Life With or Without the Internet:

The Domesticated Experiences of Digital Inclusion and Exclusion

Mark Holden,
MSc in Media and Communications

Dissertation submitted to the Department of Media and Communications, London School of Economics and Political Science, August 2011, in partial fulfilment of the requirements for the MSc in Media and Communications. Supervised by Dr. Ellen Helsper.

Life With or Without the Internet:

The Domesticated Experiences of Digital Inclusion and Exclusion

Mark Holden

ABSTRACT

As the Internet becomes an increasingly central part of daily life in the UK, questions about those who it, versus those who do not, persist. This study focuses on the lived experiences of digital inclusion and exclusion, in order to understand how it relates to the context-specific development of symbolic and material opportunities in everyday life. It aims to add to the well established body of predominantly quantitative research relating to digital inclusion and the relationship between Internet use and social capital, by simultaneously using, and evaluating, the domestication framework as a qualitative explanatory framework. Using semi-structured in-home interviews amongst ten participants in London and Hull, the study aims to develop understanding of the complex relationship between digital inclusion, or exclusion, and the development of social capital. The key finding is that access to pre-existing symbolic and material opportunities appears to be a precondition for effective Internet use. Lack of effective Internet use can be symptomatic of low social capital, or is mitigated by the social and economic support of social networks available to individuals. The study also confirms that there are clear generational differences in usage and attitudes towards the Internet, but that the lack of effective Internet use is potentially most acute for younger, working age users, particularly where it negatively impacts on education or employment opportunities. In doing so, it draws attention to the limitations and contributions of domestication as an explanatory analytical framework, raises questions about the existing UK policy framework, and suggests further avenues for both qualitative and quantitative research to complement the existing body of research relating to digital inclusion and exclusion.

INTRODUCTION

> *'The economic and social case for a networked nation is overwhelming.'*
> - Manifesto For a Networked Nation, Race Online, 2010

It is clear that over the last decade Internet-enabled technologies have assumed a growing centrality in our daily lives. In the UK, the "digital decade" (Ofcom, 2011) is defined by a rapid adoption of home and work broadband Internet access, on which organisations and citizens have become increasingly reliant. As daily reliance on the Internet has increased, questions about who is not using the Internet, why they're not online and the implications of non-use, have persisted in the policy and academic research communities. The origins of these questions can be traced to the 1990s, when the term 'digital divide' first emerged. Although its precise origins are uncertain, it was popularised by a series of reports published by the US Department's National Telecommunications and Information Administration, most notably its 'Falling Through The Net' report (Gunkel, 2003).

The term and its application matter, since it has come to characterise the divide between those who have access to new technologies, and the Internet specifically, and those without. The concept matters because it has come to distinguish between information 'haves' and 'have-nots', implicitly or explicitly suggesting that there is a causal link between access to new technologies and material wellbeing. It suggests remedies, frequently found in policy, that presuppose that providing access to new technologies can help to 'close the gap' between advantaged and disadvantaged groups (Gurstein, 2003). To some extent the digital divide perspective continues to exert considerable influence on policy-making. In the UK, the government-sponsored 'Manifesto For A Networked Nation' proposes initiatives aimed at ensuring that "everyone of working age should be online" by 2015 (Race Online, 2010), suggesting that Internet use opens up a range of economic benefits for individuals and society.

A well established body of research over the last 15 years has exposed the problems with this unambiguously binary, causal interpretation of Internet use and non-use (Couldry, 2007). Though Internet use has indeed grown, it is clear that there remains a significant minority of citizens who are not online and do not appear inclined or able to get online in the near future (Helsper, 2008). The research community has consequently been concerned with the underlying relationship between Internet use and socio-economic wellbeing, to understand when and why use and non-use matters, and the extent to which it creates or reflects

opportunities for social and material gain in daily life (Warshauer, 2004; Katz and Rice, 2002). The key questions are now not who is or is not using the Internet, but why specific user groups may or may not be online, what the positive and negative consequences may be, and to what extent digital participation is a function of social inclusion and exclusion more broadly. It is clear that, despite government rhetoric, and the undoubted impact of the Internet on daily life for many, there is no digital utopia in which all citizens naturally and voluntarily get online and benefit equally and immediately from Internet access (Katz and Rice, 2002).

The nature and relative effectiveness of Internet use is more complex. Though the economic and social case for universal Internet use is far from certain, or overwhelming, existing research has established connections between relative social exclusion and digital inclusion (Helsper, 2008; Warschauer, 2004), and the extent to which use of Internet technologies augment and build socioeconomic resources (Halford and Savage, 2010; Wellman at al., 2003). The aim of my study is to examine and understand some of the ambiguities and complexities of this relationship, by examining how they are manifested in the context of daily life. To do so, I will draw from the existing body of research and literature on digital inclusion and exclusion, theories of social capital and its relationship to Internet use, and the domestication framework as a qualititative analytical framework. My deliberate goal is to focus on the qualititative experience of Internet use and non-use, and the implications for socioeconomic wellbeing, to contribute, even if modestly, to the growing body of quantitative research and theory in this area.

1. THEORETICAL FRAMEWORK

My literature review draws from three related areas: the digital inclusion agenda, which has its origins in digital divides literature, theories of social capital and how they relate to Internet usage, and the domestication of technology framework. I first review the trajectory of digital divides (within countries) and digital inclusion literature, then move on to discuss how it is related to the concept of social capital and use or non-use of the Internet. Finally, I will assess the role that the domestication framework can play in contributing to a research agenda that focuses on issues of digital inclusion and social capital in the context of everyday life.

1.1. Why Digital Inclusion? The Problem With Digital Divides

The digital inclusion agenda has its origins in the perceived problem of digital divides, which continues to exert an influence on research, literature and the policy agenda regarding Internet access. There are a number of conceptual and practical problems with the divides discourse. In the first instance, the term itself is self-fulfilling, since it establishes a "binary logic" (Gunkel, 2003:505) that divides groups into a dichotomy of users and non-users, where the user group is normalised and the the non-user group defined as the problematic 'other'. This logic ignores significant numbers of users who choose not to use new technologies (Wyatt, Thomas, & Terranova, 2002; Klecun, 2008; Frissen, 2003; Selwyn, 2003), has the tendency to characterise citizens as 'technology consumers' rather than active users (Stevenson, 2009), normalising a form of technological determinism that, at its most severe, masks the socioeconomic problems that are at the heart of the issue - and may even serve to deepen social stratification by normalising asymmetrical relationships that overstate the positive impacts of technology use (Murdock & Golding, 2004; Warschauer, 2004; Gunkel, 2003).

In the second instance, the dichotomous framework of the digital divides oversimplifies what is a complex issue by framing both the problem and solution in terms of *physical access* to new technologies. Focusing on access alone "is meaningless unless people feel able to make use of such opportunities" (Selwyn, 2004:347). To fully grasp the complexity of the issue, van Dijk (2005) argues that it needs to reframed as socioeconomic, not technical. The implication is that a number of variables need to be taken into account that together contribute to meaningful use of Internet technologies: user motivations, variations in skill levels, availability of suitable content, material access to resources, and that variability in use may

be the product, not the cause, of socio-economic inequalities (Selwyn, 2003; Couldry, 2007; Cammaerts at al., 2003; van Dijk, 2006; Hargittai, 2002). To compound this, Norris (2001) has argued, prior to the publication of the first NTIA report, that any patterns in usage of the Internet are likely to be moveable due to the nature of ongoing technological and social change, necessitating a longitudinal view.

Alternative frameworks have been developed that better conceptualise the issue – by recognising that use is complex, relating it to issues of social inclusion and focusing on the *outcomes* of use and non-use.

1.2.   The Alternative: The Digital Inclusion Agenda

Livingstone and Helsper (2007) propose that, to look beyond the binary concept of divides, the concept of a continuum of digital inclusion is more useful, since it shifts attention "to those who, while classed as 'users', may not yet be gaining all the benefits of going online" (2007:690), by considering the variation in opportunities that are available by going online in the context of everyday life. According to this approach, different types of usage matter, since varying combinations of habits and skills result in more advanced or comprehensive use of online opportunities. The advantage of this approach is that it recognises that there is not one kind of inequality, but layers of relative inequality among Internet users based on their ability to make effective use of the Internet (DiMaggio & Hargittai, 2001; Norris, 2001). It acknowledges that there is symbolic value to the way that the Internet is used (Wyatt, Thomas, & Terranova, 2002), and therefore the research task is to identify and assess the range and quality of use amongst users and non-users.

In addition, the digital inclusion approach acknowledges that technology does "not exist outside a social structure, exerting an independent impact on it" (Warschauer, 2004:205), but is instead embedded in a system of social structures that determine how technology is diffused and used. Warschauer (2002) proposes a framework of technology for social inclusion, that shifts the focus to how the use of communication technologies can further processes of social inclusion – emphasising social transformation over technology. Effective use of the Internet may be a necessary, but not the only condition, for social and economic inclusion. According to this perspective, the promotion of inclusion will need to account for the range of available resources (physical, digital, human and social) that citizens are able to mobilise for their benefit. For Warschauer (2002, 2004), as for Livingstone and Helsper (2007), it is necessary to understand how the Internet is actually used, and what "rates of

return" (Warschauer, 2004:214) it can offer for social issues such as learning, social capital, participation in society and economic wellbeing.

Couldry (2007) similarly argues the that the distribution of "communicative resources" (2007:385) is the underlying issue. Couldry draws from Garnham (2000) to emphasise that both conceptually and methodologically the focal point should be on the choices available to citizens, enabled by the Internet (and other media), that either open or close opportunities for meeting human needs. According to this approach we should assess Internet use on the basis of individual capabilities, requiring greater flexibility in researching persistent, complex socio-technical divides. Gilbert (2010), drawing from urban studies, proposes that digital (technological) and urban (social) inequalities are mutually constituted, and that therefore a conceptual model is required which draws connections between these, focusing on the vantage point of how inclusion and exclusion is experienced in daily life – particularly amongst the economically disadvantaged. Gilbert's approach is a reminder that we cannot disasssociate technological capacity and the subsequent development of socio-economic networks from power relations. The implication is that agency matters (power relations of class, race, gender, age), that context matters (geography, daily life) and that the ongoing research agenda for issues of digital inclusion needs to move beyond descriptive research to explanatory research that examines the lived experience of technological capacity.

The digital inclusion agenda is by no means the only perspective. Compaine (2001) assumes a market-oriented, diffusion-of-innovations approach, prevalent in digital divide policy, that assumes that divisions in access and usage are an inevitable, but temporary, stage in the diffusion of the Internet to populations. Though this approach is guilty of a narrow focus on technical access, and overstates the likely material benefits and diffusion of the Internet, it draws attention to how adoption patterns develop over time. On this count, UK longitudinal research on Internet usage by the Oxford Internet Institute (Helsper, 2008; Helsper & Dutton, 2007; Dutton, 2007) indicates that gaps in usage will not 'naturally' disappear. The research suggest that UK Internet use may be plateauing, that considerable generational variations in Internet use persist and that non-users are still most likely to be retired, unemployed, have basic education and be without a computer at home. Ultimately, there is still a relationship between relative social exclusion and digital exclusion, and it does not appear that usage gaps are temporary (Helsper, 2008).

Though the digital inclusion framework is the most credible alternative to digital divides discourse, it is by no means complete. Helsper (2008), van Dijk (2006) and Gilbert (2010) assert that there is still no comprehensive, explanatory theoretical framework for digital

inclusion. On this count, further research, augmenting existing quantitative and longitudinal data, has a role to play in developing a grounded theory for digital inclusion. Nonetheless, that there is an apparent relationship between effective use of the Internet and social circumstances – such as social capital. Social capital matters, and may be an explanatory factor, since it has a bearing on the extent to which citizens mobilise digital resources (Simpson, 2005).

1.3.   Social Capital, The Internet and Everyday Life

The media as a site of symbolic power, and its relationship to social capital, is a well developed theoretical area. Bourdieu (1986) first developed the concept of social capital as part of a micro-sociological theoretical framework (Svendsen & Svendsen, 2004) that explains how the types of symbolic capital that individuals hold structure our social world, building a set of constraints that reflect the struggle for social classification. Social capital is one of three interconnected forms of capital: economic, cultural and social. It constitutes the resources available to individuals to mobilise lasting, secure social networks for material and symbolic gain. Importantly, for Bourdieu (1986; 1991), economic capital is at the root of all forms of capital, and the convertibility of different types of capital is what ensures reproduction of entrenched positions – reproducing class-driven social structures. Halford and Savage (2010), referring to issues of digital social inequality, draw from Bourdieu to highlight the development of individual social capital as processes of accumulation (of relative advantage) and conversion (of advantages from one area of life to another). This approach offers context-specific awareness of how relative advantage, realised through the development of social capital, is generated – and how technologies are associatied with the formation of social relations (Halford and Savage, 2010).

Whereas Bourdieu's theoretical and methodolical focus is on the micro, others have conceptualised social capital as collectively held. Coleman (1988) attempts to synthesise sociological and macro-economic perspectives, as a set of obligations and expectations that faciliate and constrain our actions, held in relations between people, that may ultimately have a public value – whether economic or non-economic. Coleman proposes that social capital can be negatively or positively held, and his site of focus is on community settings and civic organisations (Svendsen & Svendsen, 2004). Putnam (2000) has, in turn, assessed social capital at a macro level, measuring social capital quantitatively through comparitive levels of civic engagement. In an assessment of social capital in the USA, Putnam argued that there has been a decline in collective and communitarian civic activities, where thin, single-stranded bonds come to replace dense, well exercised community networks. Amongst a

number of socioeconomic factors, he suggests that the social isolating effect of entertainment and communication technologies is a significant contributing factor. Putnam's macro approach has been criticised for oversimplifying data, ignoring that social capital is distributed unevenly in populations and varies considerably at the micro level (Svendsen & Svendsen, 2004). Nonetheless, social capital as civic engagement has frequently been the focus of research attempting to assess Internet use and social capital.

On this count, there have been a number of studies aimed at establishing whether there is a causal connection between Internet use and social capital amongst communities and individuals. The debate has vascilated between utopian and dystopian perspectives, in which Internet use is either some kind of panacea that opens up access to previously inaccessible social networks, or at the other extreme is an isolating technology that erodes strong social ties (Boase & Wellman, 2006; Katz & Rice, 2002). A growing body of empirical evidence suggests that these are indeed extremes, that the "syntopian reality" (Katz & Rice, 2002:13) of Internet use is that it supplants existing communication patterns.

In the first instance, it does not appear that use of the Internet, on its own, significantly decreases or increases social capital (Anderson & Tracey, 2002; Brynin & Kraut, 2006). In the second instance, where a relationship between Internet use and social capital is apparent, it is likely that Internet use augments social capital when it is already held by individuals and communities. It may change its composition, but is better explained by the pre-existing socioeconomic and demographic characteristics of users (Simpson, 2005; Rice at al., 2007; Quan-Haase at al., 2002; Kavanaugh & Patterson, 2002; Wellman at al., 2001; DiMaggio at al., 2001).

Shklovski at al. (2006), in an attempt to resolve the utopian versus dystopian debate, analysed 16 separate surveys concerned with Internet use and social capital, and found that there is no broad, consistent effect on social interaction, since the Internet is intertwined with existing social patterns. Instead, Wellman at al. (2001; 2003; 2006) and Castells (2001) have argued that the relationship between the Internet and social capital should be seen as part of a broader shift in the nature of social relationships, from fixed, localised social networks bound to households or work units, to 'networked individualism' – dispersed, loosely bound networks that revolve around personal communities. The outcome of this process is not necessarily a loss of community, but a reconfiguration of it. In this context, the Internet is more likely to be used to maintain increasingly diverse and dispersed social interaction – with potentially positive and negative consequences (Katz & Rice, 2002. The Internet may be

used to mobilise more specialised, mobile forms of social capital, but does not, in itself, constitute it (Wellman at al., 2003).

Shklovski at al. (2006) conclude that research about "particular uses of the Internet for particular relationships" is more likely to uncover how the Internet impacts on social capital: by focusing on its role in the patterns everyday life, much like Bourdieu's micro-sociological approach does. Almost consistently across the body of research assessing Internet use and social capital, there is a recognition of a need to examine how Internet use reflects, or shapes, "the complexity of everyday life" (Haythornthwaite & Wellman, 2002:38). Both Internet use and the development of social capital are situated processes (Katz & Rice, 2002). Context matters: people shape their use of the Internet in accordance with their lives, and our existing circumstances have a bearing on how use of the Internet may 'realise' social capital (Halford & Savage, 2010). It is through the lens of the everyday that this relationship should also be evaluated.

1.4.   The Domestication Framework and the Internet in Everyday Life

The domestication framework, first developed by Silverstone, Hirsch and Morley (1992), has the advantage of bridging the extremes of technological determinism and agency. These have a tendency to overemphasise either the shaping effects of technology on human behaviour, or the extent to which we are completely free to shape how technology impacts on our behaviour through choice. The framework is both an approach to media technology, and an analytical tool, recognising that communication technologies have a functional significance, but in order to understand the nature of this significance and its impact on sociotechnical change, we need to examine how technological artefacts are appropriated into private cultural spaces. Domestication is a creative process: social engagement with communication technologies is evolutionary, rather than revolutionary, is non-linear, and is dependent on the variable nature of everyday practice (Silverstone, 2005; 2006). The design of technologies and their domestication in everyday life is therefore a dialectical process, where the meaning prescribed to technology is negotiated in the complexity of lived experiences and their "rituals, routines and patterns" (Berker et. al, 2006:1).

The domestication framework examines the processes that take place when technologies interact with the everyday patterns of the household: through appropriation (entering the household), objectification (symbolic meaning expressed through usage), incorporation (the position of significance acquired in the household) and conversion (becoming objects of conversation). The empirical and methodological focus has therefore been on the household,

and more specifically the 'moral economy' of the household, a unit that is both engaged with the public economy, and self-contained with its own moral, economic and symbolic patterns (Silverstone at al., 1992; Hirsch, 1992). The advantage of this approach is that it bridges the macro (the public economy, technological diffusion) and the micro (the household), by placing a qualitative focus on how users attach significance to communication technologies. However, the Internet makes the narrow focus on the household problematic: it disrupts it as a self-regulating unit and complicates the distinction between private and public spaces (Berker at al., 2006; Morley, 2006). Bakardjieva (2006), recognising the value of focusing on user and agency, proposes a more useful definition of everyday life that incorporates sites beyond the household, and re-frames 'home' as a dynamic relationship between private and public behaviour.

Importantly, though domestication focuses on everyday life as a technologically mediated space, it is also concerned with political implications – the nature of participation in the 'information society', issues of inclusion and exclusion, and the extent to which the lived experiences of technological appropriation have a bearing on the flexibility and quality of people's lives (Silverstone, 2005). Indeed, Haddon's (2000) research has demonstrated the vital role that telephony plays in social participation for the elderly and for single parents, how social networks create opportunities to learn about new communication technologies, and the need to consider how user values and priorities shape use of new technologies.

However, as an explanatory framework, it is an unfinished project. Assessing the contribution of domestication studies, Haddon (2006) himself recognises the need for further research examining the social consequences of how technologies are appropriated, by extending its application beyond ethnographic studies, considering how it can be used in combination with quantiative methods to assess the micro against macro. There remain questions about whether it can be a "coherent theoretical framework" (Helsper, 2011:295) that produces clear conclusions about the implications of socio-technical processes. Helsper (2011) argues that there is a tendency in domestication studies to produce decontextualised snapshots of socio-technical phenomena –descriptive rather than explanatory, detached from macro contexts or undertheorised.

Though the domestication framework usefully describes how changes in life and technology are experienced over time, and has the potential to draw important attention to citizen perspectives in policy making, the extent to which it is an analytical tool or an explanatory theoritical framework in its own right needs further investigation.

1.5. Conceptual Framework

Evaluating the lived experiences of digital inclusion and exclusion requires a framework that both draws from, and goes beyond, the digital inclusion agenda. Since it is the social consequences of the Internet that are at the heart of this study, it is necessary to situate issues of digital inclusion alongside their micro-sociological circumstances. I have drawn connections between issues of digital inclusion, social capital and the importance of evaluating these in the context of how the Internet is domesticated amongst individuals. What emerges is the need to consider how Internet use, or non-use, in its lived complexity, is both shaped by, and shapes, social exclusion. My study is concerned with explaining how socio-technological inequalities are reproduced, by examining the complexities of lived social circumstances and Internet use as they are experienced in micro situational contexts of everyday life, in ways that quantitative macro-oriented studies cannot.

To do this, I draw from three key conceptual tenets:

1. Digital inclusion as a continuum of Internet use and non-use, where an individuals' position on this continuum is connected to the social and material resources available to them, in ways that may have a bearing on effective participation in society.

2. Social capital as a set of resources available to individuals to to mobilise lasting, secure social networks for material and symbolic gain, as experienced at an individual, micro level. The character and consequences of Internet use or non-use are related to social capital, but there is no consistent, causal link between Internet use and the constitution of social capital by individuals. Instead, I will focus on how social capital is accumulated or converted, amongst individuals, and how technology may be associated with these processes.

3. Domestication as an analytic framework that draws attention to how the Internet is (or is not) appropriated, objectified, incorporated and converted into daily life, within and outside the home. I aim to add to macro perspectives of digital inclusion and exclusion by focusing on qualitative, lived experiences of Internet use and non-use.

1.6.   Research Objectives

The purpose of this research is primarily to develop a rich explanation of how the everyday experiences of Internet use and non-use are related to individuals' social capital. My research question is generative, aiming to contribute, at least in part, to the empirical development of the digital inclusion framework and theoterical assessment of the domestication framework. Therefore, the primary question is:

- How does the lived experience of digital inclusion and exclusion amongst individuals relate to the context-specific development of symbolic and material opportunities in their everyday life?

There is a related theoretical question which I will also address:

- To what extent can the domestication framework be employed as a framework to adequately explain the social and material consequences of digital inclusion and exclusion in everyday life?

2.   METHODOLOGICAL APPROACH

My study is intentionally qualitative: to assess Internet use and non-use at a micro level, addressing the "urgent need" (Cammaerts at al., 2003: 318) for qualitative research that situates the issue of digital inclusion in accounts of daily use. This study is intended to add to existing quantitative research, by focusing in more detail on contextually specific, "messy, complex" (Robson, 1993:4), naturally occuring conditions (Deacon, 1999). Furthermore, the domestication framework is empirically qualitative: it focuses on processes of technological mediation as they happen in everyday life (Silverstone, 2005). My aim is to bridge he macro and micro, by putting contextually specific experiences of individuals at the centre of this study (Silverstone, 2006). I cannot and will not be drawing conclusions about a fixed population, but aim to draw a subject perspective (Flick, 2002). My methodological orientation is therefore critical realist (Deacon, 1999), exploring how communicative activity, through lived experiences, relates to the social resources that constitute social capital.

My principle method is in-home semi-structured interviews, and I have investigated a range of experiences that constitute different levels of Internet use and non-use, social capital and

socio-demographic positions. In depth qualitative methods, such as ethnography and participant obversation, could also provide "thick" perspectives of how individuals' daily social patterns relate to the Internet (Geertz, 1973; Marcus, 1998). However, time constraints for conducting fieldwork, and the material resources required to conduct a comprehensive ethnographic study, have meant that this was not a viable approach. Though ethnographic approaches would provide richer micro perspectives, they would, in practice, narrow the range of individual experiences accounted for in it. Nonetheless, a limitation of this study is the extent to which I have been able to observe individual participant experiences, in depth, over time.

The empirical focus for the domestication framework is the "moral economy" of the household (Silverstone at al., 1992). The home is an important site for digital inclusion, since in-home remains a key factor for regular Internet use more generally (Helsper & Dutton, 2007), even though the Internet disrupts the private-public boundaries of the household (Bakardjieva, 2006). Interviews have therefore been conducted in participants' homes, to establish how the Internet (and other appropriate technologies) have been domesticated. Open-ended interview questions have assessed how private use of the Internet is related to other aspects of public life, so that the household is not treated as a bounded entity with no relationship to the outside world. This approach incorporates aspects of ethnographic interviews (they are in 'the field') and problem-centered interviews for non-Internet users (Flick, 1998).

3. METHOD

3.1. Sampling and Recruitment

Though exclusion an important part of this study, my aim is to compare experiences across a continuum of use and non-use. My participant selection, therefore, accounts for an appropriately diverse range of perspectives (Gaskell, 2000) relating to digital inclusion and exclusion. Accordingly, I have interviewed ten participants representing a continuum between "high" Internet usage (regular daily use at home or work through fixed line broadband) and "low" or non-usage (no use, intermittent use, no home use or use only via mobile devices). Lifestage and socio-economic factors, such as income and working status, continue to exert a bearing on Internet use (Helsper, 2010; Livingstone & Helsper, 2007). I have therefore also selected participants representing different lifestages and socioeconomic positions.

The profiles of the participants are outlined in table 2.1 below. Interview participants were recruited through a third party research recruitment specialist, Criteria, in order to fulfil the recruitment selection criteria. Each participant received a gift voucher in return for participation. Six of the ten interviews were conducted in London, and a further four in Hull, across May and June 2011. In order to recruit participants across younger lifestage groups who have "low" or no use of the Internet, it was necessary to recruit outside of London. The four interviews conducted in Hull were therefore with low- and non-users. This has a bearing on the research, since Hull suffers from higher relative unemployment and lower gross disposable income than London (Office for National Statistics, 2011). In addition, Hull is the only region in the UK that has a sole broadband provider, KCOM (Ofcom, 2010). The implication is that the sampling strategy represents two relatively distinct sets of regional socio-technical circumstances, where those in London are, in broad terms, more affluent and more likely to use a range of broadband Internet suppliers, against those in Hull. This approach is justified because the purpose of this research is not to accurately represent the UK population, but to represent an appropriate continuum of experiences, including those at relative extremes.

	"High" Internet Usage	"Low" / No Internet Usage
Age 18-24	Paul, Hatch End, London Age 24, C1, temporary office worker, degree educated, frequent broadband use at home and work, and via smart phone. Lives with family.	Zoe, East Riding, Hull Age 18, unemployed, no home Internet. Lives with sister and her children.
Age 25-35	Laura, Pinner, London Age 31, C1, executive PA, frequent broadband use at home and work, and via smart phone. Interview conducted at parents' home.	Carl, Anlaby, Hull Age 27, unemployed, no home Internet, lives alone, only one family member lives nearby.
Age 35-50	Rachel, Pinner, London Age 37, C1, degree educated, runs own Internet business from home. Single mother. Parents live nearby.	Paul, Bransholme Estate, Hull Age 38, unemployed (incapacity benefit). Lives with partner, intermittent Internet use at sister's home.
Age 50-65	Barbara, Hatch End, London Age 59, C1, degree educated, runs own jewellery valuation business. Lives with spouse, frequent broadband use at home.	Frank, Bransholme Estate, Hull Age 64, retired early due to mobility problems), lives alone with no family contact, has never used the Internet
Age 65+	David, Watford, London Age 65, B, degree educated, director of engineering firm. Lives with spouse and son. Frequent broadband use at work, intermittent use at home.	Derrick, Enfield, London Age 81, retired bookmaker, lives alone. Regular contact with family and friends. Never used the Internet.

Table 2.1. Summary of research participants

3.2. Design of Research Tools

Two structured topic guides were developed for both 'high' Internet users and low- or non-Internet users. They provide a consistent thematic framework for comparison in the analysis of results (Flick, 2002), and though structured, provided sufficient room for participants to talk freely and for follow-up questions to be asked (Berger, 1991). The key topic areas are: participants' personal socioeconomic circumstances, including their views of their present and future life opportunities, the nature, value and domestication of Internet use (for 'included' participants only), domestication of other relevant media and technology (for all participants), and their relative assessment of Internet use against other users and non-users. Each interview has been recorded and transcribed, to generate conversational data for thematic analysis in NVivo, but also a valuable part of my analysis, re-living each interview as an "essential part of the research process" (Gaskell, 2000:54).

Since there is a clear thematic structure in place, focusing on the relationship between Internet use and social capital, I have not employed more "ambitious analytic methods" (Silverman, 1993:113) such as discourse, conversational analysis or grounded theory. The analytical focus is therefore on "meaning interpretation" (Kvale, 2007:193): going beyond the manifest meanings of the text to relate them to key categories that emerge both from the interview data and from the thematic structure of the interviews, as they relate to the key

concepts of digital inclusion, social capital, and domestication. This has allowed for a wide scope of analysis, through which new, unexpected themes (Flick, 2002) have emerged from the data that merit attention in analysis.

3.3. Pilot Study

To assess the suitability of my methodological approach for the research question, three pilot interviews were conducted in March 2011. The aim was to replicate the sampling approach – the interviews were conducted with a 28 year old Londoner who uses the Internet at home and work, a 59 year old from Colchester who uses the Internet at home only, and an 80 year old London retiree who does not use the Internet. Though the pilot interviews, in general terms, validated the sampling strategy and structure of the topic guides, I made adjustments to the topic guide to ensure that there was sufficient room for "how" and "why" questions that are key to the exploratory research question (Silverman, 1993), since the pilot interviews were overly descriptive at points. In addition, the in-home risked having no direct connection to the data or on its analysis. To mitigate this risk and take full advantage of the in-home setting , I have taken field notes for the subsequent ten interviews with observations about the domestication of the Internet (and other media technologies) and incorporated themes from these into the analysis.

4. ANALYSIS AND FINDINGS

I will analyse my findings across three broad thematic areas, reflecting the three key concepts that I have drawn from. Firstly, I will discuss findings relating to the relationship between pre-existing social capital and the implications for effective Internet use amongst participants. Secondly, I will discuss themes that have emerged by examining the lived experience of digital inclusion and exclusion. Finally, I will reflect on how the Internet and other media types are domesticated amongst participants, even when the Internet is not present in the household, and the explanatory value of the domestication framework in this study.

4.1. Social Capital as a Precondition for Effective Internet Use

4.1.1. Using Social Resources to Make Effective Use of the Internet

Amongst participants who use the Internet regularly, having material, social and technical support from close family members, friends or professional contacts is a key driver for the adoption and effective use of the Internet – to maintain and develop social networks and to unlock opportunities for material gain. For these participants, social support networks play a clear role in the accumulation and conversion of their pre-existing social and material resources (Halford and Savage, 2010;) for new opportunities online. Rachel, a single mother of two children, has benefitted from her family and social support networks to launch an online shop, enabling her to look after her children at home. She has had access to technical expertise through pre-existing social relationships that have been instrumental in building a livelihood from the Internet, without which she would not have had the knowledge or financial resources to make use of the Internet as a money-making tool, helping her unlock an opportunity that otherwise would not have existed:

> Researcher: You have to learn everything from finance to obviously the nuts and bolts of running a website and that kind of thing.
> Rachel: Yeah, so yeah, it's been a massive learning curve.
> Researcher: Would it have been substantially more difficult if you didn't have people that you could...?
> Rachel: I wouldn't have been able to do it, I just wouldn't have been able to do it.

Rachel's experience is similar to Barbara, who runs a jewellery valuation business from home, and has relied on her family to help develop her knowledge of the computer

applications and the Internet to the extent that her website is her primary source of business and she relies extensively on it as a research tool for work-related projects. For her, too, effective use of the Internet has been become a central part of her life, but has relied on the support of family with technical expertise to help her:

> Barbara: Yeah, because we also joined different things from like, you know, different search engines and things like that. So we, um, we do get quite a lot of business, especially from lawyers and that kind of thing. We've used it for a long time, since the 90's, 'cause it was my husband's son's, he's a computer technician and now he has this company in Germany. But that was one of his projects. We were his projects.

The importance of pre-existing material and social support is not only important for using the Internet for material gain, but also for helping to sustain a level of wellbeing that makes it possible to use broadband Internet regularly at home, often across multiple devices. Paul, a recent graduate looking for permanent work, lives with his parents and relies on their ongoing support to ensure he can live comfortably – which includes wireless broadband, a laptop for every member of the family in the household and unlimited Internet on his smart phone. Paul also draws material and emotional support from his a tight-knit group of friends he has maintained contact with since school:

> Paul: Well money, money's lent quite freely between us, because we're so...close, it's not really a problem. You know when people are...who's actually going to pay you back and who's going to take a month. Erm...[to self] money's not a problem...Stress, erm...they've always been there. Like even at uni, when I was really struggling, they'd come up to Bristol, no problem, every year minimum, for my birthday...

Participants who use the Internet regularly have also been able to draw on social capital accumulated through tertiary education or work-based experience to develop their knowledge and skills of how to comfortably and effectively use the Internet. Importantly, however, they have also capitalised on the domestication of the Internet in their households. Though this is not formal learning or direct professional experience, the introduction of computers and Internet access in the home by family members, or through social networks, plays a key role in building familiarity with Internet services, provides learning through experience of use and opens up opportunities for Internet users, irrespective of their level of technical expertise, to draw from others on a daily basis to solve problems or acquire new skills online.

Importantly, none of the participants who use the Internet regularly in a professional capacity or for other forms of material benefit have used the Internet to "create" new social relationships. Instead, the participants in this study have drawn their social capital predominantly from close social relationships that are in *physical proximity* to where they

are. Those who rely on close family and friendship networks to provide the material support that underpins their use of Internet in daily life, appear to be more likely to have lived, with relative stability, in one location that gives them access to family or social networks they have developed locally. These appear to be the crucial relationships in their networks of social capital, since they can readily be drawn on for assistance in everyday life.

4.1.2. *Maintaining Social Networks Through Internet Use*

Though physical proximity of social networks remains important, participants who are regular Internet users do use it to maintain and develop relationships that they have already established, making it possible to retain dispersed relationships and to use the Internet as a tool to further develop social capital over time as Wellman at al. (2006) and Katz and Rice (2002) suggest. The precise nature of this, the degree to which to the Internet becomes an indispensable tool for this and the extent to which it is used to unlock new socio-economic opportunities, varies amongst participants however. For some, using social networks is simply a tool for bringing existing friends together in a more convenient way. For others, the Internet has assumed a more important function – it has become a symbolically important tool for communicating and maintaining relationships with family members who live further afield, often in other countries:

> Rachel: Oh and I use Skype as well. Because my brother lives in Vancouver and my sister's in New York, so communicating with them I wouldn't be able to do without, without the...well, you feel, its not even the cost of the call, because like speaking on the telephone doesn't cost much anyway. But actually, I haven't seen my brother's baby, who is now nine months old, but I feel like I've met her because I've seen her so often on the Internet.

The Internet has also become a taken-for-granted tool amongst particpants for facilitating or maintaining involvement in group social activities, such as participation in community groups, clubs or voluntary organisations. For some participants, Internet use has become a precondition for continued involvement in the planning and organisation of their involvement in these activities:

> David: As more and more people are available on email, it becomes something that's, er, a normal thing to do, rather than having to phone up half the people that you want to get in contact with, because...they aren't on email. Most people are now. I'm 63, so you've got a situation whereby I've still got a wide circle of contacts, some older than me of course, who aren't. So, that forces you down 2 or 3 different routes. But most, most contact nowadays seem sto be through email more than anything else.

In many cases participation in community, voluntary or interest groups had a professional or semi-professional dimension for participants. The relationships they have developed through their involvement in these activities have, in turn, opened up new opportunities for material or further social benefit. As they have come to rely on Internet tools, such as email, to facilitate these activities, there is an underlying implication that, for those who do not use the Internet regularly, there is an additional barrier to participation in these activities,and the potential opportunities they make possible. They may become excluded from the socially established convention of using email or social networking to stay abreast of group activities. This may be an incidental, though not particularly acute, form of social exclusion through digital exclusion. However, for working age groups, lack of regular Internet use has more serious implications.

4.1.3.   Digital Exclusion as a Symptom of Low Social Capital

If pre-existing social capital is important for domesticating the Internet for effective use, then amongst certain participants the reverse is true – lack of regular Internet access in their lives is both symptomatic of, and exacerbates, socioeconomic exclusion. Specifically, in this sample, it was most acute amongst younger working age participants, with no tertiary education, who are experiencing problems finding employment and are not able to draw on rich networks of social and material support. They appear to represent a potentially acute 'pocket' of exclusion, though this would need validation with additional quantitative research amongst this age group. Carl, who is 27, lives alone and is unemployed, relying solely on his mother for social and economic support, who is also reliant on state benefits:

> Carl: So, you know, I don't really, I don't really, well, as daft as it sounds, like a sad case really, but I don't really socialise a lot with…I've got a couple of friends, but not really, nothing great like I say. The guy who owns this house is a friend of mine, like I say, so I'm renting it from him for almost nothing, because I gat al.most nothing. So, em, that's it really. I don't really do much. I spend a lot of time at my mum's house, for example, because I aint got a TV or anything like that. So I don't really do much…

Carl does not have the material resources available to pay for a computer and Internet connection at home, and was the only participant who had no media technology in the home at all. His problems have been compounded by a lack of secondary (or tertiary) education, or domestication of the Internet at home during his upbringing, which have also meant that he has not developed experience with use of the Internet that would now allow him to use it as a tool to find work or draw on any readily available social assistance. He recognises it may be an exacerbating barrier for him:

> Carl: As daft it sounds, I don't know what jobs would require me to use the Internet. I suppose I don't really know, there's so many jobs that you probably wouldn't expect be out there, that there probably is. But, again, it's not summat' I've thought about thinking 'you know it's something I need to use to get this job'. I might be able to find jobs on the Internet, I don't know.

Zoe, who is 18, unemployed and living with her sister, experiences similar problems even though she has a better working knowledge of the Internet and has used it to find white collar work. Her particular problem is that she has experienced material difficulties due to fractured relationships with her parents, and as a consequence cannot afford home Internet access , which she recognises make it more difficult to overcome her problems. Her case highlights the problems that Selwyn (2004) has raised of 'solving' exclusion through technical access - she has technical access in the home, through her sister's smart phone, but this is not sufficient for the purposes that she recognises she most needs it for:

> Zoe: I'd like to have more access to the Internet because then it'd be easier for me to find a job. I wouldn't have to trail the streets.
> Researcher: Um, do you think that puts you at a disadvantage if you have to find work, say for instance?
> Zoe: Erm, I think it could, yeah. Because a lot of work now is around computers and everything like that. So it is an advantage to know how to use it, yeah.
> Researcher: Because you did work at a call centre, right?
> Zoe: Yeah.
> Researcher: And you couldn't imagine going in now knowing how to use a computer, or Internet?
> Zoe: No.

Though less of an immediate concern for Zoe, the loss of Internet in her daily life has also made it more difficult to maintain social relationships, which may have the affect of excluding her from important social rituals that help maintain and build social capital over time:

> Researcher: Do you feel like you're missing out when you're not online?
> Zoe: Sometimes I do. When everyone else is sat on Facebook and I can't get on [laughs].
> Researcher: What things do you think you're missing out on?
> Zoe: The latest gossip [laughs].

It is important to recognise that, for these participants, developing effective use of the Internet may help, but not solve, their problems. Their underlying problems relate to the social and material resources they can draw from – a network of close, physically proximate relationships that help provide financial and emotional support, and access to education inside of and outside the home. Nonetheless, lack of regular Internet use clearly has implications for their ability to participate in socio-economic activities, deepening their

relative exclusion where others are better able to capitalise on the resources available to them. This is also not the case for all non-users, since older participants who do not use the Internet are more likely to have made this a conscious choice.

4.1.4. Non-Use As a Choice – The Importance of Secondary Access

Though lack of effective use contributes to social and digital exclusion in Carl and Zoe's cases, older, non-user participants have made more of a conscious choice to not be online, either because they do not have the perceived need to go online, or because they are able to make use of the Internet when needed through their social networks. This, again, appears to be a function of the social capital available to them: because they are able to draw on social and material resources, making the choice not to have the Internet in their household does not create or exacerbate any problems they already have. In many cases their is no ambiguity about their decision not to use the Internet, and older participants were most emphatic:

> Frank: Some people do whatever, I don't really know, I 'aint interested in a sense, you know. You could put one in there [points to a desk in his living room], it would just stay there. It would never get switched on.

Importantly it appears when these choices are made that they do not appear to have made any detrimental impact on their ability to access services or maintain the social relatioships that they need to. For these participants, there is no pressing need to embrace a new technology which may seem daunting to them, and which they would probably resist integrating. Although there is a tendency to problematise these voluntary non-users (Wyatt, Thomas, & Terranova, 2002; Klecun, 2008), they did not appear to suffer from social exclusion through lack of direct Internet use. The choice not to use the Internet, however, is available because these participants have the option of proxy access through their social networks – in effect a resource they are able to draw from. Though they do not have a need for daily Internet use, there are instances when they call on friends and family to assist them with access. Paul, who is 38 and on disability benefit, suffers less from problems of social and digital exclusion than younger participants because he can draw from his social contacts to get online when he needs to:

> Researcher: Do you ever feel you're missing out by not having the Internet at home?
> Paul: It's not really been a problem, because I mean me sister's five minutes away, so if I need to get online I can. And really if I do need it...
> Researcher: Have you ever got them to something for you, like place an order, or get shopping in or try and find something you couldn't get locally?
> Paul: I haven't asked them, I've gone and done it me self. Oh, I did actually. I was on that thing, that iPad.... that's my brother in law but he works with computers. That's his job, that's what he does.

In these cases the availability of social and material resources, which help to mitigate problems of social exclusion more generally, make it possible to make the choice not to bring the Internet into their daily lives, but also provide the 'last resort' of secondary access should any circumstances arise when they need to get online. For these participants, being regular non-users does not appear to have any significant socio-economic consequences, a reflection of their pre-existing social capital.

4.2.   The Lived Experiences of Digital Inclusion and Exclusion

4.2.1.   Inclusion as a Continuum – The Centrality of the Internet in Users' Lives

The experiences of participants in this study reflect the continuum of digital inclusion that Livingstone and Helsper (2007) have proposed. There were no instances amongst any participants when technical access to the Internet was not possible. The key aspect of the 'continuum' for participants was the centrality that the Internet has (or has not) come to assume in their everyday lives, and the extent to which they rely on it for social and material wellbeing. Or, in the case of certain non-users, the extent to which they are disenfranchised by not having regular domestic access. Amongst regular user participants there is clear variation in the extent which they have come to depend upon use to maintain key social relationships over distance, to derive a direct income through Internet-based self-employment, to participate in community activities or as a core skill in their workplace. David, who is a 63 year old director of an engineering firm, uses the Internet regularly in the workplace but is not reliant on it, because he frequently draws from professional contacts and his family to complete tasks for him:

> David: No. No I wouldn't even be able to manage a website. I wouldn't be able to add anything onto it, or alter it or update it. But I know people who do.

This same pattern repeats itself in the home:

> Int: I don't switch the computer on to see what's about, I rely on my wife or my son to do it, because they're always on the bloody thing.

This contrasts with other participant users, for whom loss of direct, regular access to the Internet would have severe material consequences:

> Researcher: How do you think you'd feel if you couldn't get online for a week? If you somehow lost your laptop or Internet connection?
> Rachel: It would be a nightmare. Because, recently, about a few months back there was a power cut. The whole street on this side was gone. So I couldn't go online and I couldn't print out any of the orders. And I kind of pride myself on sending things out very quickly, so I ended up going round to a friend's house to do it. Because, I just, I can't run a business without it.

The centrality of the Internet to their lives is not necessarilly a function of the 'amount' of regular access they have, since the for many users Internet connectivity and email access through smart phones has become ubiquitous across the day. Nor is it a function of the number of devices they have available, since those participants whose material wellbeing is less directly bound to effective Internet use may still be online throughout the day across multiple devices. It appears that what is arguably the most important variable in the usage continuum is the centrality to their social and material wellbeing in everyday life. On this count, and amongst this sample, the continuum of 'effective use' appears to be generational, where the Internet increasingly appears to play a central role in education, social maintenance and access to employment opportunities for younger, working age participants – both users and non-users. The centrality and reliance on the Internet in everyday life is less of an issue for participants who are approaching or are already in retirement. Though in some instances they may use the Internet regularly in daily life, and on the surface is central to their daily routines, it is less important for their socio-economic wellbeing.

4.2.2. Inclusion and Exclusion from Education and Employment – The "Real" Divide

In addition to the home, the experience of participants suggest that there are two other key sites in which the Internet is appropriated and incorporated for effective use, and in which lack of regular access has implications for social exclusion: in education and in the workplace. For participants who are regular Internet users, use of the Internet in tertiary education and in white collar work has been either a formative part of how they have developed their online skills and knowledge, or is a prerequisite for participation. Their experiences are not necessarily about formal IT training (through some have had this), but learning how to use the Internet effectively through experience. Paul, for example, having admitted that he struggled academically at times during university, came to rely on the Internet as an important tool to help overcome some of his problems by using it for research.

The workplace is another key site of appropriation and conversion for participants, in two important ways. Firstly, using computers and the Internet in white collar work builds

familiarity with the Internet, acquiring skills that allow them to put it to effective use. The second way in which the workplace is an important site is the degree to which using IT, and the Internet, has effectively become a precondition for white collar employment. In participants' own experience, they recognise that not having demonstrative experience of the Internet and computing has a detrimental effect on their employability. Carl, who does not use the Internet regularly is aware that his relative lack of experience may be a problem for him:

> Carl: I think, because as daft as it sounds, things like Word and Excel, I know how to use them. But, but probably not as well as yourself, for example. So when it comes to jobs, when you often look at jobs and they say 'must have Word, Excel' which you know I can do, I'd quite happily say I can do them. But then are things like you need to use Powerpoint and stuff like that, and it's a bit like I don't really know how to use them. So it would be good for, you know, because there's more and more office jobs vacant now, so I think you it's something people could really do with and then, as I say, I don't use the Internet, but I know it's a massive part of people's lives and stuff like that.

This has the implication of entreching Carl's relative exclusion, since doing white collar work would help him further appropriate the Internet in a way that he needs to do to effectively use it for material gain – where others, who can draw from social and technical capital, are building a relative advantage. The most pressing 'divide' is potentially the degree to which lack of knowledge about effective Internet use, through education and work, accellerate relative digital exclusion. It is not a universal experience in this sample, but is particularly acute amongst younger, working age participants, at a stage of life which is, in turn, crucial for the development of long-term social capital.

4.3. Processes of Domestication – Appropriation, Objectification and Conversion Amongst Users and Non-Users

4.3.1. Appropriation and Objectification

For many regular Internet users amongst participants, the appropriation of Internet in their lives has been a seamless experience, a natural extension of the introduction of computers in the household and in working life. Even older participants struggle to recall the point at which they first started using the Internet, though computers will have been novel at some point in their lives – it has incrementrally become central in daily life. Rachel, who is 38 and runs an Internet business, could not recall when she first starting using the Internet:

> Researcher: Can you remember how long you've had it in the home for?
> Rachel: Umm [pauses] isn't that awful, I have no idea. I know that I've had a computer for a really long time, but I can't really register when it turned into the Internet.... I can't remember the moment that I...because it was really an amazing thing. You know it's just so much part of life, that I can't even remember life before it [laughs]...

The embeddedness of the Internet in the lives of the participants who are regular users is driven by the combination of the introduction of computing in the home, regular use at work or in education, the availability of relatively cheap wireless broadband across the household and increasing use across multiple devices (desktop computers, laptops and smart phones). Most users in this study were, at least theoretically, connected across the course of their average day. Use of the Internet has become an ingrained part of the temporal rhythms of daily life as it has proliferated across devices, but it does not necessarily supplant other media technologies in the household. In fact, regular user participants, particularly those younger than retirement age, all lived in media rich households (Internet, television, digital radio, games consoles) in which 'old media' shape how they use the Internet, since they tend to gravitate to the services of media names already familiar to them.

For non-user participants, the television remains a particularly important window to the world outside. This is especially true for those with relatively sparse social networks who spend greater amounts of time in the home. For them, the television helps to pass time and is effectively a source of company – it fills a social void, creating a sense that *something* is happening, in the absence of direct social contact. The *presence* of TV becomes the important thing, not necessarily the content on it:

> Derrick: Sometimes I'll...I'll put it on, really, because if there's nobody in the house you can hear a voice.
> Frank: That's my socialising right there [he points at his TV], television.
> Carl: Yeah, that's it, if there's nothing on then Friends or Two and a Half Men is always on. It's something that could be white noise really...

For non-user participants, the television is frequently therefore their crucial link to the outside world, the loss of which would be potentially be emotionally difficult and symbolically significant. Carl, for instance, lives alone in a semi-furnished house – the first thing he would like to acquire, when he can, is a new television. There is a sense, however, that their dependancy on the 'white noise' of television, may further deepen their relative social isolation, providing a safety blanket that helps them retreat further into their homes.

This is not to say, however, that non users do not objectify the Internet in their own way. Non-user participants in this study have more stridently negative opinions of the value that

Internet use may play in their everyday life, as against those who do use it regularly. This reflects their relative lack of direct experience of the Internet, which may dispel some of the assumptions they hold about it. In other words, their perceptions appear to be self-justifying. Nonetheless, they may act as an effective barrier to potential Internet use, and appear to harden over time as they observe, and judge, how others use the Internet, and as they are exposed to the mediated accounts of how the Internet is used, and frequently abused, through news stories:

> Carl: One of the guys was on it, em, through his phone funnily enough, and showed me it a few weeks back. And I just, you look at things, its things like 'its this guy I just met' and he showed me this guys who's put in whatever his name is, Bob. And you look through his posts, and its just...I just thought what a dick. What an absolute waste of time.
> Frank: They're sat their like that [gestures as if staring at a phone screen], you know. There was a youngster when I was at the bus stop the other day, he was using his phone to find....the kids are fat these days!

There is, once again, a marked sense of perceived generational difference, which to a degree is also found amongst regular Internet users. However, there is also an ambivalence in their perceptions, where their attitudes occassionally come into contradiction with experiences they have of secondary Internet use in their daily lives:

> Derrick: I think it...it possibly can shorten their lives. That's my opinion. You know, because they're not going to exercise as much, see. I mean when you get a kiddie, what's he gonna be like? You know he's gonna grow up and....mind you, some things, it all depends on how they treat the Internet really. I mean I've got a grandson, he's started on the computers when he was about 12. And like the Ebay things, and when he was about 12 or 13 he was buying stuff from America on the Ebay or whatever, and selling it here. He is now in China doing a business that's in China, and he's only 22. So that's the only advantage.

4.3.2. Conversion Into Daily Life – Problems and Anxieties

Anxieties about the use of the Internet are found amongst user participants too. In fact, the increasing conversion of the Internet into their daily home and work lives creates new anxieties and problems. There is a trade off for some participants: though they benefit from domesticated Internet use, and many are financially reliant on it, they also acknowledge that it potentially creates new dependencies and problems for them. The particular problems and anxieties are largely dependant on the individual circumstances of participants. They report having concerns about fragmentation of social contact in the household as each member acquires their own connected device, anxieties to do with children and teenagers spending too much time online and using the Internet inappropriately, concern about technical and

security problems which may disrupt their Internet use, and even the receipt of threatening messages. All participants of working age who use the Internet regularly, though, experience a problem balancing the degree to which connected devices bring their public, working lives into their private, domestic lives. This is particularly true for those who are self-employed and reliant on the Internet materially, but is certainly also the case for salaried users who experience an increased expectation that they will be available because they are connected:

> Laura: Because I do say to my directors if there's anything urgent, send me a text, or give me a call, or just flag it up in my inbox, so then I'll...I will check to see if there's anything. But then that's probably me being more conscientious of getting my job done, and...I don't know.... That makes me angry... It kind of annoys me more that they contact me when they know I'm on holiday, rather than it does...more than it does that I actually answer.

4.3.3. *Domestication as a Framework for Analysis in this Study*

I have drawn from the domestication framework to understand how technologies are appropriated into households, in everyday life, and to attempt to explain the socioeconomic implications of having Internet access or not. On this count I have found it to be most useful as a methodological frame: drawing attention to sociotechnical processes in daily life, highlighting how appropriation of the Internet happens alongside other media technologies in the home, and generating unexpected themes about the ambivalence and anxiety about the value of Internet use. However, I find, as Helsper (2011) has, that employed as an analytical tool on its own, the *implications* of processes of domestication may not always be apparent. There is the risk that without sufficient explanatory focus, the domestication framework drifts into descriptive analysis without a clear sense of why patterns of domestication matter – the key task is to link micro to macro processes.

I have found it necessary, in this study, to draw from other explanatory theories, in this case the digital inclusion agenda and its relationship to social capital, that focus on specific micro-processes of domestication. This does not mean the domestication framework does not have research value, since in the case of this study it has provided a valuable qualitative analytical framework that account specifically for the role of media technologies in everyday life. It also draws attention to the importance of domestication of the Internet into everyday life as an important component of effective use. However, the key distinction, based on the experience of this study, is that the domestication framework is just that, a *framework*, rather than an explanatory theory in its own right. It is most potent as an analytical and methodological framework when employed alongside well established explanatory theories of media, technology and society.

5. CONCLUSION

This study has aimed to explore how the lived experience of digital inclusion and exclusion relates to the development of symbolic and material opportunities for individuals in everyday life. One of the key findings is that access to pre-existing symbolic and material opportunities appears to be a precondition for effective, daily Internet use. Those who already hold social capital draw from it to integrate the Internet into their lives as a tool that they use to develop and maintain their socio-economic resources. For those who do not use the Internet, social capital still matters. Lack of effective Internet use can be sympomatic of low social capital, or can be mitigated by the social and economic support of social networks available to individuals. The findings confirm that there are clear generational differences in usage and attitudes towards the Internet, that there are clear differences in the degree to which the Internet assumes a central part of users' lives, but that the lack of effective Internet use is potentially most acute for younger, working age users, particularly where it negatively impacts on education or employment opportunities. This does not necessarily mean that all users believe the growing centrality of the Internet is an unambiguously positive thing – the way both users and non-users domesticate the Internet is more ambivalent, since it can be the source of perceived problems and anxieties.

The findings have potential policy implications, where the stated ambition is frequently to achieve universal Internet use. This study confirms that certain non-users, particularly those in retirement age, may actively resist attempts to have the Internet thrust on them. Importantly, it also reveals that there may be areas of acute digital exclusion, particularly amongst younger, working age groups who do not have the resources to domesticate the Internet effectively, and for whom a lack of effective use may entrench their relative exclusion. This study suggests that policy initiatives should target non-user constituencies where the Internet may be sympomatic of social exclusion, in ways that allow them to bring the Internet into their daily lives (and homes) to help develop social and economic opportunities. It is unlikely, though, that Internet use on its own is a panacea for social exclusion, but may an important part of a broader set of resources that these groups need help acquiring to improve their material and social wellbeing. Further research amongst targeted non-user constituencies, for example unemployed working age adults, is required to confirm this.

This study is, furthermore, simply a snapshot of participant experiences at a point in time. To understand how the Internet is, or is not, domesticated over time, in every day life, further research is required to understand how experiences and attitudes shift over time –

particularly as Internet technologies evolve and become part of other 'traditional' media in the household. This study suggests that further longitudinal qualititive research may usefully complement existing longitudinal quantitative research studies, that allow scope to further interrogate themes and issues as they emerge, such as the role of the Internet in education and employment, the value of new techologies, or perceived anxieties and problems that either arise from Internet use or may serve as a barrier to it. Finally, this study has demonstrated both the potential value and limitations of the domestication framework, which should be interrogated further in qualitatively-oriented studies relating to issues of digital inclusion and exclusion.

REFERENCES

Anderson, B., & Tracey, K. (2002). Digital Living: The Impact (Or Otherwise) Of The Internet On Everyday British Life. In C. Haythornthwaite, & B. Wellman, *The Internet In Everyday Life* (pp. 139-163). Oxford: Blackwell Publishers.

Bakardjieva, M. (2006). Domestication Running Wild. From The Moral Economy Of The Household To The Mores Of A Culture. In T. Berker, M. Hartmann, Y. Punie, & K. Ward, *Domestication Of Media And Technology* (pp. 62-77). Maidenhead: Open University Press.

Berger, A. A. (1991). Media Research Techniques. California: SAGE Publications.

Berker, T., Hartmann, M., Punie, Y., & Ward, K. (2006). Domestication of Media and Technology. Maidenhead: Open University Press.

Boase, J., & Wellman, B. (2006). Personal Relationships: On and Off the Internet. In D. Perlman, & A. L. Vangelisti, *The Handbook of Personal Relations* (pp. 709-726). New York: Cambridge University Press.

Bourdieu, P. (1984). Distinction: A Social Critique Of The Judgement Of Taste. Cambridge, MA: Harvard University Press.

Bourdieu, P. (1991). Language And Symbolic Power. Cambridge: Polity Press.

Bourdieu, P. (1989). Social Space and Symbolic Power. Sociological Theory , 7 (1), 14-25.

Bourdieu, P. (1986). The Forms of Capital. In J. Richardson, *Handbook of Theory and Research for the Sociology of Education* (pp. 241-258). New York: Greenwood.

Bryman, A. (2004). Social Research Methods. New York: Oxford University Press.

Brynin, M., & Kraut, R. (2006). Social Studies Of Domestic Information And Communication Technologies. In R. E. Kraut, B. Malcolm, & S. Kiesler, *Computers, Phones And The Internet: Domesticating Information Technology* (pp. 3-17). New York: Oxford University Press.

Bure, C. (2005). Digital Inclusion Without Social Inclusion: The Consumption of Information and Communication Technologies Within Homeless Subculture in Scotland. *The Journal of Community Informatics , 1 (2)*, 116-133.

Cammaerts, B., Van Audenhove, L., & Pauwels, C. (2003). Beyond The Digital Divide. In B. Cammaerts, L. Van Audenhove, G. Nulens, & C. Pauwels, *Beyond The Digital Divide: Reducing Exclusion, Fostering Inclusion* (pp. 301-306). Brussels: Brussels University Press.

Castells, M. (2001). The Internet Galaxy: Reflections on the Internet, Business and Society. New York: Oxford University Press.

Clement, A., & Shade, L. (2000). The Access Rainbow: Conceptualizing Universal Access to the Information/Communications Infrastructure. University of Toronto, Information Policy Research Program, Faculty of Information Studies. Hershey, Pennsylvania: Idea Group.

Coleman, J. S. (1988). Social Capital in the Creation of Human Capital. *The American Journal of Sociology , 94*, 95-120.

Compaine, B. M. (2001). The Digital Divide: Facing a Crisis Or Creating a Myth? Cambridge, MA: MIT Press.

Couldry, N. (2007). Communicative Entitlements And Democracy: The Future Of The Digital Divide Debate. In R. Mansell, C. Avgerou, D. Quah, & R. Silverstone, *The Oxford Handbook Of Information And Communication Technologies* (pp. 383-403). Oxford: Oxford University Press.

Couldry, N. (2001). The Hidden Injuries of Media Power. *Journal of Consumer Culture , 1 (2)*, 155-176.

Deacon, D. (1999). Approaching Research. London: Arnold.

DiMaggio, P., & Hargittai, E. (2001). From The 'Digital Divide' to 'Digital Inequality': Studying Internet Use as Penetration Increases. Princeton University, Woodrow Wilson School of Public and International Affairs. Princeton: Center for Arts and Cultural Policy Studies.

DiMaggio, P., Hargittai, E., Neuman, W. R., & Robinson, J. P. (2001). Social Implications Of The Internet. *Annual Review of Sociology* , 27, 307-36.

Dutton, W. (2007). Reaching a Digital Plateau? The Continuing Diffusion of the Internet in Britain. University of Oxford. Oxford: Oxford Internet Institute.

Flick, U. (2002). An Introduction To Qualitative Research. London: Sage.

Franzen, A. (2003). Social Capital and the New Communication Technologies. In J. E. Katz, *Machines That Become Us: The Social Context of Personal Communication Technology* (pp. 105-116). New Jersey: Transaction Publishers.

Frissen, V. (2003). The Myth Of The Digital Divide. In B. Cammaerts, L. Van Audenhove, G. Nulens, & C. Pauwels, *Beyond The Digital Divide: Reducing Exclusion, Fostering Inclusion* (pp. 17-34). Brussels: Brussels University Press.

Garnham, N. (2000). Amartya Sen's 'Capabilities' Approach To The Evaluation Of Welfare: Its Application To Communications. In B. Cammaerts, & J.-C. Burgelman, *Beyond Competition: Broadening The Scope Of Telecommunication Policy* (pp. 25-36). Brussels: VUB University Press.

Gaskell, G. (2000). Individual And Group Interviewing. In M. W. Bauer, & G. Gaskell, *Qualitative Researching: With Text, Image And Sound. A Practical Handbook* (pp. 38-56). London: Sage.

Geertz, C. (1973). The Interpretation of Cultures: Selected Essays. New York: Basics Books.

Gilbert, M. (2010). Theorising Digital and Urban Inequalities. *Information, Communication & Society*, 13 (7), 1000-1018.

Gunkel, D. J. (2003). Second Thoughts: Toward a Critique of the Digital Divide. *New Media Society*, 5 (4), 499-522.

Gurstein, M. (2003). Effective Use: A Community Informatics Strategy Beyond The Digital Divide. First Monday , 8 (12), URL: http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1107/1027 [Last Consulted 20 August 2011].

Haddon, L. (2000). Social Exclusion and Information and Communication Technologies. *New Media & Society*, 2 (4), 387-406.

Haddon, L. (2006). The Contribution of Domestication Research to In-Home Computing and Media Consumption. *The Information Society*, 22 (4), 195-203.

Halford, S., & Savage, M. (2010). Reconceptualising Digital Social Inequality. *Information, Communication & Society*, 13 (7), 937-955.

Hargittai, E. (2002). Second-Level Digital Divide: Differences in People's Online Skills. *First Monday*, 7 (4).

Hartmann, M. (2006). The Triple Articulation Of ICTs. Media As Technological Objects, Symbolic Environments And Individual Texts. In T. Berker, M. Hartmann, Y. Punie, & K. Ward, *Domestication Of Media And Technology* (pp. 80-102). Maidenhead: Open University Press.

Haythornthwaite, C., & Wellman, B. (2002). The Internet In Everyday Life: An Introduction. In C. Haythornthwaite, & B. Wellman, *The Internet In Everyday Life* (pp. 3-44). Oxford: Blackwell Publishers.

Helsper, E. J. (2010). Gendered Internet Use Across Generations and Life Stages. *Communication Research*, 37 (3), 352-374.

Helsper, E. J. (2008). Researching Trends in Internet Use. University of Oxford. Oxford: Oxford Internet Institute.

Helsper, E. J. (2011). The Social Dynamics of Information and Communication Technology. *Information, Communication & Society*, 14 (2), 295-297.

Helsper, E. J., & Dutton, W. (2007). Social Exclusion and Digital Disengagement: Issues of Policy, Theory & Management. *OxIS Workshop: The Links between Digital Disengagement and Social Exclusion*. Oxford: Oxford Internet Institute.

Hirsch, E. (1992). The Long Term and the Short Term of Domestic Consumption: An Ethnographic Case Study. In R. Silverstone, & E. Hirsch, *Consuming Technologies: Media and Information in Domestic Spaces* (pp. 208-226). London: Routledge.

Katz, J. E., & Rice, R. E. (2002). Social Consequences Of Internet Use: Access, Involvement and Interaction. Cambridge, MA: MIT Press.

Kavanaugh, A. L., & Patterson, S. J. (2002). The Impact Of Community Computer Networks On Social Capital And Community Involvement In Blacksburg. In C. Haythornthwaite, & B. Wellman, *The Internet In Everyday Life* (pp. 325-344). Oxford: Blackwell Publishers.

Klecun, E. (2008). Bringing Lost Sheep Into The Fold: Questioning The Discourse of the Digital Divide. *Information Technology & People*, 21 (3), 267-282.

Kvale, S. (2007). Doing Interviews. London: Sage.

Livingstone, S., & Helsper, E. (2007). Gradations in Digital Inclusion: Children, Young People and the Digital Divide. *New Media Society*, 9 (4), 671-696.

Marcus, G. E. (1998). Ethnography Through Thick and Thin. Princeton: Princeton University Press.

Miles, M. B., & Huberman, A. M. (1994). Qualitative Data Analysis: An Expanded Sourcebook. California: SAGE Publications.

Morley, D. (2006). What's 'Home' Got To Do With It? Contradictory Dynamics In The Domestication Of Technology And The Dislocation Of Domesticity. In T. Berker, M. Hartmann, Y. Punie, & K. Ward, *Domestication Of Media And Technology* (pp. 21-39). Maidenhead: Open University Press.

Murdock, G., & Golding, P. (2004). Dismantling The Digital Divide: Rethinking The Dynamics of Participation and Exclusion. In A. Calabrese, & C. Sparks, *Toward A Political Economy of Culture: Capitalism and Communication in the Twenty First Century* (pp. 244-260). Lanham: Rowman & Littlefield Publishers Inc.

Norris, P. (2001). Digital Divide: Civic Engagement, Information Poverty And The Internet Worldwide. Cambridge: Cambridge University Press.

Ofcom. (2011). Communications Market Report: UK. London: Ofcom [Last Consulted 20 August 2011].

Ofcom. (2010). Retail Bundling in Hull. London: Ofcom [Last Consulted 20 August 2011].

Office for National Statistics. (2011, June 8). Yorkshire and Humber: Economy. Retrieved July 18, 2011, from Office For National Statistics: http://www.statistics.gov.uk/CCI/nugget.asp?ID=2281&Pos=6&ColRank=2&Rank=176 [Last Consulted 20 August 2011].

Race Online. (2010). Manifesto For a Networked Nation. London: Race Online [Last Consulted 20 August 2011].

Putnam, R. D. (2000). Bowling Alone: The Collapse And Revival Of American Community. New York: Simon & Schuster.

Quan-Haase, A., Wellman, B., Witte, J. C., & Hampton, K. N. (2002). Capitalizing On The Net: Social Contact, Civic Engagement And Sense Of Community. In C. Haythornthwaite, & B. Wellman, *The Internet In Everyday Life* (pp. 291-324). Oxford: Blackwell Publishers.

Rice, R. E., Shepherd, A., Dutton, W. H., & Katz, J. E. (2007). Social Interaction and the Internet: A Comparative Analysis of Surveys in the US and Britain. In A. N. Joinson, K. Y. McKenna, T. Postmes, & U.-D. Reips, *The Oxford Handbook of Internet Psychology* (pp. 7-30). New York: Oxford University Press.

Robson, C. (1993). Real World Research: A Resource For Social Scientists And Practioner-Researchers. Oxford: Blackwell.

Selwyn, N. (2003). Apart From Technology: Understanding People's Non-Use of Information and Communication Technologies in Everyday Life. *Technology in Society*, 25(1), 99-116.

Selwyn, N. (2004). Reconsidering Political and Popular Understanding of the Digital Divide. *New Media & Society*, 6 (3), 341-362.

Shklovski, I., Kiesler, S., & Kraut, R. (2006). The Internet And Social Interaction. In R. E. Kraut, B. Malcolm, & S. Kiesler, *Computers, Phones And The Internet: Domesticating Information Technology* (pp. 251-263). New York: Oxford University Press.

Silverman, D. (1993). Interpreting Qualitative Data: Methods For Analysing Talk, Text And Interaction. London: SAGE Publications.

Silverstone, R. (2006). Domesticating Domestication. Reflections On The Life Of A Concept. In T. Berker, M. Hartmann, Y. Punie, & K. Ward, *Domestication of Media And Technology* (pp. 229-248). Maidenhead: Open University Press.

Silverstone, R. (2005). Media, Technology And Everday Life In Europe. Aldershot: Ashgate Publishing.

Silverstone, R., & Haddon, L. (1996). Design and the Domestication of Information and Communication Technologies. In R. Silverstone, & R. Mansell, *Communication By Design* (pp. 44-74). Oxford: Oxford University Press.

Silverstone, R., & Hirsch, E. (1992). Consuming Technologies. London: Routledge.

Silverstone, R., & Sorensen, K. H. (2005). Towards The 'Communication Society'. In R. Silverstone, *Media, Technology And Everyday Life In Europe* (pp. 213-222). Aldershot: Ashgate Publishing.

Silverstone, R., Hirsch, E., & Morley, D. (1992). Information And Communication Technologies And The Moral Economy Of The Household. In R. Silverstone, & E. Hirsch, *Consuming Technologies* (pp. 15-31). London: Routledge.

Simpson, L. (2005). Community Informatics and Sustainability: Why Social Capital Matters. *The Journal of Community Informatics*, 1 (2), 102-119.

Stevenson, S. (2009). Digital Divide: A Discursive Move Away From The Real Inequalities. *The Information Society*, 25(1), 1-22.

Svendsen, G. L., & Svendsen, G. T. (2004). On The Wealth Of Nations: Bourdieoconomics And Social Capital. In D. L. Swartz, & V. L. Zolberg, *After Bourdieu: Influence, Critique, Elaboration* (pp. 239-265). Dordrecht: Kluwer Academic Publishers.

van Dijk, J. A.G.M. (2006). Digital Divide Research, Achievements and Shortcomings. *Poetics*, 34(1), 221-235.

van Dijk, J. A.G.M. (2005). The Deepening Divide: Inequality in the Information Society. California: Sage.

Walker, A., & Walker, C. (1997). Britain Divided: The Growth of Social Exclusion in the 1980's and 1990's. London: Child Action Poverty Group.

Warschauer, M. (2002). Reconceptualising the Digital Divide. *First Monday*, 7 (7), http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/967/888 [Last Consulted 20 August 2011].

Warschauer, M. (2004). Technology And Social Inclusion: Rethinking The Digital Divide. Cambridge, MA: MIT Press.

Wellman, B., Hogan, B., Berg, K., Boase, J., Kennedy, T. L., & Tran, P. (2006). Connected Lives: The Project. In P. Purcell, *Networked Neighbourhoods: The Connected Community in Context* (pp. 161-216). London: Springer-Verlag.

Wellman, B., Quan Haase, A., & Hampton, K. (2001). Does The Internet Increase, Decrease or Supplement Social Capital? Social Networks, Participation and Community Committment. *American Behavioural Scientist*, 45 (3), 436-455.

Wellman, B., Quan-Haase, A., Boase, J., Chen, W., Hampton, K., Diaz, I., et al. (2003). The Social Affordances of the Internet for Networked Individualism. *Journal of Computer-Mediated Communication*, 8 (3).

Wyatt, S., Thomas, G., & Terranova, T. (2002). They Came, They Surfed, They Went Back To The Beach: Conceptualising Use and Non-Use of the Internet. In S. Woolgar, *Virtual Society? Technology, Cyperbole and Reality* (pp. 23-40). Oxford: Oxford University Press.