll break it. I have a terrible fear of actually breaking the internet.

This quote highlights some of the fears associated with the use of computers. This evidence is from a 19-year-old girl, but is remarkably similar to some other respondents typically associated with older age groups. However, the other

respondents in this age-group testified to successful domestication of the artefact, and to briefly encountering computers and the internet in a meaningful way during their time at school.

10.2.3 Users between 21 and 25 years old

21 – 25 years	
Information purposes	2
Communication purposes	1
No use whatsoever	1

Table 10.4 Use and function of early to mid-20s users

This group is comprised of four respondents aged between twenty-one and twenty-five, forming 8.5% of the total sample (Table 10.4). Of the four respondents, three are regular users, while one respondent claims not to use the internet in the domestic setting, but has access to the internet in her workplace. Two members of this age group use the internet solely for informational reasons such as topical interest, while the remaining respondents state communication as the prime motive for using the internet at home.

As with previous age groups in this chapter, there is an instance of non-domestic use in this age group. However, compared to the preceding age group, where domestic non-use is characterised by techno-fear, the non-user in this case is by choice. Her decision is shaped by her conceptualisation of the internet as a work tool, although she has access to the internet at home. This respondent has access to the internet in her workplace and conducts all internet activity during her breaks at work. However, as she explains, the computer to her is a work tool and computer activity, including internet consumption, is thereby associated with work. Mary McDonald stated:

If I didn't have to sit in front of the computer in work all day I would probably look at it differently.

Mary McDonald explains that her first encounter with the technology was in college and this has shaped her relationship and conceptualisation of the artefact. She stated:

When I bought that, I had about two years experience of using a computer and mostly in college

This respondent had recently completed a master's degree course and all of her interaction with computers and the internet has been in an institutionalised context. For her, the difficulty in associating the computer or internet with anything other than work or college-related work has been shaped by the environment in which socialisation occurred. She explained:

Because everything I do would be, well it wouldn't be just work related, it would be project or college related. I guess you would use the internet for leisure sometimes too, but I would associate it with work or college.

This age group witnessed the entry and domestication of new media technologies into domestic and educational/institutional spaces. As testified by the majority of members in this age group, educational establishments figured as their first encounter with computer technologies. The conceptualisation of the computer and the internet as 'work tools' was greatly influenced by this first encounter.

However, one respondent, Jean O'Rourke, first came across computer technologies as a child, as commodities in her father's electronics and hardware shop. She explains:

I have been on computers since I was four years old. My father started me. We are in the retail business, and my father started selling computers, they were Amstrads, and I was the 'wonder-child', and it used to be a selling point that I could work on the computer. So I learned how to spell Kangaroo and play hangman, and do basic sums. I have been working on computers since then and I also used to sell computers and I used to earn £10 an hour, showing kids how to work a computer when I was eleven.

From this comparison, it is easily observed that a completely different or antithetical relationship was constructed between the respondent and the

technology. In Mary's case, it is clear to see that a relationship was constructed through necessity for work and college and constructed through an institutional gaze. In Jean's case, her relationship with the technology began earlier in her life, not in an institutionalised context.

It is notable that even though respondents are similarly aged, it was the socialisation of the artefact and mode of domestication, which was shaped by many social factors, exerted a critical influence on how technologies were later used and consumed.

Meaning attribution is initiated in the early stages of domestication. A relationship is constructed throughout the time the user spends with the ICT – whether it started in college or earlier in life. The difficulties experienced when interacting with the technology also provide us with an insight into how the relationship is constructed and how it changes progressively over time. Mary, so far, has retained her initial conceptualisation of the computer as a work tool. As we shall see later, other respondents also encountered the technology in educational establishments, but have succeeded in domesticating the internet for purposes other than education or work functions. The notion of interpretive flexibility plays a key role here.

10.2.4 Users between 26 and 35 years old

26 – 35 years	
Use of both information and communication elements	3
Communication purposes only	1
Information purposes only	4
No use whatsoever	3

Table 10.5 Use and function of users aged between 26 – 35 years

In this age group, informational uses are the primary functions of the technology, although only slightly more than non-use or combined use (Table 10.5). Twenty seven percent of this group used the internet for both information and communication purposes and the same number did not use the technology at all. Again, we see a continued trend of non-users emerging from all age groups.

The non-users in this age group have several common characteristics. Two non-users come from working class households, while the remaining non-user originally hailed from a working class household, but now is considered lower middle class due to social mobility. Another factor, more pertinent in two of the three cases, is low self-esteem and a lack of education and technological competency. As stated in earlier chapters, this is seen as a hindrance or a barrier to further domestication of the internet. One common tie between the non-users in this group is that they feel more comfortable using traditional media for information retrieval and communications. The motivation to incorporate the internet as a useful tool for informational resources or communications has not been realised.

However, eight of the 11 members of this group have successfully domesticated the internet and display high levels of use – for example, Mairead Mulhare and Martin Smith are members of this age group. For the majority of this group, the computer and internet have only been recently experienced.

10.2.5 Users between 36 and 40 years old

36 - 40 years	
Information purposes only	3
No use whatsoever	2

Table 10.6 Use and function of users aged between 36-40 years

The pattern observed in the previous age group, that of the focus on information as the main motivation for use, is again evident in this age group (Table 10.6). These respondents use the internet solely for informational purposes and have not embraced the communicative functions. The respondents mostly testified to not using email, and more interestingly, *not* having a reason to use email. Their communication network did not extend to online communication and electronic mail. The telephone appeared to be the preferred mode of communication. However, another observation must be made in this case. The majority of those who make up this age group are from working class backgrounds. As noted in previous chapters, focusing on economic factors, the type of employment in which the respondent engages in has an important influence on their use of the internet,

especially where email is concerned. The construction and maintenance of social and work electronic networks depends on those friends and colleagues having regular email access and email accounts. Those in the sample of this age group were typically employed in areas not connected with computers or online access, such as manual jobs. Compared to those in the sample who maintained regular electronic communication, their networks were, more often than not, borne out of college, university or educational backgrounds or, in some cases, employment related.

10.2.6 Users between 41 and 57 years old

41 - 57 years	
No use whatsoever	3
Use of both information and communication elements	3
Information purposes	1

Table 10.7 Use and function of users between 41 and 57 years old

The trend in the previous age groups was that informational resources of the internet were the main motivation for use, but this last age group reverts that trend. Table 10.7 shows that amongst 41-57 year-old respondents, information-only functions of the internet dropped significantly to 14 percent. However, more respondents in this age group used the internet for both information and communication functions.

Nevertheless, my findings suggest that this age group has the highest number of non-users in the sample, apart from the very young age group. This trend appears to reconfirms the findings in qualitative surveys and studies, which position older respondents in the non-user category. Even so, the oldest respondent in the sample, John Keller (57), was a regular user of the internet and of email. Yet, as stated above, other factors need to be taken into account to explain why respondents of the same age choose to accept and use the internet, or choose to reject and become non-users of the technology.

Reg Loughlin (56) and John Keller (57) both offer an interesting comparison between respondents' conceptualisations of the internet. Reg Loughlin works in sales and John Keller is a college lecturer in mechanics. The major difference in

their domestication of the artefact is how each respondent became familiar with the technology. John Keller's actively sought out access to a computer. Reg Loughlin was forced by his job to appropriate the computer in order to standardise reports and work figures and so on.

John Keller states:

I read a book *Future Shock* one time, not all of it, but I got the gist of it and I didn't want to suffer from it, so I force myself every so often to go into an area. At the time, it looked like they were optional, whether people were going to use a computer or not, and I decided that in my line of business it wasn't optional. Then the net came along, and I thought anybody who didn't go with it was illiterate.

John Keller's active efforts to appropriate the technology were in stark contrast to Reg Loughlin, who felt obliged to take on computers in accordance with work policy (see case-study below).

The employment issue became an significant influence as both respondents testified that the initial impetus was related to their jobs. However, it is obvious that one respondent chose to integrate the computer into his daily working and eventual domestic life, which the other respondent had no option but to unwillingly accept the technology, despite a visible fear, dislike and aversion to the artefact (see case-study below).

10.3 Section conclusions

The traditional trajectory of the internet from business and work tool to eventual domestic artefact is reflected in this chapter. The older members of the sample have associated the internet with a work tool, while the younger members have associated it with either entertainment or education. What is noticeable about the ways in which users become acquainted with the technology is that younger users are more likely to have first contact with the artefact in an educational institution. For older respondents, the emphasis shifts from education to employment institutions.

These findings confirms the trend emerging from the thesis thus far, that one singular factor such as age or gender on its own does not explain or sufficiently describe respondents' relationships to the technology. However, once several factors are combined, the depth of the relationship becomes increasingly comprehensible and better substantiated and supported. Age alone cannot sufficiently explain or illustrate a respondent's acceptance or rejection of the artefact in the same way that a broader study can.

What is apparent from my research findings is that there are non-users in all age groups amongst my sample. The non-users are not confined to young age groups or older age groups, but are evident even in traditionally heavy user and early adopter age groups. So, what does that tell us about age as a social variable acting on and shaping internet use? First, age plays a vital role in shaping internet use when married with education, both education received during school and third-level and life-long learning levels. As the computer becomes increasingly bound up in teaching practices, it provides, as noted in Chapter seven, an impetus or catalyst for domestic use and consumption. Second, age plays a significant role when married with interest and motivation to use the technology. Without the motivation to appropriate the artefact, the internet becomes redundant in the home. Third, age plays a role when married with the skills to operate the technology. Without the skills to operate the technology, the uses and functions of the technology are unrealised. However, when skills and motivation are married, the likelihood of domestication is accentuated. Fourth, the conceptualisation of the technology is entwined with the user's age and how likely they are to think of the internet as a work tool or as an entertainment medium or information source.

For some older respondents, the internet is seen as a younger person's domain and they sense that the internet has passed them by. However, in many cases, as the technology is appropriated by other members of the household, the barriers to domestication are lowered and the potential for eventual domestication by the respondent is augmented.

10.4 Case-study: Age and generation factors

The Loughlan household provides an interesting representation of how each generation, that is the 'boomer' generation (Reg, 56), the 'X' Generation (Nicky, 24) and the 'N(et)' generation (Ross, 20), interpret and domesticate (or not) the internet technology.

10.4.1 Background to Loughlan household

The Loughlan's are a suburban middle-class household living in a coastal town in north county Dublin. The family home is a 4-bedroom semi-detached house built in the 1960s. It is located in a 'well-to-do' area where most houses are well kept and maintained, with two or three cars in the driveway, demonstrating the prosperity of the area. There were three computers available to the household and only one with internet access. The interviews were conducted in the conservatory at the back of the house.

10.4.2 Reg's story

Reg is 56 years old and works as a sales agent. Reg's wife is terminally ill with Multiple Sclerosis and lives in a nursing home near their house. The family visit her each week. Reg feels his life, and life in general, is running at a pace too fast for his liking. Everything from traffic to technology is moving rapidly from the days when he felt in control. Nowadays he feels his life is being swept along in an uncontrollable river of change, including his work-life. He was forced to accept the laptop computer from his company and to input his data during the week, rather than of filling out forms manually. He resisted the changes and tried not to incorporate the technology into his life.

Reg preferred the time when he could use a pen and paper and spend more time in the field with people, instead of facing a computer screen. Before the introduction of computer technology to his company, he felt in control and knew what he was doing through the day instead of relying on friends for pointers and instructions on how to input data into the computer. He used to work from a paper diary, from which he had control over his daily agenda. However, the company has now electronically updated this, and to find out what to do the next day he must check his laptop diary to inform him of what his duties will be. Reg is fearful of the

computer. This may well be related to his working experience where the introduction of ICTs entailed a significant loss of personal control and autonomy over his daily work routines.

His fear of the computer also restricts his ability to use the internet at home. Although there is only one computer in the home with internet access, he will only go near it when one of his sons are using it, and he will ask them to show him something. He claims he would love to be able to search for information on holidays and trips abroad, but because he is nervous of encountering computer problems, he has been unable to fulfil his wishes. His relationship with the home computer has also been affected by his relationship with his work laptop, which he feels was thrust upon him. Although the company he works for paid for courses in order to raise his level of skills and expertise with the technology, Reg claims he learned nothing from the courses and that they were a waste of time.

10.4.3 Nicky's story

Nicky is 25 years old. His computer, the only one with internet access in the house, has caused a lot of trouble for him. It has a fault, in that it keeps crashing and the screen would freeze. This has influenced the patterns of use in the household, with only Nicky having the confidence to use it and Reg avoiding it for fear he will cause more damage to it. Nicky is a dedicated internet user. He claims he would not be able to 'survive' without email, as he has built up a social network of friends and acquaintances. His principal use of the internet is communication. Nicky has been using computers for the last couple of years, especially for his college and university degree course work. Having graduated from university in England, he has come back to work in Dublin and is working full time in a web-based tutorial company. He is the principal user of the internet in the home and has located the computer in his room.

10.4.4 Ross's story

Ross is 20 years old and has recently moved home from being away at college. While he was at college, Reg bought him a computer to help him with his studies. Having since moved back, he has brought his computer home, adding to the number of computers in the house. Ross has only recently begun to use the

computer for the internet and non-college related uses. He has developed a reliance on the mobile phone, both for calling and text messaging his friends.

10.4.5 Appropriation

The appropriation phase is concerned with the acquisition of the technology and its initial entry into the household. As stated earlier, the household has three computers, with only one having access to the internet. Each computer was acquired for different purposes, and each informant went through different appropriation experiences.

Nicky: I bought mine from Gateway last year and I wish I hadn't!

Ross: We have three computers, Dad got me mine, he got it second hand.

Reg: And I have a company laptop.

Each quote describes each household member's computer. There is a brand new computer bought directly from a computer manufacturer, a second hand computer and a 'company' laptop. This differentiation is important. While the two sons regard the computer as *theirs*, whether it was bought for them or not, Reg regards his laptop computer as the 'company's', and not his. This differentiation will become apparent later on as Reg's growing alienation from the technology is examined in further detail.

Nicky: It was a full multimedia package with a CD writer, and I wanted a good sound card and a good monitor.

Ross: Mine is a basic computer, Pentium II 64 megs – all the programs were on it like Excel and Word – it was like a word processor.

Reg: My one has a keyboard.

Nicky: Dad's is mainly for office systems and it's a laptop with speakers.

This series of quotes indicate the rather different technical competencies of these male household computer users, as each respondent describes the type of computer considered as 'his' own. While his sons may be adept at computers and computer terminology, Reg seems reluctant to become familiar with the functions and components of his laptop. He speaks of it in derogatory terms, and leaves it up to his sons to explain the uses/functions of the computer to him.

The following section outlines the motivation for actually buying or receiving the computer. Nicky states that the biggest factor involved in the purchase of his computer was *features and price*. Reg talks about Ross's computer in terms of necessity, but of his own computer in resistive terms.

Reg: He needed it for his studies [talking about Ross's computer] and the company had gone into liquidation and I heard about it and I said 'get it', and I didn't care.

Ross: I needed one anyway because I'm thinking about doing what Nicky is doing.

Reg: Yes, he [Ross] was doing design and I felt this computer would help him with his design – furniture design.

Nicky: The price was very cheap and that's the reason why it was bought.

Reg: And my laptop, I was pressurised into getting it. I didn't want it because I hate them with a vengeance.

Ross: Dad doesn't know how to use computers.

Reg: I hate laptops, I hate mobile phones all these things.

Int.: You hate technology?

Reg: Basically, yeah. I just don't need it. I've worked all my life without it, I don't like the speed of things today, basically.

Int.: Do you feel overwhelmed?

Reg: I did certainly when I got it at the beginning, but now I am controlling it instead of it controlling me.

Int.: How did you manage to get control of it?

Reg: I lied to it, that's true.

It is possible to infer from this series of quotes that the relationship between Reg and the computer technology is one of master/servant, or subservient type of association. He uses the terms *pressurised*, *controlling*, *speed*, *hate*, and *'I don't need it'* to convey a sense of antagonism and antipathy towards the computer. However, he sees an entirely different relationship between the computer and his sons, something that he does not feel part of. When discussing this relationship, he used terms like *needed* and *would help him*. This marks a very different appraisal of the computer. Reg does not regard the computer as a *helpful* device or one that is *needed* in his life. It was something that was forced on him by his company, something that he could not resist.

Because of this forced adoption, Reg was not personally motivated to acquire the technology. Usually, the relationship between user and technology develops when the user is instrumental in initiating the incorporation of the technology into the domestic space, for example, the relationship between Nicky and his computer. Reg's relationship with the technology is strained and unwelcoming, because he had no choice but to accept the computer and integrate it into his work and domestic life. This trend is further observed when analysing the purchase experience of both Reg and Nicky (as Ross did not buy his computer). Both respondents were questioned on their experience of actually going about purchasing the machine. They said:

Nicky: Purchase experience was fine because as soon as you ring them up they tell you all the different options, and they are only too eager to please, and it's amazingly easy to pay for your computer, that was fine. I rang Gateway. They all do it through that way, and they build the computer for you. I told them the specifications of the machine I wanted, and they gave me a price. I shopped around a few different places, in Dell and Compaq and a few places like that, and I ended up going with Gateway because their price was the best for the same specification.

Reg [talking about the purchase of Ross's computer]: It was just there, they were in liquidation and I said give it to me.

Int.: Did you have to go anywhere?

Reg: No, a friend of mine phoned me and said 'do you want this computer' and I said 'get it for me', so he got it for me.

Stemming from the earlier discussion about the construction of an identity and relationship with the technology, it is possible to judge that their purchase experience had an influence on the individual respondent's experience during purchase. In the above extract, we see the difference in the types of relationship with the technology between father and son. Whereas Nicky wished to configure the technology to his particular requirements, Reg was happy to accept the recommendation of his friend. Regardless of what specification of technology he was about to buy, Reg had no further input into the condition or kind of computer he was buying for his son.

Appropriation of such a technology into the everyday life of the individual requires mutual shaping of the technology and of the habits of life. This is clearly lacking

in the case-study of Reg. Having been given a laptop computer by his superiors at work to encourage automation and standardisation of his work, Reg was faced with an alien approach to work and one which required a major transformation of his work practices. He explains the barriers he had to overcome in order to appropriate and integrate the computer firstly into his work and eventually into his everyday life.

He stated:

Reg: Yeah, it took me ages. They even had to send me on a computer course. They did eventually, as it transpired it was useless to me, you know, because what I have to input in, I had to put in for the job had nothing to do with the course I did to learn to use the computer.

Nicky: Dad did a word processing course, and it's Excel that Dad has to work on.

Reg: Which I don't use now at all, gradually I'm getting it. I do – I feed in what I have to for the guy I work with, who shows me everything I have to do. I write it down. I don't remember it. I write it down and every time I have to do that I look for where I have it written down and do it and just go from there.

Int.: How much of a change was it for you?

Reg: It was huge, huge.

Int.: How did you treat the computer?

Reg: I rejected it. I didn't open it, I said 'I don't want this' I didn't want it.

Nicky: When we got our first computer, a 486, I used to be saying "Dad, look at this" and he'd be saying 'I don't want to know, don't want to know'. He wouldn't go near the computer at all. I don't know, it was like he was scared of it.

Reg: The other one, I'm meant to report to that computer every 24 hours. Now I report to it twice a week, and that's it, I use it as little as possible and usually what I do, I'm meant to go to it every 24 hours, I come home on a Monday, and Monday I spend all morning feeding in what work I am going to do through the week, and on Friday I check what I did for the week. That's it. It seems to be enough. It keeps them happy. They haven't come back and said 'you're meant to do that every 24 hours', I'm sure they will."

Nicky: Dad's goal in life is minimising his interface with the computer.

This series of quotes aims to highlight the barriers and problems Reg had to overcome in order to appropriate the technology. He speaks in terms of:

"Fear", "useless", "accept it", "rejected it", "don't want it", "didn't want it".

These phrases are expressions of resistance and contempt. The vocabulary in which he speaks of the technology urges a separation between him and the technology.

Reg: I learned nothing from it. It [the course] was just a beginners, learning how to type, windows, but I don't remember any of it.

It was as if he is deliberately trying to distance himself from the technology, deliberately refusing to incorporate the technology as a means of resistance. Below are a series of quotes highlighting Reg's alienation from the technology:

Reg: At the beginning, it was a threat to me... not knowing it was a threat... because I've never had one in my life, we had one for a good few years and I never wanted to know anything about it and still don't want to know any thing about it, so I just do the bare necessities that I have to with it, and that's not going to change... I'm afraid I might do damage to that machine upstairs as well, trying to get in to the internet, I might do damage so I won't touch it. I'm afraid to touch it.

Nicky: Techno-fear.

Reg: Yes, huge, I have it. It's basically with the Gateway one because it has collapsed so many times in front of Nicky that God only knows what it will do on me.

His son speaks of *techno-fear*, a sense of nervousness or panic when it comes to anything technical. For Reg, he believes that this is the condition he has. He is nervous around the computer and panics when anything goes wrong. The fact that Nicky's computer has crashed numerous times has been an off-putting element for Reg. He is terrified of what might happen when he goes near the computer in case he 'breaks it':

I could just never see myself sitting in front of the PC watching something. I like the comfort of television, the PC is a discomfort to me, put it that way. It's like work – sitting down in front of a desk I don't want it... Nothing, it might as well not be there because I don't go near it...I would like to be able to go upstairs to the PC, turn it on, tune in to the internet. I'm going to Canada next year and see what is out there, I would like to be able to do that, but I am afraid to do that, I am afraid to damage his computer...I am afraid of it, I mean, Nicky's computer has crashed so many times and I don't want to be the one. I just don't understand it. I know it's there. I go up to Nicky's room and he says 'look at this Dad'; it's there. It's like when I go to my laptop. It's a learning experience which I know if I

want to look at something I know these guys are here to switch it on for me, if I want to get into something I could never see myself. If they are not here going upstairs and sitting in front of it and switching it on, I can't see myself doing it.

Reg claims that the internet means nothing to him and he is happy to accept that fact. The very thought of 'going up stairs' to sit down in front of the computer does not appeal to him at all. He states:

I haven't a clue about the internet, so it doesn't mean a thing to me. It's very advantageous to the lads here, nothing to do with me...But the PC means nothing to me. I have no interest in it.

There is a visible relationship between Reg's enforced appropriation of the laptop in a work context and his resistance to incorporating it into his domestic routines. This also has a reverberation on his inability to incorporate the internet into his everyday life. The conceptualisation of the computer as something other than a work tool is alien to Reg. He equates the computer and email technologies as products of modern-day life. He feels pressurised by the increased pace of life brought about by the compression of time and space, one of the characteristics of the 'information society' (Castells, 1996). It has left him feeling left out of a major transformation of society, and he finds himself looking back to the days when there was no hassle or traffic or imposing technologies forcing him to move at a pace that he is uncomfortable with. He states:

I'm not happier no, less happy. I'd like to be out interfacing with people and things, like that that's the way I've worked all my life, so I don't see why a machine should control me. You get an email – you don't know the hell where it is going really. I know it's very fast: I email you and you have it in seconds in Manchester or London or where ever it's going to, it's there. But I don't like the speed you see, be it the traffic or the computer. I hate the pace of life today.

Reg plainly rejects the computer and everything to do with it. He feels that by controlling it, that is, by only submitting his data once or twice a week instead of the recommended daily input, he can somehow gain some dominance or control over it. By doing this he wishes to change the perceived pattern from it dominating

him to him controlling it. He in some way blames the computer for the change in the pace of his life and society in general.

There are clear and marked tones of resistance in Reg's responses. His case matches the resistor/rejecter profile in the MRBI (2002) survey, which defines a typical rejecter as mainly coming from the older population, regarded as being 65 or over. The MRBI survey suggests that this older age group also displays no interest whatsoever and would be reluctant to even try it, and it implies that this group speaks of the technology in tones of rejection.

Reg speaks of his age as being instrumental and a vital factor in his dismissal of the internet. As argued throughout this thesis, there is a need for motivation of sorts to inspire, prompt and encourage users to become familiar with and adopt new technologies, such as the internet. Using as an example the 'Information Age Town' in Ennis, which was an attempt to construct a digital environment by introducing ICTs to the town, the need or motivation to acquire the technologies was commonly absent and this was a factor in the partial failure of the project. In Reg's case, he has not experienced such a need to incorporate the technology, either the computer or the internet. Instead he has experienced aggressive attempts by his employers to 'force' him to accept, incorporate and use the technology in his everyday work practices. This has had a knock-on effect on Reg's perception of the internet at home. He is unable to separate the computer as a work tool from the computer as a leisure/communications tool in the shape of the internet.

10.4.6 Objectification

As noted previously, there are three computers in the Loughlan household, and each is located in a different room. Nicky's computer is regarded as the best computer in terms of processor speed and applications available to it. Most importantly, it is the only one with internet access and is located in his bedroom. He explains why it is situated in his room:

Nicky: Because I have built a little studio up there with all my sound equipment and computer, and one of the main reasons that I was getting a computer as well was that I wanted to make music...I already had, not for this PC, the PC I had before I had already

organised the old computer and the room so it could fit in that way, so with the new one, I just put it in the same position, but initially I did organise the room to accommodate it.

Ross: The second PC, we don't know what we are doing with it yet because I have only just come back from college, more than likely we'll put it in the small room downstairs.

Reg: In my study, or now the media room because of all the music stuff that's in there.

Nicky: In the converted garage.

Seeing that the computer with internet access is located in Nicky's bedroom, this brings into the equation a number of privacy issues. Nicky responds to these issues by saying:

No, because we wouldn't be on it on any out of the way hours or anything. We'd wait until after six o'clock if we are going to use the internet, for the cheaper rate that way, where you pay by the minute.

What is interesting about this quote is that there is a sort of unwritten rule that the internet must be accessed after six o'clock in the evening, this rule is referred to in greater detail in Chapter six. This is a common trend observed throughout the present thesis. This trend can be witnessed in both middle-class households and working-class households, and is not confined to any particular social class or household configuration.

10.4.7 Incorporation

The meaning of the internet is assessed by questioning whether the respondent regards it as special kind of machine or as just another machine for the home. Here, Nicky responds:

I think of the computer as it was a television or anything like that. It's not necessarily a form of entertainment. It's more interactive than a television, but it's just another way of interfacing with media.

While Ross says:

The internet, of course it is brilliant if you want information, all the information there is on the internet and there's email as well, that's another form of communication. Well for

Nicky, that's how he works. If he didn't have the computer at home he wouldn't be able to do work.

Reg's lack of affinity to the internet technology has been discussed in earlier parts of this chapter. In contrast to his sons perception of the internet, Reg explains disaffection with the internet:

I haven't a clue about the internet, so it doesn't mean a thing to me. It's very advantageous to the lads here, nothing to do with me.

Int.: Would you regard it in the same light as a television or a washing machine?

Reg: Not at all, it's special for the lads. It's nothing special for me at all. The washing machine and dishwasher are essential.

These series of quotes give some insight into how the internet is viewed by the three members of the household. While we have seen previously how Reg views the internet and computers, it is interesting to analyse the rather different opinions of the other members of the household. Nicky regards the computer in the same light as a television or any other domesticated technology. To him, the internet technology has been incorporated into his life to such an extent that it no longer obvious. It has achieved a level of invisibility and embeddedness in his daily life, so it no longer is regarded as something special.

Ross still views the internet as something special, something 'brilliant'. To him, it is a means to find out whatever information he may be looking for or a form of communication. But this is not on the same level as Nicky, who has transformed his communication habits to focus solely on the internet as the primary mode of communication.

10.4.7.1 Methods of use

Concerning methods of use, each respondent speaks of his own particular attraction to the internet. They state:

Nicky: Well, I couldn't survive without email. I constantly check my email and I constantly reply to people. As you know, if you send me an email I'll get back to you. I love email, because it is instant talking.

Ross: Or text messaging

Nicky: Or text messaging is another technology that I haven't really embraced, but email is just wonderful. It is the main reason why I enjoy the internet so much.

Ross: I can't really say that it has, no.

Reg: If somebody emails me and I have to reply to them I will. If I don't have to reply I'll just reject it.

From this passage, it is evident that the internet is regarded as a communications device by Nicky. The significant point emerging here is that each member of this household has his own preferred mode of communication. Reg has spoken of his preference for the telephone. Nicky here states his preference for email. Ross rates text messaging as his preferred method of communication with his peers. As new communication technologies emerge, the domestic users associate themselves with them for different reasons and according to social, cultural and economic factors. There is four years between Ross and Nicky. The internet/email 'revolution' came for Nicky around the same time in his life as the text messaging 'revolution' did for Ross. Hence, the technology means more to those who adopted it and embraced it for reasons of communication. Nicky's contemporaries and peers are immersed in the practices of electronic communication. He elaborates:

Nicky: I suppose it is strange that there are some people that I only know through email, which is a strange sort of situation. But there are some people that I have been introduced to by another friend that I know from the 'real' world. These people I would have never talked to before, and I was introduced to them via friends. They gave them my email address and we've been emailing back and forth, so I've made some different kinds of friends because of that – text-based friends.

Int.: How are text-based friends different from real-life friends?

Nicky: When you write something down you spend more time thinking about what you are actually writing rather than just blurting it all out, which I have a tendency to do.

Int.: What has that added or taken away?

Nicky: I don't think it takes away. It's just a different thing. It's more structured than normal conversation, your language does change slightly. I don't write an email the same way as I talk. I find that I use more slang than I do when I'm talking, I truncate words, not as much as a text-message like 4 instead of the word f-o-r. I'm not that bad. I can't stand little emoticons, I have nothing against them but I can't stand them.

Nicky differentiates between electronic communication and verbal communication. He speaks of how his language changes in order for him to communicate the same

utterance via spoken or electronic communication. The truncated words are an example of this transformation in his speech patterns. He finds he thinks about his utterances/responses in greater detail when it comes to text-based communication. While this might be the case for most people, the use of email communication allows those in the conversation to prolong the timeframe of the conversation and reply at will, regardless of the time or day.

The distinction between Nicky's view of email and Reg's view – that if Reg needs to reply he will if he doesn't he will just reject it – is that again they are trying to assert some level of control over the technology. Reg has noticed that his circle of friends does not extend to online communication. He has developed a reliance on the phone, and his friends are accessible via it.

10.4.8 Conversion

The conceptualisation of the internet is an important element of domestication. The respondents in this case-study describe how the internet fits into their daily lives. This question is designed to be vague and ambiguous, to allow the respondent to describe what the word 'fit' actually means. The series of quotes below reveal how each respondent 'fits' the internet into their everyday life:

Nicky: Quite neatly really, it's a part of my life.

Reg: It's his whole working environment.

Nicky: Exactly, it fits into my life in a work situation.

Reg: And at home when you make your music.

Ross: Well that's the computer not so much the internet.

Nicky: But the internet has allowed me to download instruments and stuff.

Reg: And steal music.

Int.: Do you think the internet is more of a work tool than a leisure tool?

Nicky: It could be either, but down to my personal experience it is a work tool.

Ross: Leisure tool.

Reg: Work.

We see that two out of three respondents regard the internet as a work tool rather than a leisure tool. The respondents who didn't regard the internet as a leisure outlet worked with the internet in their everyday jobs. For example:

Nicky: Work, that's what the internet means to me most of the time, just work, except communication via email.

Int.: Do you think your web consumption has been influenced by your work?

Nicky: Oh, yes, hugely. I didn't get on to the internet at all until about 1998/1999, when I went to college in Wolverhampton. I had automatic access regularly in college, and since then I used it on and off. But since I have started work, what I am doing right now, yes, it is part and parcel of what I do.

The internet is used in different capacities in both respondents' jobs. In Reg's case, he is required to fill out forms and reports and send them via email to the company headquarters. He feels it has had the following effect on his work:

It slows it down extremely. The time spent out working in the field has been halved because I have to feed so much information in, receive and feedback. Through this machine, it's ridiculous. But that's the way the company wants me to go, so I do... I'm not happier, no, less happy. I'll like the out interfacing with people and things like that, that's the way I've worked all my life, so I don't see why a machine should control me.

The distinction between work and leisure tool is a major factor influencing the use of the internet in terms of patterns of use, length of use and reasons for use. Reg is unable to distinguish between the use of email for work purposes (i.e. emailing reports), and the use of email for personal contact with relatives or friends. Also, the fact that his generation of friends would not usually be in possession of an email address and use it regularly is another obstacle in his path for fully incorporating the internet into his life – not solely as a work tool but as a communication tool.

10.5 Chapter conclusion

This case-study was designed to address the questions surrounding the agency of 'age' shaping the domestication and consumption of internet technology. We saw how Reg shied away from the artefact and how he tried to convince himself that the internet was not useful nor needed in his daily life. So, instead of becoming familiar and adept with using the technology, Reg decided to resist and refuse the computer and internet any meaningful role in his life. This resistance was borne out of attempts to force the technology upon him and his daily working routines. However, Reg attributes the resistance to his age. He spoke of his exclusion from

the 'information revolution' that shaped his sons' lives and their successful attempt to domesticate the internet and computer into their daily routines.

However, I have presented evidence to conclude that his age did not have a direct bearing on his resistance and refusal to incorporate the technology, but was one of several active factors shaping his relationship with the artefact. It would be simplistic to attribute Reg's failure to domesticate the internet technology solely to his age. As stated in the outset of this section, the aim of the case-study was to assess the matrix of social, cultural, and economic environments in which the domestication of the internet is immersed, and to examine the combination of factors exerting an influence on the success or failure of domestication of the internet technology.

In Chapter four, and the first section of this chapter, the aim was to examine how age was a crucial social shaping agent. It was also noted that the demography of internet users has become a matter for increasing interest in policy debates and research about ICT futures and social inclusion/exclusion narratives. Indeed, we have seen that a wide range of studies of early internet users typically portrayed them as predominately white, young and male, in employment and from professional or managerial classes (Eurobarometer, 2001; MRBI, 2002).

The digital divide has become the internationally accepted term to describe this gap between the adoption rates of different social groups, which many fear is in danger of creating a new form of social exclusion (see for example, *Falling Through The Net – Defining the Digital Divide*, NTIA, 2000). The fear is that in a changing world some people will be 'left behind'. The digital divide discourse tends to confirm *age* and generational factors as major influences in the inclusion or exclusion of potential users from the 'information society', even in some cases replacing the traditional excluding gender gap.

The term 'generation gap' has been employed in some fields to describe the gap in technological competence between those of different age groups. While the conclusions from the previous section signal *age* as a significant influence on internet consumption and the construction of relationships with the technology, the

following case-study presents an example of a household where there is an obvious clash of generations, or in other words a 'digital divide'. However, it appears that age is the reason why the different respondents have taken to the technology in different ways, but as we shall see later, age is not the single most influential factor. In collusion with employment/economic household configuration factors the real story behind the 'gap' becomes apparent. The value of qualitative research is exhibited in this case-study. The purpose of this next section is to examine the social context, in which age is a contributory factor, to assess whether the internet is appropriated and domesticated successfully, or whether it is rejected and denied. What is important and valuable here is the story behind each respondent's individual relationship to the technology and how that relationship was constructed and maintained.

I came to the conclusion at the end of the first section of this chapter that different age groups exhibit rather different relationships to the internet. They appear to use the technology for different things and for different purposes. However, this generalised analysis of the sample, on the basis of age, did not provide me with evidence rich in detail to demonstrate the influence of more than one factor in the domestication processes of the Loughlan household. This case-study instead argued for and demonstrated the need to conduct qualitative in-depth research to uncover the reasons behind a user's relationship with the internet technology.

While Reg was the oldest respondent in the household and is considered a non-user of the internet, I found that it was too rigid to attribute his rejection of the technology to his age. Instead, I found that taking his work experiences, lack of skills and motivations, along with the technical problems of the computer, in to account, it was possible to paint a completely different picture as to the reasons behind his non-use. Reg's 'age' was just one of a myriad of factors influencing his current resistance to computer and internet use and consumption.

The younger members of the household first encountered the technology in very different environments and under different circumstances. It is significant to note that, initially, the computer (and later on, the internet) were conveyed as useful and beneficial tools and aids to education to Ross and Nicky. Reg, on the other hand,

first encountered the same technology as an imposing and usurping influence enforced by his employers, which consequently influenced his reluctance to comply with their directives. When assessed in this light, the agency of age is reduced, whilst the social shaping of technology perspective, namely the collaborative efforts of factors working and interacting together, provides us with a more grounded approach to explain how domestication occurs.

Chapter Eleven

Thesis conclusions

- 11.1 Introduction
 - 11.2 Literature revisited
 - 11.3 Reflections on research
 - 11.4 Overview of research findings
 - 11.5 e-Working Class
 - 11.6 Domestication revisited
 - 11.7 Limitations of the study
 - 11.8 Further research
-

11.1 Introduction

The key theme advocated throughout this thesis argues against conducting research into areas of ICT use and consumption in the domestic sphere which is selective or blinkered in its outlook. The optimum approach, therefore, centres on the multiplicity of factors influencing and shaping the kinds of users who access the internet from their home. The current thesis extended its scope to four fundamental spheres of influence on domestic use and access of internet services: these factors were inclusive of but not exclusive of economic, household composition, gender and generational factors. Further to the factors mentioned above we saw through the analysis how other relevant, but often overlooked, factors were significant in shaping user experience and relationship with internet technologies. Those additional factors included user IT skills, motivational issues, general interest in technologies, educational factors, and societal pressures. The chief conclusion, as argued by this thesis, was that when these factors were analysed *simultaneously*, a more grounded and comprehensive understanding of domestic internet users emerges.

Furthermore, this thesis presents an argument for a critical analysis of domestic ICT use that is underpinned by a historical framework. Chapters two and three offered a historical perspective of media technologies in society which demonstrated that: a) the hyperbole surrounding the emergence of the internet is not novel, but accompanied the emergence, development and lifecycle of previous media technologies, b) the changing nature of the 'audience' requires careful attention and on-going, in-depth research to trace the changes to domestic consumption and use of media technologies. The historical framework provided evidence to counteract determinist assumptions concerning uptake and adoption of

technologies which claim new technologies are suddenly thrust upon society, without warning, that brings about new audiences and new social relations, similar to the magic trick of pulling a rabbit from a hat. Instead, the current thesis presents a more sophisticated and nuanced approach, which emphasises that technologies do not emerge from a vacuum, uninfluenced or tainted by previously established media networks. Rather, conditions of the artefact's creation and use, along with the subtle processes of domestication, prove instrumental in the ways artefacts and users are mutually co-constructed and shaped.

The aim of this thesis was to provide concrete examples and experiences of how social factors work together to shape the ways people create themselves as users, and shape their relationship and engagement with the artefact. Domestication of the internet may be successful, translating it as something valuable and useful in users' lives, or domestication may prove unsuccessful, where users resist and dismiss the technology.

In Chapter one, I set out my hypotheses to test the validity of deterministic claims, and, from the evidence presented in the previous empirical chapters (six to ten), I demonstrated that a precise understanding of domestic internet use cannot be realised without taking many social factors into account and assessing their combined influence on the various stages of the domestication process. In order to achieve this, the Silverstone *et al.*'s concept of domestication (1989; 1992; 1994) was applied as both a theoretical framework and the key analytical tool. It was therefore possible to closely examine and interpret user experiences of ICTs and the social changes taking place in the home. Further to the empirical implications, it was also possible to assess the theoretical suitability and relevancy of the concept of domestication. As discussed in earlier chapters, the concept of domestication employed in the current thesis was derived from Silverstone *et al.*'s work on television and traditional media (Silverstone *et al.* 1989). Therefore, it was valuable to apply the concept of domestication to new media and the internet to achieve a functional and practical application of the domestication concept supported by concrete empirical user experiences. Later in this chapter, I shall present a revised model of domestication based solely on the empirical experiences gathered from this research project.

11.2 Literature revisited

Attempting to draw on literature, either from a national or international perspective, proved difficult, as studies focused on domestic users became less frequent after 2000. This decrease in small-scale academic studies was echoed by an increase in general, wide-scale studies. In addition, there were repeated failures by university research centres, particularly in Ireland, to secure funding for qualitative, in-depth longitudinal studies in the area of domestic internet consumption.

At the same time, the CSO and market research companies continued to produce large-scale quantitative studies aimed at giving a 'helicopter view' of internet consumption in Ireland. In recent months, two reports (again, quantitative in nature) have been published with a degree of focus on domestic internet use in Ireland.

The first of these reports (CSO, 2003) broadly addressed the use of ICTs in Irish society, with a small focus on domestic users. The second report is a quantitative analysis of the uptake of information technologies in the Dublin region, compiled by Haase and Pratschke (2003).

The CSO report (2003) is particularly useful because it provides a balancing view of current internet statistics and figures on uptake and consumption patterns on a national level. The microcosm of domestic users that is described in this thesis is valuable and significant because it provides insights into the lived histories of users behind the generalised findings offered by the CSO report. The report states that internet use has reached its highest level ever, 33.6% of the population, while personal computer ownership is also at its highest level, 42.3%. As reflected in the current thesis, the study reports that the personal computer is the most popular mode of internet access, with 79.6% of users accessing the internet in this way.

It is interesting to compare and contrast the findings of the current thesis to that of a wide-scale study of general trends and patterns of use. The CSO report identified the age of respondents as a factor determining use. The report states that 60% of 16–34-year-olds have used the internet, while only 11.4% of 65+ year-olds have ever used a personal computer and only 8% of the same group have ever used the

internet. At first glance, these figures would suggest that there is a massive divide between the generations. However, the main criticism of such studies, as argued by the present thesis, is that such data reveal only superficial conclusions, which overlook the need to investigate more deeply into the reasons *why* people choose to become users or dismissers of the technology. Lived histories, on the other hand, address the individual fears, hopes, motivations and barriers to use, and how internet technologies fit or do not fit into individual users' everyday lives. Studies such as the CSO report rely on deterministic methodologies, ignore the diversity of users, and fail to take into account the influences of social factors on the subtle processes of domestication, as found in the current thesis.

Studies such as CSO (2003) and Haase and Pratschke (2003) seem to refer to households and access to technology in the same breath. This idea receives criticism based on the findings and arguments put forward in the present thesis. Instead, it argues that the simple fact of having access to a computer or internet technology in the domestic space does not necessarily bring about use in a meaningful way. Access to the technological hardware does not imply automatic or immediate domestication or use of the artefact. It does not imply that each and every member of the household with access to a computer will actually be able to use it, let alone form a relationship with the technology. The present thesis goes to great lengths to stress the importance of the subtle domestication phases and how users are created through this process.

There are several findings common to both studies mentioned above and the current thesis. First, these recent quantitative studies reveal a decline in the gender divide. Second, both the CSO and Haase and Pratschke's study corroborate the fact that information retrieval and communicative functions are the two most popular online activities (see Chapter six). On a superficial level, all three studies appear to correspond with general conclusions; however, the value of the present thesis is that it addresses *why* such activities appeal to certain users, *what* social factors shape their use and their experiences online, and *how* the technology and user are mutually shaped. Therefore, this thesis suggests that future research in the field of ICT consumption should attempt to marry both qualitative and quantitative findings together to provide a more nuanced and grounded study.

11.3 Reflections on research

To achieve the level and depth of the data presented in the current thesis a methodology sensitive to the peculiarities and exigencies of everyday life was required. This was provided in the shape of ethnography, which allowed for everyday life experiences to be collected and interpreted as part of the overall scientific representation of fact and evidence. Engagement and interaction with the respondents allowed a fuller, more subjective understanding of how new ICTs have (or have not) become part of their everyday life and what this integration means to ordinary users in their home. Needless to say, to understand the significance of such data requires some analytical interpretation on behalf of the researcher. It is unlike the kinds of data produced by quantitative methods, in the sense that it does not claim to be representative of national or even generalised groups. The presented evidence speaks only for the sample involved insofar as generalised claims can be made. However, as an object of research, such an insight into the everyday life of respondents is highly valuable and worthwhile. By employing such methodologies, it has been possible to achieve a more fruitful perspective of Irish domestic internet users. Moreover, we gain insights into the meaning of new media technologies in relation to mature media networks, and how users adapt or amend their consumption practices within this new media environment.

The empirical process proved to be a very difficult exercise because of the problems associated with the nature of qualitative research. The main problem experienced involved the recruiting process of potential respondents. As reported in Chapter five, the majority of the respondents were recruited through contact via a number of IT courses the author delivered in a nearby suburb, close to the university. Although this method of respondent recruitment proved to be a very efficient and rewarding, it was also fraught with uncertainties, prolonged periods of preparation work and informal conversations with the respondents. This kind of research proved to be very costly time-wise. In a similar fashion, it was time consuming to build respondent confidence and trust in order to gain access to their private spaces, access to personal data, their personal stories of ICT consumption, their backgrounds and their histories (all of which make a qualitative study of this nature so rich). But such engagement and effort proved worthwhile owing to the rich and quality data it produced.

This reflection generates two topics for further discussion: (i) ethical considerations of the means of respondent recruitment, and (ii) the extendibility of the research findings to large groups.

As noted above, the process of gathering suitable and willing respondents can be a frustrating and unrewarding task. For this project, I found my role as an IT lecturer especially conducive to bridging the gap between potential respondents and actual process of talking to people, recruiting them as respondents, and building a level of trust³⁰. It is important to realise that trust is a vitally important factor for building a picture of people's internet use and how they shape it according to their own personal characteristics, history, education, class, household configuration and so on.

It proved sufficient to discuss the specificities of small groups who displayed similar use characteristics and patterns as opposed to attempting to draw wide scale conclusions or generalised claims. In some instances, to use the term 'household' proved too broad a definer/generalisation because the process of domestication can, in some instances, be such a specific and individualistic event. Indeed, there could be different domestication processes for each member of the household, each influenced by personal variables. The principle finding in this respect is that one size, or one domestication process, does not fit all. Instead, each individual domestication process is slightly modified or heterogeneously constructed.

11.4 Overview of research findings

This section will review the major findings and conclusions emerging from my empirical research. Each of the previous chapters (seven to ten, in particular) addressed a single specific social shaping factor influencing domestic internet consumption, while Chapter six addressed generalised findings pertaining to patterns and trends of consumption across the sample.

³⁰ Building trust between respondents and researchers is a vital part of conducting ethnographic research. See chapter 5 for

The findings will be presented in the same format in which they were gathered. This means that the four aspects of domestication concept (Silverstone, 1989), which was codified throughout the thesis as the major structuring framework, provides the conceptual basis and interview schedule for the empirical process. Therefore, the following themes will be discussed (Figure 11.1).

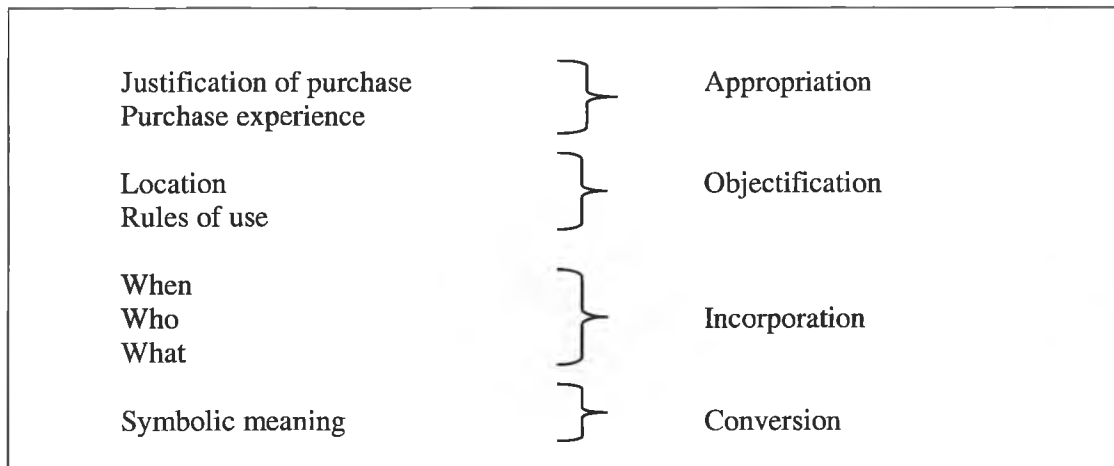


Figure 11.1 How the 4-stage process translated into the interview schedule.

11.4.1 Aspects of appropriation

The first phase, appropriation, addresses the processes involved when users come into possession of the artefact. The findings suggest that this phase is made up of several sub-phases. For the main part, the appropriation of the technology began with the first encounter or experience with the artefact – either in an institutional environment (school or college), or a work or leisure environment. However, due to the nature of the present study, the boundary of concern is limited to the appropriation of the artefact into the domestic setting. The starting point of the research was taken from when the decision was made to acquire the technology, what inspired this decision, and the justification of the acquisition – both morally and financially – for the household.

The majority of the sample, 14/16 households, *actively* acquired the artefact. The remaining two households came into possession of the technology through winning a competition or as a gift.

I found the 'justification for purchase' to be a critical feature of the domestication process. This phase concerned the reasons for and the motivation behind the initial purchase process. The majority of the respondents in my sample indicated that *education* (in its broadest sense) was the prime motivation for purchase of the technology. *Education* was taken as an umbrella term to represent all kinds of education, from formal third-level college courses, to basic information technology instruction courses, to an educational aid to their children's school education.

As it transpired, I found that the 'justification for purchase' process was rendered less difficult when the technology was regarded as an educational *tool*, rather than when it was regarded as an entertainment or leisure *technology*. On this point, a significant finding emerged, which I believe to be crucial to the overall process of domestication. I found that when the technology was acquired with a specific purpose in mind, it required a *higher* level of shaping in order for it to fit into the lives of the respondents. This was because the technology, when first acquired, was thought to fulfil only one function or purpose, but through use it became apparent that it could also function as 'something else'. For instance, when the technology was acquired with only educational functions in mind, users reported that they began to use it for other purposes such as electronic communications. During use, the technology came to mean other things to users and it required additional shaping and reshaping for the technology to fit in to their lives in line with users' interpretations.

Besides educational motivations, the respondents pointed to other kinds of motivations to acquire the technology, such as wider social pressures from a number of sources. These social pressures ranged from 'keeping up with the Joneses', peer pressures from family and friends, or demands from their children, or media influences instructing the public to acquire the next domestic electronic gadget on offer to keep up with current trends.

I found that those respondents in my sample who were parents reported feeling negligent if they did not acquire a computer with internet access for their children (some going so far as to attend courses in order to be able to help their children with problems). It came across during the interviews that the very fact of having a computer or internet in the home was beneficial to their children's education,

regardless of whether any meaningful use occurred or not. Possession was sufficient. This was reflected in the ways younger respondents regarded the technology as a leisure or entertainment technology, to facilitate online communications with friends and family, or to facilitate music downloads or information on hobbies and interests. Their parents, on the other hand, were adamant that the technology should be regarded as an educational tool.

11.4.1.1 Purchase experience

Once the decision to acquire the technology was justified, the actual purchase experience proved to be a significant process in the overall appropriation stage. My findings suggest that users regard this stage as the first contact, leading them to domestic use. For some, it marked the beginning of their relationship with the technology – incorporating serious research into what type of internet technology they were to acquire (computer or set-top box), how much they could afford and from which retail outlet to purchase it.

For other respondents, the ‘purchase experience’ proved to be less intensive, taking no more than ‘10 minutes’ – where the advice and assistance of the sales staff was sufficient to inform their purchase. In such cases, economic factors proved to be the determining factor, resulting in the cheapest or most affordable package being purchased. This package was chosen not because of its technical capabilities, but because it could be afforded. Whereas in other cases, the information-gathering process was extensive, spread over a number of weeks with all options – cost and technical capacity – being explored. In such households, cost of the technology was not the determining factor.

Therefore, I concluded that economic factors *were* influential in the purchase experience, but more so in cases where the respondents availed of special inclusive deals offered by retail outlets. In other households, respondents testified to researching and searching out specialised hardware and software, irrespective of financial constraints. In general, households availed of various purchase methods to acquire their chosen technology, including in-shop, online and telephone purchases.

11.4.2 Aspects of objectification

Once the technology was acquired, it was then subjected to processes associated with the objectification stage, including the decision about where to locate the newly acquired artefact, and how this inclusion of a new technology affects the media network already established in the household.

I concluded that the artefact was generally located in three main areas. In the majority of households, it was located in a public space, such as the living-room; the next most popular location was the bedroom of a sibling/child; and in only one case it was located in an office or study space. It emerged that the decision of where to locate the technology was informed by a number of factors, including household configuration factors, economic factors and generational factors. In brief:

- In most cases, a myriad of factors influenced the decision – the location was shaped by the number of active users, the purpose of use and aesthetic concerns.
- In some cases, the artefact was located in communal areas to ensure supervision of younger users. If space was an issue, it was decided to locate the technology in the bedroom of a household member.

11.4.3 Aspects of incorporation

The incorporation of the artefact was bound up with a number of issues, including the methods of use, and who, why and what it was used for. One significant theme emerging from the findings concerns 'rules of use'. These sometimes explicit, and other times implicit, rules were imposed by the users of the technology in the household, with respect to particular times of use, rules of supervision and patterns of use.

Extending across the majority of households was the 'after-six' rule. This particular rule was heavily influenced by economic factors. Respondents testified to adapting their use and consumption patterns to fit in with economic constraints. In Ireland, with the majority of domestic users availing of dial-up/pay-as-you-surf

accounts, the respondents found they could consume the internet for less cost if they logged on after six o'clock in the evening. This finding was also evident from analysis of the time-use diaries, which showed an upsurge in use after this time.

Another 'rule of use' concerned parental supervision of children while online. In a number of households with young active users, the adults heavily monitored their children's use, in some instances accompanying their activities, in other cases, installing specific monitoring software such as NetNanny, to ensure their children were not exposed to adult-themed content. This concern also influenced the location of the technological artefact, as discussed above.

Several respondents reported a shift in their eating and sleeping habits to facilitate their patterns of use. For example, some respondents spoke about staying up later at night, or getting up earlier in the morning to take full advantage of cheaper internet rates and to communicate with friends and family in different time zones.

When the internet was used

My findings suggest that the majority of the sample were not heavy users of the internet. The time-use diaries indicated that most accessed the internet once a week. The second highest frequency of access was three days a week, while only two respondents claimed to access the internet seven days a week and there may have been multiple internet sessions on those days.

I found that those who accessed the internet most frequently, and in a regimental way, appeared to have a well-defined relationship with the artefact. These respondents managed to fit the internet into their lives to such an extent that the technology performed tasks and functions that no other technology could do. It had become an integral part of their lives and had been shaped and reshaped to fit smoothly into their lives.

As discussed briefly in section 11.4, the breakdown of daily use shows an upsurge in use after six o'clock in the evening. The time between six and eight o'clock is the most popular time to access the internet, with eleven o'clock at night the second most popular access time.

Who uses the internet

Twenty nine out of the 44 respondents in the overall sample of household members claimed to be active users of the internet in their home. Section 11.5 will address in more detail the different kinds of users I found. However, this section will give a general breakdown of the sample as a whole.

The oldest user in the sample was 57 years old, while the youngest active user was 10 years old. The findings demonstrate that experienced users tended to ‘surf’ the internet less and, instead, visited bookmarked sites of interest. On the other hand, those users who were less experienced tended to ‘surf’ more and become what has been termed ‘cyber-flaneurs’ – those who aimlessly wander in cyber space, clicking from link to link with no predetermined destination.

I concluded that with regular and experienced use, a user’s preference and online activity is more defined and *shaped*. Use becomes routine and habitual as users visit the same sites of interest regularly. In general, experienced respondents spoke of their internet practice as regimental and sequential, where users follow the same pattern of sites visited and activities online.

What the internet was used for

Overall, the findings suggested a number of main uses of the internet. Communications (email and instant messaging) ranked as the primary function of the internet, with information retrieval and surfing coming next. These two major functions will be discussed in greater detail below, where the conceptualisation of the artefact was instrumental in shaping how the internet was used and what motivated the use.

The most common forms of information that motivated internet usage were topics such as current affairs and news, sports results, travel timetables, entertainment guides, and so on. On the whole, respondents spoke of topical events, or day-to-day occurrences, as the main motivation to conduct information searches online.

Communication functions also played a major role in internet use. It was found that those respondents whose primary use of the internet was defined by their usage

of communicative aspects were more frequent users of the internet, as opposed to those users who only used the internet as an information resource. This was determined by the necessity of checking for email replies and the heightened sense of community and contact, with friends and family, that the communicative functions of the internet engenders.

11.4.4 Aspects of Conversion

My findings suggest a mutual relationship and shaping both of the user and of the technology. This relationship was created through the three stages of domestication (appropriation, objectification and incorporation), where significance and meaning of the artefact was defined through use. It was possible through the analysis of the above findings to construct a typology of users. This typology was created with the intention of identifying styles of internet use emerging from the sample.

It was found that certain users in the sample displayed similarities in their use patterns. For instance, those users who used the internet for communication purposes (talkers) were adamant that their usage was more nuanced than mere surfing. The 'worker' group also wished to distance themselves from any leisure or entertainment connotations of the technology, maintaining their usage was primarily work-related. Those who formed the 'searcher' group seemed happy to surf and spoke of their use as sporadic and less nuanced than the 'talkers'. These three distinctive use styles were in direct contrast to the 'dismitter' group, who identified themselves as those to whom the internet meant little, non-users, informed rejecters and reticent technophobes.

On the whole, it was later possible to identify users based on their conceptualisations of the technology. This produced a dual conceptualisation of the internet, where one group of users saw the technology as a tool, in the same vein as an information retrieval system or a digital library/data-base, and the other group conceived of the internet as a collective medium, used mainly for keeping in touch with friends and family and the outside world.

11.4.4.1 Consumption convergence

During the empirical process, it became apparent that a transformation of domestic users' consumption and patterns of use was emerging. In essence, it appeared that there was a converging of consumption patterns and of media content from online and traditional sources, and this was happening at the same time in the same space. For example, respondents would speak about surfing the internet whilst watching television. In other cases, some respondents would read the newspaper whilst the television was on and consume online content simultaneously.

This activity marks a significant shift in domestic media consumption. Consumption convergence refers to the notion that media networks are 'coming together', or becoming hybridised in the domestic sphere, which has brought about a convergence in the consumption of media content. Within this notion, the stress is on the confluence of media technology networks, on social factors and on synchronicity.

The Unison set-top box technology is central to this analysis of consumption convergence. The set-top box is an alternative internet platform available to domestic users.³¹ The set-top box also permits the user to watch television while accessing the internet. Therefore, it is possible to consume both media concurrently by using the in-built function which allows two windows to open together – one with access to the internet and the other with whatever television programme is chosen. This intrinsic capability is designed to make dual consumption easier for the user/consumer/audience.

The case-study featuring Mairead Mulhare (see Chapter nine) encapsulates the essence of consumption convergence. There are other instances in the empirical sample where respondents noticed a coming together of their consumption patterns.

Donal O'Donnell used the computer and internet in his home for activities other than leisure – or communication-related purposes. The PC was located in the same room and nearly adjacent to the television entertainment unit, and Donal would find himself consuming both simultaneously.

Another instance provides a clearer illustration of this phenomenon. The case-study in Chapter eight revealed that Martin Smith's daily pattern of media consumption was influenced by his 'addiction' to information. This excerpt here embodies the very essence of consumption convergence:

I might have the television on. I mightn't necessarily watch it, but I might have it on while I'm in the room but while I'm on the internet...I'd have music on, the TV could be on as well in the background ...and music on at the same time, everything's on – radiation central! [Int.: *Do you use many media simultaneously?*] Internet and radio and music, radio and newspapers, I could have the newspaper open on the floor and be reading it while looking at the internet and have the radio on all the time through that.

The core significance of consumption convergence is highlighted in this one quote. The ubiquity of media forms available in the one space brings about the convergence of consumption of media content. The confluence of media networks such as television, print media, radio, and internet all in use at the one time provides Martin Smith with a whole host of media options with which to engage.

In another example, Jean O'Rourke spoke about dual consumption of media technologies as an automatic response. Her daily patterns and habits of media consumption had been altered to accommodate her dependence on two media. There is a temporal/spatial aspect to consumption convergence. The spatial aspect

³¹ In Ireland, Unison was launched in February 2000 as a 'branding exercise', according to Eoghan Kelly, a spokesman for Unison. Thirty thousand set-top boxes have since been purchased, given out as promotion prizes, or for free. Unison has no plans to update the technology or continue with the exercise and has since discontinued the line. Kelly outlined that the set-top box was targeted to an older, non-PC literate/familiar audience who wished to access the internet from their living room television, instead of being locked away somewhere away from the rest of the family, Unison (Eoghan Kelly) was contacted on the 15th April 2002, in regards to questions pertaining to the target

is that the consumption of media texts occurs in the same location, and temporally speaking, consumption of more than one media takes place at the same time. The spatial aspect is interesting as it confirms the fact that one location in the home has become a type of *hub* for competing and converging media. The PC is more often joined by other media, for example, alongside the television, radio or video.

This discussion of convergence and its application to the domestic multimedia environment shows an interesting trend taking place in the household. It is possible to say that, while not evident in every household in the sample, a change is taking place in the ways and shapes of people's consumption of media technologies. Consumption convergence marks a move away from the traditional mode of media consumption. What was once a solitary and singular activity (for example, early radio listening with earphones), has morphed into a shared, collective experience. Both media content reception and the form of media texts received has changed. While television is an activity enjoyed in the presence of others, and also individually, radio can be either as well. What makes consumption convergence of the internet and other media an exception is that the user is paying attention and is alert to competing media at the one time.

11.5 The e-working class

The thesis presents a study of domestic use and consumption of working class households in Ireland, which is typically a neglected area of research, overlooked, ignored in academic as well as commercial studies. Such an insight into how working class households domesticate and consume the internet is a valuable addition to the available literature about domestic use and consumption patterns and trends of households. Some of the most significant trends and patterns revolve around educational motivations for acquisition and use of the technology.

The working class respondents' use was characterised by an emphasis on education and informational resources. These respondents have developed cost-saving mechanisms to reduce the financial burden of use, including composing emails

audience and introduction of the set top box to the market.. It is a Linux-based platform which offers email/internet services.

offline, after-six o'clock use, restricted time-frames of use, and physical means (removing the access card from the machine). Working class respondents experienced the economic-squeeze more than middle class respondents, due to unjust pricing schemes, as this thesis points out. Regular and heavy use is rewarded with lower internet access rates, but this does not benefit those individuals or households who use the internet sparingly, but value their use and what it means to their situation.

This method of self-enforced cost-cutting makes the internet a viable source of information and a cheaper means of communication. Although, the majority of the working class respondents in the sample did not make full use of the communication aspect of the internet. The reasons for this varies, but one major reason was that the respondents did not have a network of contacts of friends and acquaintances with whom to communicate via the internet. They preferred the telephone, although they would use the internet to request information from specific sites. This aspect of the communicational functions of the internet was well received because it removed the need to leave the house, or speak to another person face-to-face to explain information requirements. The respondents conveyed the fact that this method of information retrieval was ideal because they had previously perceived a sense of discrimination from whom they sought the information.

One major theme emerging from this particular sample of respondents was the self-inflicted pressure to acquire the internet. This stemmed from a sense that possession of a computer is in some way beneficial to children's education prospects. Most respondents spoke about their lack of knowledge and competencies to actually operate the machine, and also told of their learning experiences and reliance on their children to help them master the simplest of tasks.

This perceived 'social pressure' was the justification and motivational force behind the decision to acquire the technology. The decision was also reinforced by the those working class parents' lack of or little educational proficiency. The internet technology then assumed a greater level of significance to these respondents who perceived the internet in a 'saving' or 'redeeming' sense, where the respondent's lack

of education or knowledge was bolstered by access to the internet from their homes. Requesting information in the traditional sense reinforced their perceived ignorance, and many respondents spoke about the ostensible condescending attitude towards them because of their background.

The majority of working class respondents tended to locate the artefact in a bedroom location. This decision was influenced by the fact that the internet/computer is deemed to be 'for the children' although it was also used by the parents when required.

This study has provided some valuable insights into the domestication process of working class households and the extent to which their domestication of the technology was influenced by social factors. The most pertinent finding is the apparent relationship between education and the internet, and how education is bound up with the identity of the technology as an information resource.

This thesis can justifiably claim to portray a novel experience of working-class internet use in Ireland. The internet (in terms of access and use) has for a long time been seen as a middle-class, privileged (in terms of use and analysis) activity.

11.6 Domestication revisited

In carrying out this research, I have applied the domestication process as offered and developed by Silverstone *et al.* (1989, 1994). In a sense, I have used Silverstone's concept as an 'ideal model' (Figure 11.1) through which the findings were filtered about the domestic consumption practices and experiences of the users. Silverstone's model has both informed the way I gathered the data and the way I have interpreted the data, essentially meaning that the domestication concept has provided me with an analytical tool. As argued in Chapter two, the Silverstone version proved to be more appropriate than the competing, alternative theories and concepts of ICT integration into everyday life (Lie & Sørensen, 1996) or even diffusion models of uptake (Rodgers, 1995). The Silverstone model proved useful in the ways it highlighted certain phases or aspects of the social processes through which domestic users experience a level of meaning and significance, embedding the artefact into 'everyday life' and the household ('habitus', Bourdieu 1984).

However, despite my extensive use of Silverstone's domestication concept, it should only be thought of as an theoretical apparatus, or empirical check-list employed to make sense of the experiences of users. While I have retained the terminology offered by the Silverstone's approach to domestication, my analysis of domestic use suggests that the process of domestication can be understood in another way, one which stems from my rich, in-depth research of domestic users.

But, let us first reassess the Silverstone model and its usefulness as an analytical tool for the current study, how successful it was as a model of understanding use/consumption practices, and how successfully the Silverstone approach can be applied to the domestication of new media technologies.

Domestication as an ideal concept

The concept of domestication was first formulated to deal with the appropriation and use of mature media technologies, such as television (Silverstone *et al.*, 1989). This produced a 4-stage model of domestication aimed at making sense of the process whereby people come into possession of a new technology, for whatever reason, and where they subject the technology to social processes in order to 'tame' or 'integrate' the technology into their lives, and into the moral economy of the household.

This model, however, comes across as an ideal process, with abstract phases relating to user experiences. The Silverstone approach, in some ways, lacks a real sense of *user* experiences. In some respects, it can also appear rigid in the ways phases are entered into – these become blurred when applied to new media technologies (especially the computer and internet). The challenge of this thesis, then, was to apply the Silverstone domestication approach to the sample and assess if this process can be transferable to new ICTs.

This thesis argues that when Silverstone's model is applied to the domestication of the internet, several issues become problematic. First, the process needs to become more fluid and dynamic than Silverstone's initial conception of the model, due to the increased functionality of new media technologies. It is rarely the case that

new media technologies are dedicated to one purpose or function, instead they can converge with or assume the role of mature media uses.

Closure of meaning is problematic because of the increased functionality and utility of new media, in the ways that the internet can mean different things to different users, sometimes simultaneously (as an information resource, communication medium, or entertainment station).

Transfer of meaning and interest across the different functions of new media may also occur. This multiplicity of functions brings with it an added problem of new skills and practices required to operate the technology and make use of the technology to its fullest capacity. Renegotiations of meanings and uses are possible and common in relation to new media technologies. Meanings are renegotiated when new aspects of new technologies are discovered by users. This ensures the process of domestication of new media technologies is not harmonious, linear, or complete, but is in constant flux and transformation. This also ensures that the outcomes of domestication are heterogeneous and unfixed. Some of the factors making domestication problematic when applied to new media technologies are:

New technologies:

Users experience the domestication process, more often than not, when the technology is newly acquired, or when it is first encountered in external environments. However, in the case of new media technologies, peripheral devices are often bought to complement the existing artefact (printers, scanners, digital cameras etc). This brings about a new domestication experience, and sometimes a relocation of the artefact, which further enhances the users experience of the technology. New technologies and peripheral devices open new negotiations in ways not possible with mature or traditional media.

Software:

Users can explore and discover new aspects to the technology brought about by new software. New software also carries baggage in the shape of new skills required to negotiate and navigate the new experience.

Shift of focus:

When users discover alternative uses and functions of the technology, their experience is again enhanced. For instance, if the primary function of the internet was to surf for information, but the user discovers email, chat-rooms and/or message boards, their interest, skills and conception of the artefact is developed and extended. This brings about a re-negotiation of meaning and significance of the technology in their everyday life.

To understand this process from the viewpoint of the user, I shall present a version of domestication gained through an analysis of the empirical data, this time from the users' perspective. The 4-stage approach proposed by Silverstone *et al.* (1989) underpinned my study, providing a theoretical framework and a tool by which to analyse the process of domestication. However, it became apparent that the user's *own* interpretation of how and why they consumed the technologies was not adequately described by Silverstone's approach. In fact, it might be understood as the *product* of the application of Silverstone's model to the current study, which evolved into an alternative 3-stage model. This alternative model aims to advance the concept of domestication, in order to portray the lived realities of domestic users as they experience domestication of internet technology in their own homes.

The 3-stage model describes the processes that occur from *before* the actual acquisition of the technology to the changes the user and technology undergo during subsequent social processes (Figure 11.2). Although this schema begins with 'acquisition', I propose that the processes that occur before the technology actually enters the home form a crucial element of the acquisition phase. This is a user-based model which makes sense of users' experiences. These processes are not fixed or linear, but can be experienced at different stages during use.

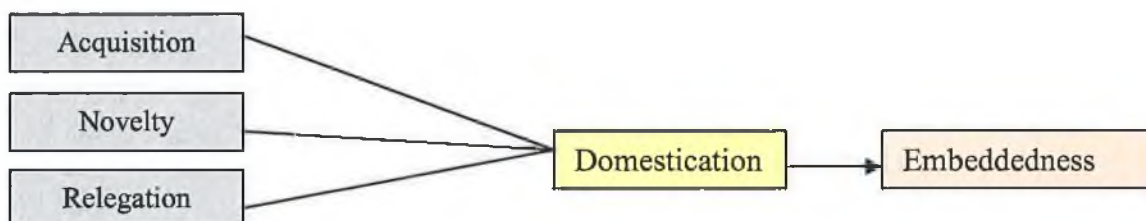


Figure 11.2 3-stage model.

11.6.1 Acquisition phase: the home's new arrival

The Silverstone 4-stage model suggests domestication begins when the technology enters the home; however, my empirical analysis suggests that users experience earlier stages/aspects *before* the technology even reaches the home or even before it is used in any real meaningful way in the domestic domain.

The findings indicate the following phases of acquisition:

- First/previous encounter(s) sets the scene/shape of use
- Interest, motivation and skills
- Justification for purchase
- Research
- Actual purchase experience
- Entrance of technology
- Location in the household
- Early use
- Learning, training, and teaching skills to other family members.

My findings suggest that what goes on before the entrance of the technologies to the home is just as important as what goes on once they have entered the domestic space. Users or 'informed' non-users shape their experiences by their first encounters with the technology – such as in a school, university and college or work – and this shapes the way users approach the acquisition of the technology. The data provide rich examples whereby respondents in the present study have encountered the technology and how those have helped shape their use in the domestic setting.

Interest, motivation and skills also prove to be crucial factors in the ways respondents shape their experiences when coming into possession of the technology. Respondents see skills and abilities to operate the technology as crucial to the type of machine bought, how they perceive the technology, and where this technology is to be located. If the technology is seen as another part of the entertainment network and used mainly for entertainment or communication purposes, it tended to be located in the communal living space. When the

technology is seen as an information resource, in the same way as a set of encyclopaedias, it tended to be located in a bedroom or study location.

The justification for purchase, and the research that the respondents conducted prior to the purchase of the actual equipment, was associated with a high level of significance for respondents. This sub-phase of acquisition was important in that it informed what kind of technology was best suited to their needs and financial status.

The technology then enters the home and remains in the acquisition stage whilst the user realises the actuality of consumption. Once the technology achieves a level of familiarity, and the user overcomes the difficult stage of becoming acquainted with it and its functions, the process enters the next stage.

11.6.2 Novelty phase: 'I couldn't turn it off!'

The second phase, which I have termed the novelty phase, is experienced after the early stages of meaning association and value attribution have assigned a certain level of significance to the technology. This phase is concerned with meaning and use. All respondents testify to experiencing this stage during their domestic use. For example, Deirdre Lawlor explains how she experienced the 'novelty phase':

It took a couple of nights, when we had it first, we had it on all the time - the novelty of it - just surfing through it, finding out how things worked, what goes where, and what you can do with it. It was a bit of a buzz at first, but it soon wears off.

This phase has an unfixed timeframe and is entirely dependent on the individual user. The time it takes for the 'freshness' or novelty to abate is determined by what functions the users themselves have discovered. Significantly, it is also possible to re-experience this phase, along with the acquisition phase, throughout the process as a whole, as new uses and functions are constantly discovered and the technology is reshaped, and as new items of hardware and software are added. Once this happens, the user will undergo the process again and experience yet another novelty phase.

11.6.3 Relegation phase: how the technology lost its charm

The third phase in the process of domestication of the internet is the relegation phase. Once the period of novelty has abated, users' patterns of use change as the technology fits into the everyday routines of users' lifestyles. After the initial acquisition and novelty period, the attraction of the technology begins to dissipate and the technology slowly begins to achieve a level of embeddedness and integration. The technology comes to be regarded as just 'being there', relegated to just 'another machine for the home', in the same sense as the television, radio or telephone. The testimonies below illustrate how the technology loses its charm:

Even though when you buy something, within weeks – because you have worked for it and you have bought it and are delighted with it. Suddenly it loses its novelty like everything does. I found the computer still lost the novelty of being a wonderful thing (Karen O'Connell).

When I first got it, I would have considered it a special type of machine. I was very much careful because it was so expensive, so it was packaged and only taken out if I wanted to do something specific. But now, because I have it for so long, it is part of the home. I'd come in and put on the television and computer (internet) automatically (Jean O'Rourke).

No, to us it is part and parcel of the household like the television (Betty Houghton).

However, as stated before, even though the technology may appear to be in the relegation phase, if new functions or uses are discovered, the user re-enters the two initial phases. The model I propose should not be considered as a linear process, because overlapping and entwining of all stages is possible, unlike the Silverstone model.

While the model I propose gives an understanding of the lived reality and user experience of the domestication process, it is essential to place it within the context of my sample, as a working application of Silverstone's model. It must be viewed as a practical, rather than a theoretical model. It is only through practical application that such a model can further our understanding of the complex

processes of domestication, that is the ways users acquire, use and consume and make sense of the technologies within their own 'everyday' reality.

11.7 Limitations of the study

One of the main limitations in conducting a qualitative research project, such as this one, is that the sample, by necessity, is restricted to a manageable size. Whilst there are advantages in conducting such an in-depth study with fewer respondents, there is also the possibility that a larger number of respondents would have led to the identification of trends outside the scope of the current study.

The nature of in-depth analysis means that it is not feasible to work with a large number of respondents. While a large sample may have provided a more generalisable picture of domestic internet consumption, in the context of the current study, a large-scale survey was impractical for the following reasons:

- First, time constraints determined the number of possible respondents due to the high levels of contact time and in-depth interviewing required.
- Second, financial constraints impose a significant obstacle to conducting a larger-scale study to the one presented here.
- Third, the scope of the research would need to stretch further than the locations used in the current study in north Dublin. Confined to Dublin, research of a similar nature in rural areas is ignored, which could provide an interesting comparison to the present study.

Despite the acknowledged limitations of the present study, the value of small-scale studies, which produce very subjective responses based on personal experiences, is nonetheless immensely significant especially in the field of new media technology consumption. Studies that document and analyse the changes to domestic consumption patterns and habits produce a useful and fruitful balance to large-scale quantitative studies.

11.8 Further research

Commodities, such as ICTs and media technologies, are given different meanings and uses by different people, in different environments, and these meanings change

over time. Such consumption, especially the generation of meanings, is understood within cultural and socio-economic settings – such as the family, the household, the workplace, and so on. Meanings are constructed through use and experience, but those meanings are also constrained and shaped by the setting. Users re-invent and re-define technologies with new meanings and new functions according to their personal codes and characteristics.

To gain a better understanding of domestication, it would be beneficial and valuable to conduct a longitudinal study of domestic users. Areas worth focusing on include how users shape their everyday life and realities to accommodate the new technology, whether they perceive the technology as a necessity, and if so, how this develops over time. In order to observe the situated practices of interpretation and cultural distinction at work, users should be studied from the point when the artefact arrives in the home and is used.

A large-scale study, using both quantitative and qualitative techniques in tandem, would provide a better understanding of a more representative nature. Using such methodologies would deliver a clearer picture of domestic use and consumption of internet technologies on a wider scale.

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Appendix A

Household 1.

Name: Donal O'Donnell {30}

Household configuration: single household

Class: Middle class

Household Description: Single

A primary school teacher by profession. experienced computer and internet user. Lives on his own in his parents old home. **Recruited:** Interview conducted with Donal only.

Household 2.

Name: Mairead Mulhare {31}

Daughter & Son {both under 10}

Household configuration: one parent family, separated from husband.

Class: Working class

Household description: Mairead is unemployed and lives with her two children in a high-rise tower block. Her only experience of computers was gained by attending a course run by the school her children attends. She regularly accesses the internet from her Unison internet set-top box. **Recruited:** Mairead attended IT course. Interview conducted with Mairead only.

Household 3.

Names: Mark Boland {31}

Sandy Boland {35}

Daughter & Son {both under 10}

Household configuration: nuclear family {2&2}

Class: Working class

Household description: Mark works full-time in a semi-skilled job with Dublin Bus and Sandy works part-time in a city-centre off-licence. They live in a small three-bedroom house in a working class estate. **Recruited:** Both Sandy and Mark took part in interview

Household 4.

Names: Jenny Marlon {37}

Brian Marlon {42}

Robert Marlon {13}

Son & Daughter {both under 10}

Household configuration: nuclear family {2&3}

Class: Working class

Household description: Brian is a long distance lorry driver and Jenny works part time as a cleaner in a football club in the area. They live in a high rise tower block flat, but are awaiting relocation to a new housing development. Jenny and the two boys are the only members of the household who have computer experience. Brian has none at all.

Recruited: Jenny attended IT course Brian and Jenny took part in interview, although Brian said very little, and Robert was interviewed alone.

Household 5.

Names: Karen O'Connell {34}

Alan O'Connell {36}

Son & Daughter {both under ten, 8&6}

Household configuration: Nuclear family {2&2}

Class: Working class

Household description: Alan works for a delivery company as a van driver and Karen works part time (voluntary) as a secretary in the school. They live in a working class housing estate. Karen has experience of computers from working in an office and doing a course in the school, while Alan completed an ECDL (European Computer Driving Licence) course.

Recruited: Karen worked in school where IT course was based and also attended classes. Both Karen and Alan took part in interview

Household 6.

Names: Deirdre Lawlor {37}

Martin Lawlor {39}

Four sons {9, 8, 6, 4}

Household configuration: Nuclear family {2&4}

Class: Working class

Household description: Martin works two jobs – one as a bricklayer and the other as a taxi driver. Deirdre manages the household. They live in a three bedroom house a working class estate. Deirdre is the only person with computer experience – gained from various courses. However, they do not have access to a computer, but access the internet a set top box.

Recruited: Deirdre attended IT course briefly while voluntarily helping out in school. Deirdre and Martin took part in interview, although Martin had to leave half way through to go to work.

Household 7.

Names: Jean O'Rourke {23}

Mary McDonald {22}

Household configuration: Shared flat

Class: Middle class

Household description: Mary is a new media manager for a graphics company, while Jean is a part-time lecturer and PhD student. They live in a two bedroom flat in the city centre. Both have extensive experience of computers and the internet. Both household members took part in interview. But were interviewed separately.

Recruited: Snowball sampling, named contact

Household 8.

Name: Martin Smith {35}

Household configuration: Single household

Class: Working class/Lower middle class

Household description: Martin is unemployed but university educated. He does some part time free lance work. He lives on his own in a bed sit on a north inner city street. He also has extensive experience with computers and the internet.

Recruited: snowball sampling, referred by member of sample

Household 9.

Names: Reg Loughlin {56}

Nicky Loughlin {24}

Ross Loughlin {20}

Household configuration: Mature family, three members of the family living at home

Class: Middle class

Household description: The Loughlin's live in a large 5 bedroom house in a well-to-do suburb of north Dublin. Reg is a sales representative for a company, Nicky is web designer, and Ross is a student. Both Ross and Nicky have experience with computers, Reg works with a laptop but has little experience.

Recruited: Snowball sampling, named contact, referred by member of sample. All three took part in interview.

Household 10.

Name: John Keller {57}

Household configuration: Empty nest

Class: Middle class

Household description: The Kellers live in a bungalow in a well-to-do suburb of Dublin. John is college lecturer. However, he claims his wife and he live separate lives, have separate rooms of the house, this suits them, and she refused to take part in the interview. John's knowledge of the computer is extensive.

Recruited: Snowball sampling, named contact. Only John took part in interview.

Household 11.

Name: Alison Moran {31}

Household configuration: flat-sharing

Class: Middle class

Household description: Alison at time of interview was living with a male friend who was about to move home back to Australia. She was currently searching for a new house-mate. Therefore, only Alison took part in the interview. She is primary school teacher. Her knowledge and use of computers is relatively limited, but she has basic competency.

Recruited: Alison taught in school where IT course was held. Only Alison took part in interview.

Household 12.

Names: Ken Barry 31 Denise Barry 30

Household configuration: Co-habituating

Class: Working class

Household description: Ken is a Phd student and Denise works as a civil servant. They have just bought a house together in working class suburb of Dublin. Their computer knowledge is above average. Both respondents took part in the interview.

Recruited: Snowball sampling, named contact.

Household 13.

Names: Rachel Benton {30}

Sean Benton {33}

Son {6}

Household configuration: nuclear family

Class: Working class

Household description: They live in a poor housing estate in a working class area. The house is small with two bedrooms. Rachel has the most IT experience from attending classes at the school. She manages the household, while her husband works as a pipe fitter.

Recruited: Rachel attended IT course. Only Sean and Rachel took part in interview.

Household 14.

Names: Betty Hutton {48}

Karen Hutton {18}

Household configuration: one parent family

Class: Middle class

Household description: Betty is separated from her husband who has moved out of the home. Her eldest daughter is away at college. Betty is a mature student in university and Karen is in her final year of secondary school. Betty's computer use is very limited, Karen's use is self-taught and she is only competent at activities that interest her such as online consumption and downloading music. They live in a three bedroom house in a well-to-do area of Dublin.

Recruited: Snowball sampling, named contact. Both respondents took part in interview.

Household 15.

Names: Des Dooley {55},

Mary Dooley {50},

Eimear Dooley {19},

Tiernan Dooley {11}

Household configuration: nuclear family

Class: Working class

Household description: Des is currently between jobs, Mary works in a library at the issue desk, Eimear works in a grocery store, and Tiernan is in primary school. They live in a three bedroom house in a middle class suburb. All members have limited, if no experience of computers.

Recruited: Both Mary and Des attended IT course. All members took part in interview

Household 16.

Names: Judith Ryan {39}

Robert Ryan {13}

Joanne Ryan {17}

Barry Ryan {11}

Household configuration: one parent family

Class: Working class

Household description: Judith Ryan works in a job share arrangement in a civil servant job and is separated from her husband. The children are all at school. Judith has computer experience from her job, and Joanne is self-taught, and has passed her knowledge on to her brothers. They live in a three bedroom house in a suburb close to a working class estate.

Recruited: Snowball sampling, named contact. Judith, Robbie, Barry and Joanne took part.

Appendix B

Interview questionnaire:

Below is the standard list of questions applied to the body of respondents, but other areas of interesting findings were taken further with discussion.

Background questions

1. Names
2. Address
3. Ages
4. Occupations
5. Approximate income
6. Education details

Appropriation phase

7. When and where did you buy your computer with internet access?
8. What sort of package did you opt for?
9. What was the biggest factor that influenced your purchase? (price, package)
10. Why did you decide to buy a computer?
11. Can you tell me about your purchasing experience?
12. What were the barriers that you had to overcome before buying the PC?
13. Where did you learn to operate the PC and internet?
14. How much influence did your previous experience with PCs have on your purchase decision?
15. Do you think your level of experience has improved since buying a PC?
16. What advice would you give to a potential buyer?
17. What difficulties did you experience as you were learning how to operate the PC? (probe: age)
18. What is the most important reason for having a PC with internet access in your home?
19. Who is the principle user?
20. What is the main purpose or function of the internet and PC?
21. Who makes the rules regarding the PC, internet and general use?

Incorporation phase

22. Where is the PC located?
23. Whose decision was it to locate it there?
24. Was there a phone line in place or did one need to be put in?
25. Did the location of the PC need to be refurbished to accommodate the PC?
26. Does the location of the PC have any implications for usage for other people in regards to time spent using it, when it is used etc?
27. Does it cause phone line disruption in your home – for people trying to call or other people trying to phone out?
28. If so, does it cause tension or stress in the family?
29. Since installing the PC, have you noticed any increase in stress or tension or arguments between family members concerning the use of the computer?
30. Do you regard the PC/internet as another machine for the home or do you think of it as something special? (probe)
31. How much do you pay per month for internet use? is it expensive?
32. Who is your internet service provider?
33. To what extent has the internet been incorporated into your life?
34. What sort of a role or part does it play in your daily life? (explain)
35. Has having the internet in your home had any effect on television viewing, radio listening, newspaper reading, video watching?
36. What sort of effect has the internet had on your social life?
37. Do you find yourself spending more time in front of the computer screen than before?

38. What sort of impact has the internet on your: Home life, Education, Leisure time, Work Shopping

Relationships

40. Does one's age, social class or gender have a bearing on their usage of the internet?

41. Do you feel the area you live in has any bearing on your internet use?

General media use

42. What does the internet mean to you?

43. How does it fit into your life?

44. Do you feel your leisure time has become more mediated or depended on media?

45. Do you still have time for non-media past times?

46. What do you use the internet the most for?

47. Which websites do you access most often, what for? Why them?

48. How long do you spend on each website?

49. What sort of websites appeal to you and why?

50. What influences your web consumption?

51. Have you ever been part of an internet chat room/message board? On what subject?

52. What did it mean to you be part of such a community?

53. Did you have any fears or reservations?

54. Does the idea of a virtual relationship appeal to you? (probe)

55. Do you have your own webpage?

56. What sort of content would you put on your personal webpage?

57. What did you do before you got the internet for: communication, information, entertainment?

58. What do you do to relax?

59. What makes you prefer to relax to X rather than Y?

60. What television programmes do you prefer? Why these?

61. Who chooses what is watched on television?

62. Has your television viewing any impact on your web consumption i.e. web addresses for programmes, email opinions, etc?

63. Do you listen to the radio? What programmes?

64. Do you watch videos? How regularly? What sorts?

65. Do you read books? What genre?

66. Has any of your media consumption, for instance television viewing or book reading been replaced by the internet?

67. How does the internet fit into your home and the media already in place?

68. Do you buy magazines? On what subject? How regularly?

69. Do you buy/read a newspaper daily? If so, which paper do you prefer? Why?

70. Do you buy/read a Sunday newspaper?

71. Which medium, in order, do you use for? Entertainment, Research, Education, Shopping Leisure, News and information and current affairs, Communication

72. Do you use any multimedia packages, such as CD-Roms?

73. How long would you spend on the phone daily? Business or personal?

74. Do you have a mobile phone? For what reason?

75. What has the mobile phone added or taken away from your life?

76. If you didn't have the internet at home would it be missed?

77. What are the most important technologies in your life?

78. Are you the sort of person who buys new technologies as soon as they come on the market, or do you wait until they have become established and familiar in society?

Appendix C

Time/ Use Diary

Instructions

1. This is a record of your media use
2. Please fill out appropriate space when necessary.
3. There is a space provided for each day for one week only. Add date at top of each page
4. Please fill in time of day, time spent using media, type of media, purpose, accompanied or sole use,
5. If you miss a day, or forget – please fill as soon as remembered.
6. Please add additional pages if required.
7. List of media on last page

Tuesday 10th November (example)

Time	Time spent	Media	Purpose	Alone/ accompanied
8.20am	20mins	Radio 2FM	Early morning news	Alone
9.30am	60mins	Internet	Research for new software for office project	Alone
11.15am	15mins	Newspaper - The Star	Just to have a look at what is going on in the world.	Alone / break.
2.10pm	30mins	Internet	Check email, and send email	Alone
5.40pm	45mins	Radio	Company in the car on the way home	Alone
7.00pm	180mins	Television	Soaps, film, and night-time news.	Accompanied by husband and kids.
11.00pm	20mins	Internet	Chatrooms with friends	alone

Date:

Time	Time spent	Media	Purpose	Alone/ accom.