

**Where are the *Faceless* Masses?: Studying Users and Non-Users of Technology**

by

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## **Abstract**

Current accounts of 'users' and 'non-users' of technology remain conceptually weak. Part of the reason for this is rooted in the assumption that 'using technology' is an inherently desirable and (socially, economically) advantageous form of engagement. Another reason is that both phenomena are often explained in terms of the (purported) information needs of society, while the information needs and motivations of the individual are often overlooked. This thesis will offer a critique of these existing perspectives, followed by an examination of recent research on undergraduate users and non-users of Facebook in hopes of developing a more robust conception of 'the non-user', not only as a useful starting point for any future research on the matter, but also to help foster renewed interest in the critical examination of issues surrounding the use (or not) of technologies.

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## **Glossary of terms**

**ANT:** Actor-Network Theory

**HCI:** Human-Computer Interaction

**ICT:** Information and Communication Technology

**SCOT:** The Social Construction of Technology

**SNS:** Social Network Site

**STS:** Science and Technology Studies or, Science, Technology and Society

## Chapter 1: Beyond Diffusion: A Conceptual Approach to Studying (Non) Users of Technology

*According to some physicists, there is not enough mass in the universe to balance the accounts that cosmologists make of it. They are looking everywhere for the “missing mass” that could add up to the nice expected total. It is the same with sociologists...I expect sociologists to be much more fortunate than cosmologists, because they will soon discover their missing mass. To balance our accounts of society, we simply have to turn our exclusive attention away from humans and look also at **nonhumans**<sup>1</sup>. Here they are, the hidden and despised social masses who make up our morality (Latour 1992: 226-7 emphasis added).*

### 1.1: Introduction

It is widely acknowledged that Information and Communication Technologies (ICTs) like the Internet are rapidly transforming all aspects of our everyday social lives. Ever since the infancy of Internet in the early 1990s, scholarship has been focused on various factors related to the use of the Internet: Who is making use of it? (Pew Internet and American Life Project 2003) What socio-economic benefits are associated with use? (Madon 2000) What social policies should we enact in order to protect the privacy of Internet users? (Sheenan 2002) But now, in 2012 after the initial charm of the Internet has begun to wear off, people are starting to question these uncritical views of the Internet, and technology in general. For instance, what would happen if we asked these same questions, but focused our attention on non-users of technology? When we do, recent authors have found that it challenges our existing understanding of the perceived benefits of using technology. Charting this change in the conceptualization of users is the purpose of the present chapter.

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<sup>1</sup> One should note that I am not equating ‘the non-user’ with ‘the nonhuman’ in terms of Latour’s definition, just that he uses ‘the nonhuman’ in contraposition to ‘the human’, and the non-user is invoked in the same way.

Even as some scholars begin to change, today it is widely assumed that having the ability to use the Internet is a prerequisite for living and working in the 'information society'. Some commentators have even suggested that using the Internet is "The Great Equalizer", capable of reducing the social and economic disparities between all social strata (Maibach 1999).

Use of the Internet has not only become a social imperative but a civic one as well, guiding many political efforts to ensure that every citizen has 'universal access' to ICTs as well as seeing to the reduction of socio-economic disparities between those who make use of ICT and those who do not (Selwyn 2003: 100). As a result, during the mid to late 1990s a number of studies began pointing to the advent of the 'digital divide' occurring between technological 'haves' and 'have-nots' (Colby 2001; Howland 1998; Wilson 1987). However simply distinguishing between technological 'haves' and 'have-nots' "both avoids precise delineation of who these are and fails to consider the range of different positions in a class-divided society" (Webster 1995: 157). The problem, then, within this prevailing conceptualization of the 'user of the Internet' is that it frames use in terms of 'either-or'; either an individual has access to the technology or does not; an individual is either making use of the technology or is not. This approach to conceptualizing users and non-users of technology, consequently, leaves us with rather rigid categories. The reason for this rigidity is because this conceptualization has its origins in the assumption that using a widely popular technology (like the Internet) is a prerequisite for living in the modern social world. While the prevailing concept can account for accessibility issues related to the 'economics of adoption' (e.g. skills,

costs, location etc.), it does not account for the enormous range in the frequency of use. In order to encompass the notion of the user and non-user more broadly, it needs to be understood in a more nuanced way. For instance, one is not simply either a cell phone user or not, but rather there is a range of possibilities in the way individuals may approach the 'usage' of cell phones. One could be a daily cell phone user, another may only use one when traveling abroad, and another may be no longer able to use a cell phone due to strict security requirements at their workplace. Notions of users and non-users need to take into account the different degrees and forms in which an individual may engage (or not) with the technology that may also change over time. Hence, as Wyatt et al. argue:

[t]he Internet 'user' needs to be conceptualized along a continuum ... and needs to encompass not only a structural table of different types of use, but also the possibility of reversals and changes in the direction of individual and collective patterns of use (2002: 37).

Hence there are not simply different varieties of use or non-use but there can also be different reasons for, and different ways of, not using a specific technology.

Therefore, this chapter follows from the more recently emerging dialogue in the sociology of technology that conceptualizing non-users of ICT as technological 'have-nots' is a conceptually weak basis for academic research (Selwyn 2003; Selwyn et al. 2005; Selwyn 2006; Wyatt et al. 2002; Wyatt 2005). Indeed, what we discover when we consider the previous framework for studying users and non-users of technology is that most existing explanations of non-use of technology are based on a number of widely held assumptions.

First, as the notion of "The Great Equalizer" suggests, ICT use is assumed to be an inherently desirable and beneficial activity for all individuals. In this vein,

commentators contend that technological development follows a predictable path, unhindered by cultural or political influence and that the benefits of a technology are “inherent”. The crux of this argument is that technology is something that enters society from ‘the outside’ and then ‘impacts’ social life in various ways (Fischer 1992: 12). This is known as technological determinism<sup>2</sup>. Second, technological adoption is seen to be inevitable. This is what is known as the theory of the diffusion of innovations and it seeks to explain why and at what rate populations at large adopt new ideas and technologies. Diffusion theorists argue that when we statistically examine how the use of a technology expands from initial adopters through to the majority of the population at a later date it reveals a recurring ‘s-curve’ of adoption, which in the long run, indicates that the majority of the population will ‘inevitably’ adopt the innovation (Rogers 1995).

In this review of the literature of different ways that users and non-users have been conceptualized, frequent examples of Internet use are made, though this is intended to encompass ICT use more broadly. This is not to say that the Internet is treated as some monolithic technology. Rather, I see it as a technology that can mean different things to different people and can be used in different ways and for different purposes.

I will first examine the weaknesses of existing accounts that deal with ICT use. I will then reconsider some of the factors that influence individuals’ use and non-use of technology, and finally I will propose a new model of understanding

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<sup>2</sup> For more on technological determinism using Facebook as an example see <http://htasthoughts.blogspot.com/2011/02/question-7-determinism-v-constructivism.html>

users and non-users, based upon the information needs of the individual rather than on the perceived information needs of society.

Thus, by critiquing the widely held assumptions of existing attempts to conceptualize the user and non-user and by reconsidering factors that influence individuals' non-use, this chapter hopes to develop a more robust conception of 'the non-user', not only as a useful starting point for any future research on the matter, but perhaps to also help foster renewed interest in the critical examination of issues surrounding the use (or not) of technologies.

## **1.2: Critique of Existing Accounts**

We begin by examining some of the widely held assumptions of existing explanations of non-users of technology. In his paper, "Apart from technology: understanding people's non-use of information and communication technologies in everyday life," Neil Selwyn identifies four assumptions put forth by existing explanations of non-users of technology. The first seeks to explain non-use in terms of discourses of material and cognitive deficiency. In this line of thought, the most immediate factors influencing individuals' engagement with ICT are economic and material. The day-to-day economics of using ICT are described as a "crucial and on-going mediating factor" (Selwyn 2003: 102). An individual's material resources and economic capacity play a central role in determining whether they will use ICT, as well as in determining the subsequent patterns of that use – for example the difficulty of 'using' the Internet today with a dial-up modem. As computers, software and even web services continually improve over time, they increase the

minimum computer system requirements needed to use them. As a result, an individual's material and economic resources (such as income) are taken by some (e.g. Bucy 2000) to be important social determinants of on-line access and use. Another set of 'enabling or disabling factors' of ICT use are highlighted in the more psychologically oriented literature as being "a range of individual factors centering around the cognitive and intellectual ability to use technology" (Selwyn 2003: 103). Psychologists point to a range of cognitive and affective factors as important determinants of individuals' engagement with technology such as self-efficacy, perceived behavioural control and perceived ability (ibid.).

Related to these more general cognitive factors, psychological research has also coined the term 'technophobia' as an established account of individuals' non-use of computers and ICTs. As Selwyn describes: "Technophobia [is described in the literature as] the fear and apprehension felt by an individual when considering the implications of using technology, even when it poses no real or immediate threat" (2003: 104). In this conception, individuals' reasons for non-use are seen in terms of an irrational fear; an individual's technological reticence is seen as impermanent and somehow 'treatable'. In other words, non-use – an individual condition or problem – is pathologized in such a way that it becomes defined and treated as a medical condition or problem, falling under the authority of health professionals who are charged with protecting the 'health' of the public. In this case, while non-use is construed as 'unhealthy' or abnormal, for the most part use, or at the very least choosing to adopt the technology, is assumed to be 'healthy' and normal.

Following from this latter assumption, another popular explanation of the phenomena of non-use of ICT is ideological refusal. Part of this explanation comes from the belief that all widely pervasive technologies (such as the telephone or the television) will inevitably, but albeit gradually, approach *absolute* saturation within the population. As the number of users of a technology such as the telephone, approaches 98% of the population, the remaining 2% will be viewed as technological 'want-nots', "refusniks who for ideological reasons choose not to engage [with the technology] despite being able to in practice" (Selwyn 2003: 104). In this explanation, non-users are viewed as 'deliberate' non-users who avoid ICT altogether. However, we can begin to see the weakness of this explanation when we consider that these same 'deliberate' non-users may have been 'former' users who are simply expressing their discontent with the current state of the technology and some may even consider using it again at some point in the future. They are not simply staunch 'refusniks', but what the technology currently offers is not in-line with their current needs. The terms 'deliberate', 'want-nots' or 'refusniks', appear to be used pejoratively, strongly reinforcing a sense that ICT use is to be preferred over non-use.

As we have seen, the various explanations popularly given as to why some individuals do not use technology share similar assumptions. For the most part, they assume one particular mode of engagement to be more 'normal' than the other. These are the assumptions carried by diffusion theory and technological determinist standpoints. Diffusion theorists point to the 'inevitable' adoption of a technology, beginning with initial groups and later by the majority of the population. The

successive adoption of a technology follows an 's-curve' beginning with the 'innovators', then on to the 'early adopters', the 'early majority', then on to the 'late majority' and eventually reaching the 'laggards' (Rogers 1995: 263-5). As Selwyn points out, "This 'natural' diffusion (or trickle down) thesis can be seen as an elaboration of a technological determinist viewpoint that access to ICT inevitably leads to use" (2003: 105). Indeed, the assumption that has prevailed in our exploration of existing discourses of non-use is that non-use is seen as an impediment towards an innovation's saturation in society. Of course, this is based on another assumption: that the purpose of any technological innovation is to realize its full economic potential. If non-users are seen as potentially weakening the 'critical mass' of adoption, thus reducing the innovation's potential market, then clearly there is an economic motive behind these popular explanations of the non-user. By focusing attention on the importance of use and users, "we implicitly accept the promises of technology and the capitalist relations of its production" (Wyatt 2005: 69).

Having shown that many conventional explanations of use and non-use of technology derive from the diffusion and technological determinist perspectives, we can see that such explanations define use and non-use with respect to the prevailing ethic of instrumental rationality. It is 'normal' to be a user and it is not only 'abnormal' to be a non-user, but ultimately an irrational and socioeconomically disadvantageous position to adopt. But as Selwyn argues, this prevailing notion of 'normality' is a narrowly defined one (2003: 106). It is inadequate to claim that non-use is simply a universally cognitive, psychological, or social problem. When

applied in a social context, the concept of 'normal' is meant to provide a measurement of deviations from the 'normal way of life' in that society or culture. Exposure to a world so saturated with the use of a particular technology, such as Facebook, may be so ordinary that otherwise normal reluctance will appear as 'abnormal'. But as Watson-Verran and Turnbull have shown, Western conceptions of normality are often applied as a benchmark by which the knowledge systems of other cultures are evaluated (1995: 115). For instance, other cultures have different ways of experiencing and dealing with new technology and are not necessarily in need of methods that are morally or economically sanctioned in the West, although according to that standard they appear to be. However, it is not only other cultures that are evaluated according to this prevailing ethic, but all groups that do not fall under the category of 'normal'. "Thus", as Selwyn argues, "to date, most academics have focused on non-use of ICT as a 'problem' that needs to be 'solved'" (2003: 107). More succinctly, and as Satchell and Dourish contend, "The problem is the creation of moral subjects" (2009: 15). This deficit model of non-use assumes that the 'problem' has a relatively straightforward, 'pre-scribed' "therapeutic or technical solution at the level of the individual" (Selwyn 2003: 107). In other words, in order to 'solve' this problem, the non-user is morally encouraged, via 'the script' (Akrich 1992: 208), to find a solution in what the technology is said to offer. This moralization of ways of dealing with a technology is not only limited to non-users. Users too can be seen in a negative light. For instance, some teens may curb or altogether halt their use of Facebook because they respect or agree with their parents' moral or safety concerns over the site's privacy issues (boyd 2007: 3).

As I will now go on to discuss if we are to develop a broader and more objective understanding of people's non-use of technology then we must avoid assumptions about the implied benefits of a technology and also avoid framing use or non-use in terms of a deficit in need of rectification. The problem with existing explanations is that they provide a pretense that use and non-use are moral behaviours or attitudes. While it may be true that use and non-use are treated by some (e.g. parents) as moral phenomena and while it is important not to discount that fact, researchers and academics ought not to be confined to it conceptually.

Again, it has been argued that these issues have resulted from the previous literature's reliance on assumptions derived from the standpoints of diffusion theory and technological determinism. By uncovering where these perspectives fall short, we can now point to elements that a broader conceptualization of users and non-users would include. In other words, a better and more objective conceptualization of the user/non-user will have the following properties: it will not assume 'use' to be an inherently desirable and beneficial activity for all individuals, it will have no moral connotations (no pathological, pejorative, or normal/abnormal categories), it will not be based on the perceived information needs of society but rather in terms of understanding the information needs of the individual (Selwyn 2003: 107), and finally, users and non-users do not represent distinct categories but are part of a broad spectrum of different types of use and non-use. With this in mind I will now consider a number of factors that influence non-use of technology in order to uncover different forms of non-use.

### **1.3: Considering Factors that Influence Use/Non-Use**

One of the first studies seeking to understand the phenomena of non-use (though they do not use this term) was Katz & Aspden's 1998 article "Internet Dropouts in the USA: The Invisible Group." As the title suggests, however, they were trying to uncover factors that lead Internet users to become 'former users'. Using a national random telephone survey conducted in 1995 with 2500 participants, the authors found that 15% reported being unaware of the Internet; 69% reported being aware of the Internet but did not use it; 8% reported being users and 8% reported being former users (Katz & Aspden 1998: 328). The authors then identify four basic reasons that former users provided for stopping using the Internet: loss of physical access, lack of interest, problems with use, and high costs (1998: 338). Based on the data in their survey, the authors argue that 'loss of physical access' and 'lack of interest' are reasons more likely to be given by younger populations who are more likely to be shifting between institutions (i.e. between the home, college, the workplace). 'Problems with use' and 'high cost', they contend, were more likely to be given by older populations since they were more likely to be informally introduced to the skills of using Internet, or were more likely to not have access to school facilities or who preferred to access the Internet at home (but did not have it yet) (ibid.). However, as we can see from these latter findings, the reasons for former and non-use uncovered by Katz & Aspden only seem to apply when using the Internet was a largely uncommon practice ("The World Wide Web" was introduced in 1989, and at the time of their study it was only 6 years old).

Twenty-two years later, using the Internet is so ubiquitous, so "normal" that

one can hardly imagine being a student or in the workplace without being at least an occasional user<sup>3</sup>. But their study was important in that it was one of the first to look at Internet use in a radically different way; in their own words, studying former and non-users “has the potential to reveal [the] barriers and disincentives to Internet participation” (Katz & Aspden 1998: 327). Even within the rhetoric of technological determinism or diffusion, it is important for proponents of a technology to know why some people avoid, ignore or stop using it. To this end, researchers began to introduce preliminary taxonomies of non-use in order to improve our understanding of the non-user. One of the first identified four types of non-user: ‘resistors’, ‘rejectors’, ‘excluded’, and ‘expelled’ (Wyatt et al. 2002: 36). Resistors are those who have never used a technology simply because they do not want to. Rejectors are those who voluntarily stop using a technology. The excluded are those who never use a technology because they cannot get access to it. And the expelled are those who involuntarily stop using a technology because of cost or loss of institutional access (ibid.).

While this work represents one of the first attempts to categorize the non-user, it can nevertheless be criticized for three main reasons that we have identified in the previous section. The first is that the categories appear to be rather pejorative, namely, the last two categories have connotations that liken the non-user to a vagrant or derelict. The second reason is that, while Wyatt et al. (2002) and

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<sup>3</sup> Here I am careful to note that I am not sharing in the assumption that we are all ‘potential users’ since we all will likely make ‘occasional use’ of the Internet. Rather, I contend that we are just as likely to be ‘potential non-users’ as we are ‘potential users’ of a technology. Recognizing this distinction is important conceptually in order to avoid approaching the matter one-sidedly.

Wyatt (2005) take care to stress that the notion of the user ought to be “conceptualized along a continuum” (2002: 37; 2005: 77), the four categories do not provide much information in terms of patterns or frequency of use/non-use. In other words, while they can tell us the reasons why an individual uses a particular technology or not, they cannot tell us about why an individual uses a particular technology (or not) ‘often’, ‘sometimes’ or ‘never’. Therefore a more nuanced understanding of use/non-use must take into account an individual’s frequency of use, which can then be used to investigate how use is stratified. The third reason we may criticize these categories is that they do not provide us with a heightened understanding of the information needs of the individual non-user. A person may be technologically ‘excluded’, but perhaps they personally find no need for that technology in their everyday lives. Although there are varying factors that determine whether an individual may have access to a technology (e.g. economic, social, cultural), “it is the meaning, significance and utility of the potential technology use which is the crucial underlying factor for the individual concerned” (Selwyn 2003: 108).

Therefore, in order to better understand factors that influence use/non-use of a technology, we must not only take into consideration the ‘frequency of use’, but we must also evaluate the degree to which an individual finds a technology *relevant* in his or her daily life. When applied to studies of technology, the notion of ‘relative advantage’ – “an individual’s perception of whether adopting an innovation is worthwhile or not in terms of economic and/or personal cost” (Selwyn 2003: 108) – may prove to be a useful starting point when considering factors influencing non-

use. But as we have already suggested, this examination aims to provide a deeper and more dynamic understanding of use and non-use by looking at these factors where they occur within different patterns or frequencies of use.

Before detailing factors influencing users/non-users in their article “Whose Internet is it Anyway?: Exploring Adults’ (Non)Use of the Internet in Everyday Life,” authors Selwyn, Gorard and Furlong organize their sample into four categories according to frequency and range of engagement with the Internet:

*Broad frequent users:* Those who reported using the Internet for three or more different applications/purposes.

*Narrow frequent users:* Those who reported using the Internet for one or two different applications/purposes.

*Occasional users:* Those who reported using the Internet ‘occasionally’ or ‘rarely’.

*Non-users:* Those who made no use of the Internet in the past 12 months (Selwyn et al. 2005: 9-10).

The benefits of grouping a survey sample according to frequency of use is that we cannot only compare each group to see how they differ along demographic lines, but we can also probe each group’s reasons or factors that contribute to their particular use (or not) of the technology in a follow-up interview. One of the main reasons Selwyn et al. identified for broad frequent users’ intensive use of the Internet was that it was an extension of things they were already doing offline. In this group they found that the Internet was “being overwhelmingly used...as a stimulus for pursuing existing interests” (Selwyn et al. 2005: 13). Therefore, the factors that lead to ‘broad

frequent use' depend on a succession of events: first the user must see the technology as an aid to everyday (e.g. household) activities, second the technology becomes integrated with, and seen as an extension of the self (e.g. extension of things they are already doing offline), and finally, the use of the technology becomes extended into other domains (e.g. leisure). 'Narrow frequent users' in their study are characterized as those who use the Internet "for fulfilling a specific need or interest in their lives" (ibid.: 15). This category of user is said to rarely make use of the Internet beyond its basic informatic function. Above all the main factors that leads to their 'narrow' use of the technology is that they see it as an 'individually constructed tool'; some see the Internet as a reference tool, others may see it solely as a 'work tool'. Occasional users are much like narrow users but make more cautious or sporadic use of the technology. One reason for this, argues Selwyn et al., is that "the Internet appears to sit less comfortably with pre-existing ways and means of doing things" (ibid.: 16). In this case, the factors that lead to occasional use could be that the technology is only occasionally seen as being more useful or effective than other means of fulfilling their everyday needs. For this group, these issues of interest, relevance and utility contribute to a general lack of motivation to make more use of the technology.

It is important when considering factors that influence the non-user not to confuse them with 'the truly unconnected' – i.e. those who "live completely apart from the Internet...who do not live with or even know many users" (Pew Internet and American Life Project 2003: 19). In their study, Selwyn et al. found that non-use was due to a combination of choice, interest and disposition. Some resisted the

technology because they felt “resentful to the way the world is going” (Selwyn et al. 2005: 18). The authors also make note that non-users are often in close proximity to the technology without actually having to make use of it. “Parents, children, relatives, work colleagues and friends were all cited as ‘surrogate’ users of the Internet” (ibid.: 19). These sources of ‘use-by-proxy’ precluded the need for these non-users to engage with the technology themselves. Another study charting the differences between users and non-users of Social Network Sites (SNSs) found that one’s living context is significantly related to whether one adopts the technology or not. For instance, Hargittai found that first-year students who live at home are considerably less likely to use Facebook than those who live with roommates or on their own (Hargittai 2008: 291). These latter three examples of factors that influence non-use: resistance, use-by-proxy and living context begin to demonstrate just how diverse the phenomena can be.

Thus given this preliminary glance at some of the factors that contribute to use/non-use of a technology we can be justified in saying that the social reasons underlying people’s use/non-use of technology are complex and due to a host of factors. Though we might be tempted to view people’s use/non-use of a technology in terms of demographic factors like gender or age, “we should not overlook the importance of the micro-politics and moral economies of households and families, social and cultural capital, and even issues of status and fashion” (Selwyn et al. 2005: 19-20) in an individual’s acquisition and use of a technology. What can be gleaned from this section that offered a brief description of some factors that lead to use/non-use of a technology, is that one must take care to note the opportunities,

needs, motivations, material circumstances, and lived experiences of the particular user/non-user in order to better understand the underlying pattern of engagement. In other words, the factors that contribute to the frequency of using/not using a technology are “best understood both in terms of social *structuration*<sup>4</sup> and an individual’s personal circumstances” (ibid.: 22, emphasis added). Having now laid the foundation for what a more robust conceptualization of the user/non-user might look like, we will now apply the above conceptual framework to existing typologies of non-use to see if the two may be reconciled. Stated differently, having now reconceptualized the user and non-user in terms of reasons for their frequency of use, we will now add to that understanding by considering different ways of not using.

#### **1.4: Towards a Reconceptualization of the Non-User**

The previous section demonstrated the methodology to be followed by any study wishing to examine the phenomena of use/non-use under the conditions this chapter has set out to establish: it must be based on an objective factor (i.e. ‘frequency of use’) identifiable in a survey sample, and it must be based on the information needs of the individual rather than on the perceived information needs of society (i.e. ‘motivations for use/non-use’) identifiable in a follow-up interview.

Interestingly, in the course of implementing this methodology to study non-users, one will invariably encounter users as well. This demonstrates yet another

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<sup>4</sup> According to Giddens, the notion of structuration expresses the mutual dependence of structure and agency. “According to this conception, the same structural characteristics participate in the subject (the actor) as in the object (society)” (Giddens 1979: 70).

strength of this methodology over and above studies that exclusively examine users. For example, in the case of studying undergraduate users and non-users of Facebook, since there is often a much smaller proportion of the latter, quantitative studies will have to focus more on factors that contribute to the level of Facebook use. This should not be taken as a sign that quantitative studies of non-users are not possible. Remaining consistent with our argument above, non-use can be defined as ‘using least frequently’<sup>5</sup> – something that quantitative studies are able to identify. Quantitative studies are necessary to highlight the differential patterns of engagement in terms of frequency. Afterwards and on the basis of this, a qualitative study will enable us to know even more about non-users and users – for instance, we could ask users what they think about non-users and vice versa. What is crucially important about this methodology is that the researcher must set out to study both forms of engagement simultaneously and that the quantitative study must be accompanied by a qualitative one. In Selwyn’s own words: “[H]ierarchies of non-users identified from our survey data can be more usefully explored via an analysis of the follow-up interview data” (2006: 282). This methodology proved to be useful for Selwyn (2006) and Selwyn et al.’s (2005) studies because not only does it address the differential patterns of engagement within the survey data, but it also points to the “subtleties of inequality which were not necessarily apparent in the broader measure of ‘Internet use’ provided by the survey” (Selwyn et al. 2005: 20).

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<sup>5</sup> Non-use cannot be defined as ‘using less frequently’ because that evokes a sense that non-users ‘use’ but, less frequently. It is also possible that the individual seeks to avoid using altogether. Non-use is defined as everything on the lower end of the spectrum of ‘frequency of use’ and bearing in mind the discussion on page 29, the conception of non-use must begin from the bottom-up perspective.

This methodology allows one to focus on the structural as well as personal circumstances that influence use and non-use, whereas, as we saw in section 1.2, existing discourses usually explained use/non-use in terms of one or the other. Hence it is important to note in any characterization of user/non-user how the technology is integrated (or not) alongside their existing everyday activities. In most cases, studies have found that how the Internet was being used (or not) was connected to activities users/non-users were already doing offline (Selwyn et al. 2005: 22; Selwyn 2006: 289). To be sure, as the concept of structuration suggests, the degree of the technology's integration with an individual's everyday activities depends on both structural and personal circumstances. The Internet might simply be seen as a 'work tool' to some because that is the sole environment in which he or she has access to that technology, and the way in which they engage with it will be strongly shaped by such structural circumstances, but not necessarily so. While the opportunities to access and use a technology are certainly mediated by structural factors relating to the household or the workplace, for example, we cannot deny individuals' agency as an equally important mediating factor. Throughout Selwyn's (2006) interviews with non-users he found that "non-use was mediated by conscious decisions and whims, on-going 'life-flows' and deliberate changes in life circumstances" (Selwyn 2006: 289). In particular, it may be argued that while these circumstances lie at the heart of why an individual makes use of a technology or not, they may also characterize the nature of how they engage with the technology. For instance, if one is motivated to use the Internet as a tool for social networking, then that reason will likely be one of the more prominent ways that characterize how

they use it and continue to use it. Similarly, if one does not use the Internet because they 'dislike modern forms of communication', then that reason will likely be a factor guiding them in their use of more 'archaic' forms of communication.

Having now demonstrated why the underlying reasons for using/not using are important features in any characterization of these phenomena, we will now evaluate a 'tentative and provisional accounting' of varieties of non-use<sup>6</sup> supplied by Satchell and Dourish (2009) in order to provide a more thorough understanding of the nature of technological non-engagement. The authors begin with a form of non-use they call 'lagging adoption': "Lagging adoption is defined with respect to some expected pattern of technology adoption and diffusion" (Satchell & Dourish 2009: 10). While this concept has its origins in the 'diffusionist' conception of non-use and cannot tell us much about people who do not use technology, the notion provides a useful heuristic and can tell us about people who do not use a technology *yet*. For instance, some people might postpone their use of a technology for as long as they can, perhaps because of a feeling of distrust towards modern technologies. Others might hold off adopting because they are 'acquiescers' – choosing to follow along with what their friends or those closest to them do. However, the term 'lagging' might be taken to imply that complete technological adoption among the population is (at least) statistically inevitable, leading Satchell and Dourish to caution researchers about the use of the term since "more can be said about non-users than

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<sup>6</sup> The reason we focus on non-use and not on use is because varieties of the latter are much more evident and are rather inconsequential for the task at hand. We are interested in examining non-use because it is important to understand it outside and beyond specific circumstances of use (a predominant feature in the existing literature).

simply that they have not yet become users ... [our] concerns for non-use should be greater than simply to turn it into use" (2009: 11).

Another related form of non-use is deemed 'active resistance', constituting an active and considered effort to resist a technology. One can cite myriad reasons for actively not using a technology such as concerns over the control of private information, a preference for alternative modes of engagement, political, cultural and/or religious beliefs, and so on. From one perspective, active resisters may evoke images of protesters, anarchists or members of the so-called 'counter-culture'. Viewed more broadly however, if non-users can be seen as one part of a larger collective attempt to make sense of new technologies, then those who actively resist technologies can also be seen as making significant contributions to this debate. Both frequent users and active resisters are "responding to and shaping cultural interpretations of technology ... [and] each play a role in the cultural appropriation of technologies" (Satchell & Dourish 2009: 11). This form of non-use might not always be a product of an individual's political or philosophical beliefs, but it could also be an attempt to avoid aspects of their own character. For instance, a non-user may actively resist Facebook because using it would entail spending a number of hours in front of the computer, something that they find they no longer enjoy. Satchell and Dourish label this variant of active resistance 'disenchantment' which they argue often manifests in a belief that the nature of technology and technologically-mediated interaction are wholly inauthentic, often with a "nostalgic invocation of the way things were" (ibid.: 12). Nostalgic invocations are useful in qualitative analyses of non-users insofar as they tell us something about the range of

anxieties concerning the rapid pace of changing socio-technical relations in contemporary everyday life.

This method of non-use also can also be applied heuristically to the assumptions of diffusion theory. If diffusion theory assumes that we are all 'potential users' of technology, then we could also be considered 'potential non-users' using the same assumptions. Users are not precluded from becoming disinterested or 'disenchanted' with the experience of being a user simply because it is rational and efficient to continue to use a particular technology. Rather than treating former or non-use simply as an irrational decision, it is important to chart the reasons behind these methods of dealing with technology. Doing so will not only provide greater insight into the phenomena of non-use, but will also strengthen our understanding of use as well. Increasing our awareness of this fact is precisely what this chapter has sought to establish.

For the purposes of exploring this topic further, I will now try my hand at creating a 'tentative' taxonomy of non-use. The conditions of such an account must not only conceptualize the non-user in terms of the properties we identified at the end of section 1.2, but must also satisfy the following requirements:

1. It must avoid assumptions about the 'inherent benefits' of technology for individuals; non-users are not automatically 'at fault' for avoiding use. This is based on the proposition from Collins (1983) and Woolgar (1991) that the nature and capacity of a technology is (at least in principle) interpretively flexible throughout all stages of development and use.

2. It must approach the conceptualization of the non-user from the information needs of the individual rather than from the perceived information needs of society (Selwyn 2003: 107).

It is also important to note that such a classification scheme does not intend to create a set of expectations of how the non-user is expected to behave in each case. Rather, in what follows, the categories are intended to foreshadow the types of non-user that have been uncovered in the course of researching both forms of engagement in Chapters 2 and 3. Given the emphasis on the notion of interpretive flexibility in our requirements above, it must be made clear that the individual is always capable of acting otherwise. Taking these into consideration, below we have created a new preliminary classification scheme based on Satchell & Dourish's (2009) typology and Selwyn's (2006: 277) groups of non-user based on frequency of use:

### **1. Former users/"Indifferent Conscripts":<sup>7</sup>**

We can identify three forms of non-user in this category that meet our criteria. The first two can be subsumed under a much broader category that Satchell and Dourish define as 'Lagging adoption'. Lagging adoption is defined with respect to some expected pattern of technology uptake (Satchell & Dourish 2009:10). Notwithstanding the applicability of this form of non-use to the main tenets of diffusion theory and still keeping in mind that we wish to avoid the assumptions carried by this theory, this concept can still

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<sup>7</sup> The latter is when one finds oneself in an institutional situation where the use of technology is an expected institutional norm (Selwyn 2006:285).

tell us something about people who do not use a technology *yet*. At this stage, we can identify two forms of this kind of non-use: Postponers and Acquiescers. Postponers are those who hold off being a user for as long as they possibly can. Acquiescers by contrast, can be thought of as those who go along with what friends or those closest to them do, in other words, those who go along with a social or institutional norm. The third form of non-use we can identify in this category can be seen in terms of 'Disinterested' or 'Ex-users'. In this case, we may observe an individual who has become disinterested with the experience of being a user. This form provides us with a glimpse of how there is always a potential for users to become 'former users', despite the expectations we may have (says the diffusion theorist) about the reputed uptake of a technology.

## **2. Active Non-users:**

In this category we can interpret individuals' motivations and rationales behind their non-use of a technology in three ways. First, their non-use may be characterized in terms of 'Active resistance' or 'Ideological refusal'. In this case, the individual sees the purported benefits of using a technology itself as insufficient for their needs. In this respect, the individual may perhaps be resistant to changes in familiar ways of socializing and existing/being in society and instead, are happy with existing forms of social relations and practices. The second motivation to not use technology in this category can be seen in terms of 'Disenchantment'. In this case, the individual will express sentiments that technologically-mediated interaction is wholly inauthentic,

often with nostalgic invocations of 'the way things were'. This form can be seen as an elaboration of the former kind of non-use in that 'nostalgic invocations of the way things were' will provide the grounds upon which the individual may actively resist a technology. The third type of non-user in this category can be identified as 'Early articulators': those who are aware and express from early on that they have no desire to be a user.

### **3. Surrogate/Proxy users:**

In this category we have a hybrid, a sort of chimera if you will, of the user and non-user. The motivation/rationale to not use in this category stems from the relationship the non-user has with other users. Here, the individual may be in a situation where they can 'displace' or 'off-load' their primary use of a technology onto someone else. In this case, the primary use of the technology has become a service for non-users. For instance, to be considered a 'proxy' or 'second-hand' user of Facebook, one is observed, via their non-use or their reluctance to use Facebook, to be engaged in gathering or persuading others (who are regular users) to provide personal or social event information, which is usually exclusive to Facebook users. This form of non-use illustrates the importance of conceptualizing use/non-use along a continuum and not as a simple dichotomy. It also demonstrates that non-use can be seen as a site of empowerment, a new way that individuals are using technology without physically engaging with it.

Upon close examination of the preliminary categories of non-users above, we can see that a fundamental feature of these types of engagement is the individual's 'reflexive awareness' of their relationship with the technology. We can also see that on the basis of such an awareness (and in keeping with the notion of interpretive flexibility), these individuals may also be aware that 'they could act otherwise'. Incidentally, both of these features are what Anthony Giddens argues to be core characteristics of agency (1979:53-6).

Before concluding, it is worth noting that there are many different 'ways of not using' other than those mentioned here. Future studies can contribute to the growing understanding of non-use of technology by documenting new ways that non-users interpret and respond to ever new and ever pervasive technologies. By looking at and broadening examples of, and possible rationales behind, 'ways of not using' that other researchers have identified, this section has shown that a conception of the non-user that is based on the information needs of the individual, rather than on the perceived information needs of society, can broaden our understanding of the user and the non-user beyond the narrow assumptions of diffusion theory or technological determinism present in existing interpretations.

## **1.5: Conclusion**

This chapter set out to demonstrate that the conceptions of users and non-users in the existing literature are problematic because they do not seek to understand non-use as part of a broader continuum of use, but instead treat them as two separate phenomena often characterized as binary opposites in a utilitarian

morality. As Satchell and Dourish contend: “From the perspective of system developers ... the good user is one who adopts the system we design and uses them as we envisioned ... [while] the bad user is the one who does not embrace the system or device” (2009: 15).

At first glance, this type of reasoning will appear to be very lucrative to designers and policy makers who believe that technological adoption is commensurate with increased standards of living and well-being, and are concerned with how to make technologies (or systems) more attractive to potential users. However, when viewed differently these designers and/or policy makers are not seeking to uncover ‘how to increase the general well-being of society’, rather, they are concerned with the creation of moral subjects. For instance, research that takes place using this conception might view the ‘privacy issues’ of a technology not as threats to the privacy of individuals, but as potential threats to the successful development of the technology. This example raises questions about our responsibility as researchers, developers and policy makers towards people to whom we introduce new technologies. As Satchell & Dourish thoughtfully conclude:

As an ethical concern, it suggests that we should take people’s concerns as primary rather than attempting to interpret them as providing support for one sort of potential product or another; and as a methodological one, it highlights the important things that we might miss if we are attempting to read all responses to technology purely as expressions of potential interest or potential adoption (2009: 15).

Therefore, what we have been suggesting all along is that we can learn much more about the use of technology when we place it in the context of non-use. We should not view use and non-use simply as dichotomous responses to the ‘inevitability of

technological progress', but rather as complex and contingent acts of their own. The fallacy in the former is further evinced by the fact that even those who apparently make no use of a technology at all have distinct ways of engaging (or not) with it (Selwyn 2006: 288). These patterns of engagement are precisely what need to be addressed over and above the 'technical' issues of access (and even more so above efforts to moralize adoption) if our aim as researchers, designers and/or policy makers is to fully grasp the human-technological relationship. For example, and as practical application of the knowledge developed in this chapter, let us consider the claim that e-voting technology will increase electoral participation. Some authors have indicated that since there is strong support for the use of 'e-voting' that introducing it will increase electoral participation rates (Houston et al. 2005: 12-3). However, we will still likely find unequal patterns of engagement because e-voting does not make 'increased electoral participation' seem any more important to those who do not find it relevant to their lives. Increased electoral participation is more likely to be achieved if we concentrate our efforts on making voting a desirable part of people's everyday lives before expecting a technology like the Internet to accomplish this on its own. This example demonstrates the importance of taking the needs of both users and non-users seriously when researching or designing new technologies.

In the first section, this chapter provided a picture of what existing accounts look like when they do not understand use and non-use as part of the same broader phenomenon. We saw that whether they explain non-use solely in terms of economic, cognitive or affective circumstances, it can be argued that they share in

the assumptions of diffusion theory and technological determinism. Ultimately, we saw that these existing accounts characterize non-use as an impediment to the successive adoption of a technology and hence as a 'problem' that needs to be 'solved'. When we treat the notion of non-users in this way, we are not concerned with *why* an individual is making little-to-no use of a technology; we are rather concerned with *how* we might turn them into them into users. This is a conceptually weak basis for understanding the phenomena because it begins from a top-down perspective: the perceived information needs of society are taken over and above the information needs of the individual. An improved method for understanding non-use would begin from a bottom-up perspective. As Selwyn notes: "This involves accepting that people are more than simply 'end users' with no role to play beyond accepting ready-made technological artifacts and, instead, seeking to explore the social processes underlying how technologies are consumed and used" (2006: 275).

In the second section, before examining some of the factors that influence non-use, we looked at two preliminary attempts to classify non-users, but ultimately found that they were either slightly archaic (e.g. Katz & Aspden 1998) or too pejorative (Selwyn 2006: 282). Driven by the need to provide a more nuanced understanding, we followed the work of Selwyn who argued that we can better understand the relevance of a technology by first considering how frequently it is used, then subsequently probing the social processes that underlie how and why certain technologies are consumed and used (or not) (Selwyn 2006: 275).

Following this insight, a new methodology for researching users and non-users was proposed. First, a survey is distributed whose goal is not only to categorize

respondents according to their frequency of use, but also to chart the demographic circumstances of that use. Afterwards, a follow-up interview is carried out situating use or non-use in terms of the (enabling or disabling) circumstances, rationales and motivations of the individual (ibid.: 276). This methodology proved to be useful in that it enables many more factors that influence technological engagement to be identified, over and above the 'diagnoses' of existing accounts.

In the final section we proposed a preliminary taxonomy of non-use that classifies 'ways of not using' in terms of reasons or motivations for not using. The majority of existing studies are predominantly concerned with evaluating the 'engagement potential' of new designs or technologies, typically focusing on those who might be 'potential users' of the technology. While employing the term 'potential user' may evoke a sense of non-use, "it is still a form of examination in which the user plays a central role" (Satchell & Dourish 2009: 10). Instead, this conception frames non-users as 'not-yet-users', ignoring a whole range of other forms of non-use which are, and have been shown to be consequential for providing a more dynamic understanding of technological engagement.

By critiquing existing accounts of users and non-users and the assumptions they hold, this chapter sought to offer a new way to conceptualize technological (non-) engagement that more closely meets the needs of contemporary sociological accounts of technological interactions. To reiterate, the conditions of such an account will not assume 'use' to be an inherently desirable and beneficial activity for all individuals, it will have no moral connotations (no pathological, pejorative, or normal/abnormal categories), it will not be based on the perceived information

needs of society but rather in terms of understanding the information needs of the individual, and finally, users and non-users do not represent distinct categories but are part of a broad spectrum of different types of use and non-use. Having thus presented the grounds upon which a more nuanced conceptualization of users and non-users will be based, and having formulated a methodological approach for studying these forms of engagement with technology, we are now well-equipped to apply the knowledge developed in this section to a novel topic of research: undergraduate users and non-users of Facebook.

In the chapters that follow, the underlying patterns of engagement of undergraduate students will be examined using the methodology developed above. For instance, a recent study found that demographic factors such as 'gender' and 'context of use' are strongly correlated with whether a student will use Facebook or not (Hargittai 2008:285). While females were significantly more likely to use Facebook in Hargittai's sample (*ibid.*), such gender differences were found to be much less likely in my study conducted 4 years later (see Chapter 2). This suggests that the use of Facebook has become much more widespread in domains that were previously deemed to reduce the likelihood of being a Facebook user, possibly owing to Facebook's success at capturing ever-wider segments its target audience. Hence, follow-up qualitative studies with survey respondents are needed to highlight and uncover such subtleties, which may not be as apparent in the broader measures of 'use' provided by survey data alone. While the data collected in Chapter 2 indicates that women and men have roughly equal levels of Facebook use, the data from our interviews in Chapter 3 may suggest that the quality and nature of men

and women's use of Facebook remains heavily differentiated, especially in the context of the family and the household (see also Selwyn et al. 2005:20). In Chapter 3, the interplay of the household and social relationships remain especially important in shaping some of the dynamics uncovered in Chapter 2. In particular, some of the interview data provides powerful examples of the 'technical intermediation' of the university's Internet infrastructure in developing structural circumstances that help stimulate the use of Facebook. Keeping this in mind, Chapter 2 will address the following question: Who is using/not using Facebook and how is engagement patterned by demographic characteristics (such as age and gender)? This question will be explored in comparison to a similar study conducted in 2007.

## **Chapter 2: Demographic Predictors of Using Facebook Among First-Year Students at Carleton University**

### **2.1: Introduction**

Facebook has become the most popular social network sites in the world. In terms of its user base, 11% of the world's population currently uses Facebook (Facebook 2011). Recent studies have begun to identify 'predictors' of SNS usage such as a person's gender, age, socio-economic status (SES), and education (Pew 2003; boyd 2007; Livingstone & Helsper 2007). The recurring importance of these factors has even led one US study to conclude that "demography is destiny when it comes to predicting who will go online" (Lenhart et al. 2003: 41). Notwithstanding the importance of these studies, they leave us with a rather bleak image of the non-user of these sites. For example, if use is strongly patterned in terms of socio-economic status, then we are left to assume that non-users of these sites will be characterized by relatively low incomes and thus, that non-use constitutes the reproduction of existing patterns of inequality and social exclusion (Selwyn 2006: 274). Therefore, while uncovering the factors that contribute to use of SNS is important, "a significant antecedent question", argues Hargittai, "has been largely ignored: Are there systematic differences between who is and who is not a SNS user?" (2008: 276).

In Canada, the vast majority of users on Facebook are young adults between the ages of 17 and 34 (Ipsos-Reid 2007). Therefore, it is important for any study seeking to examine differences in types of use to focus on this population because people in this age group are much more 'wired' than their older counterparts and

typically have fewer issues related to accessibility and connectivity. For this very reason, one author argues, “college students in the US constitute an ideal population” to study differences in SNS use, particularly because of their high level of connectivity (Hargittai 2008: 279). In following the work of Hargittai, the present chapter seeks to implement a similar research design, methodology, and analysis to see whether similar patterns of use/non-use can be uncovered in the Canadian context. Therefore, and with all of this in mind, we seek to address the following research question: What are the differences between US first-year students (in 2007) and Canadian first-year students (in 2011) in terms of demographic ‘predictors’ of use/non-use?

## **2.2: Methods**

In order to address this question this chapter utilizes survey data collected in October 2011 as part of the author’s thesis research examining overall patterns of Facebook use/non-use by first-year students. This survey was distributed in two first-year ‘introduction to sociology’ classes composed of a diverse group of students enrolled in a wide variety of programs at Carleton University (See Appendix 1). This was to ensure that the sample would be much more representative of the entire university population. However, as can be seen in Table 1, the sample has a much higher proportion of Bachelor of Arts students (61.9%) and Business students (26.5%). Thus while the sample over-represents students in these programs, it is an otherwise fair representation of the population of study.

<b>Table 1: Current Program * User/Non-User of Facebook Crosstab</b>				
		Current Non- User of Facebook	Current User of Facebook	
Q6 CurProg	Bachelor of Arts	2.4%	59.6%	61.9%
	Bachelor of Science	.2%	2.6%	2.8%
	Bachelor of Architecture		1.2%	1.2%
	Bachelor of Commerce (Business)	.9%	25.5%	26.5%
	Bachelor of Engineering	.2%	4.5%	4.7%
	Aboriginal/Enriched Support Program		.5%	.5%
	Bachelor of Information Technology		.2%	.2%
	Undeclared		1.9%	1.9%
	Bachelor of Mathematics		.2%	.2%
<b>Total</b>		<b>3.8%</b>	<b>96.2%</b>	<b>100.0%</b>

Respondents were first asked to enter basic demographic information such as age and gender. Male is the base gender category (male = 0, female = 1). Instead of seeking information about race and ethnicity, the survey asked respondents to report their originating Canadian province or country/nation (e.g. 'Ontario', 'Venezuela'). This was done in order to measure the extent that distance from one's place of origin played a role in students' use of Facebook. Indeed, based on the survey results, distance was commonly reported as a significant reason among SNS users as an important factor underlying their choice to use Facebook instead of other means of communication (see Appendix 2). Consistent with Hargittai's methodology, parental education was operationalized as a measure of socio-economic status. Since it is often the case that students do not know their parent's income and that many may not know how to interpret 'household', parent's highest

level of schooling is a valuable measure. This ranged from no schooling (less than high school) to the graduate level (MA, PhD.). In keeping with Hargittai's methodology, respondents were asked to report whether they currently lived at home with their parents or whether they currently lived on campus.

The survey was distributed to a total of 423 students over the age of 17. Within the sample, 41.4% (n=175) were male and 58.6% (n=248) were female. The age range was between 17 and 80 years with a mean age of 19.56 (standard deviation 4.899 years). The vast majority of the sample, 79.7% (n=337) hail from Ontario, followed by 4% (n=17) from Asia and 3.1% from the Middle East (see Appendix 3). Nearly one third of respondents have parents whose highest level of education is 'Undergraduate' (30.5%), while 16.5% have parents whose highest level of education is 'High school' and 2.1% have 'none or less than high school' (See Appendix 4).

Following the rationale of Hargittai's study, the survey was administered on paper instead of online. This is because when implementing a study on the use of Internet-based services, relying on an online survey would create a bias towards people who spend more time online. The average survey completion time was approximately 20 minutes. The survey also included detailed questions that probed respondents' use of the Internet (e.g. frequency of use, hours of use per day, applications used, etc.), use of Facebook (e.g. frequency of use, hours of use per day, profile history, etc.) as well as their demographic background.

Use of the Internet has become a necessary aspect of being an undergraduate student at Carleton University. Being a student necessitates using one's

'connect.carleton.ca' user name and password in order to access everything from course content, campus-wide wireless Internet access points, or simply to use a computer in the library. Furthermore, many professors use the course management system 'WebCT' to distribute and organize class announcements, lecture notes, in class discussions/mail, and even to hand in assignments. Indeed, accessibility was not a problem for respondents in the sample: all reported being able to access the internet, whether at home, work, school or by mobile phone and 98.8% report that they currently own a computer (See Appendix 5). When asked how often they go online, the vast majority report doing so at least once a day (98.8%) (See Appendix 6), and on average, they estimate spending 5.08 hours surfing the web per day (See Appendix 7). As previously mentioned, there are no basic barriers preventing these first-year students from accessing the Internet, enabling us to hold issues of accessibility constant and focus on differences in details of use instead.

### **2.3: Results**

Who is using Facebook? To address this question, respondents were first asked if they have ever heard of the site. 99.8% (n=422) have previously heard of Facebook and only 1 respondent in the sample has previously never heard of the site (See Appendix 8). Next, they were asked to indicate their experience with the site with the following options: 'Never used it', 'Tried it once', 'Use it infrequently' and 'Currently use it'. Overall, 96.2% (n=407) of the sample are current users of Facebook, leaving 3.8% (n=16) as current non-users of Facebook (Table 2).

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Current Non-User of Facebook	16	3.8	3.8	3.8
	Current User of Facebook	407	96.2	96.2	100.0
	Total	423	100.0	100.0	

Importantly, the percentage of non-users of Facebook in the sample includes 6 respondents over the age range said to comprise the majority of Facebook users (17-34) (Ipsos-Reid 2007). When these respondents are not included, that number falls to 3.1% (n=13), which indicates that half of those over the age range most likely to be Facebook users are non-users.

There are a number of differences between the data from this survey and Hargittai's findings. First, since there is such a small number of non-users of Facebook in the sample (3.8%), there is little variance available to explain differences in terms of adoption. Nevertheless we could still see whether similar results are found in terms of Facebook users. For instance, Hargittai found that as parents' level of education increases from 'less than high school' (6%) to 'College' (37.4%) (equivalent to 'Undergraduate' in my sample), the number of Facebook users increases, but then starts to decrease if parents have graduate degrees (20.1%) (2008: 283). Similarly, in the data for Canadian students, as parents' level of education increases from 'none/less than high school' (2.1%) to 'undergraduate' (29.6%), the number of Facebook users increases, but then starts to decrease if parents have graduate degrees (21.7%) (See Table 3).

		Current Non-User of Facebook	Current User of Facebook	
Q4 ParntEd	None		2.1%	2.1%
	High School	1.4%	15.1%	16.5%
	College	.5%	27.7%	28.1%
	Undergraduate ("Bachelor"s)	.9%	29.6%	30.5%
	Graduate ("Masters, Phd")	.9%	21.7%	22.7%
Total		3.8%	96.2%	100.0%

		Current Non-User of Facebook	Current User of Facebook	
Q5 Reside	'Yes' Currently Resides w/ Parents	.9%	38.1%	39.0%
	'No' Does not Currently Reside w/ Parents	2.8%	58.2%	61.0%
Total		3.8%	96.2%	100.0%

Hargittai found that 48.2% of her sample of 1001 first year students who are current users of Facebook currently live with their parents (2008: 283). As can be seen in Table 4, 38.1% of first-year students who regularly use Facebook in the sample currently live with their parents, while 58.1% of users do not live with their parents. Here, the difference between the US and Canadian sample could be due to the fact that in general, households and post-secondary institutions are much more geographically dispersed in Canada than in the United States, prompting many students to choose to live on their own closer to campus rather than commute from more rural areas.

In terms of gender differentiated use, the results from the Canadian survey match Hargittai's results. Given that, in the sample, 41.4% are male and 58.6% are female, the fact that 56.5% of females and 39.7% of males are current users (See Appendix 9) match Hargittai's findings that there is little difference between young men and women when it comes to Facebook use (2008: 283).

#### 2.4: Explaining Differences in Facebook Use

The findings presented in Table 5 provide an indication of the factors that influence whether a student uses Facebook. The figures in the table are 'odds ratios', denoting that any number greater than 1 constitutes a higher likelihood to use Facebook, whereas a number less than 1 indicates that that characteristic lowers the likelihood of using Facebook.

**Table 5: Results of Logistic Regression Analyses Explaining Facebook use**

	Without other variables in the model	Full Model
Age	0.876***	0.882**
Gender (Male=0, Female=1)	1.106	1.168
Parent's education: High School	<b>0.311**</b>	0.314
Parent's education: College	2.823	1.494
Parent's education: Undergrad	1.330	
Parent's education: Graduate	0.876	0.622
Living with parents	0.509	0.698
Living on Campus	0.542	1.666
Internet Access location: Home	<b>0.107**</b>	
Internet Access location: School	<b>6.571*</b>	7.202*
Hours spent surfing the web (Greater than 30mins)	<b>6.478**</b>	3.278
N	423	423
Chi <sup>2</sup>		35.1854
Pseudo R <sup>2</sup>		0.077

Note: \* $p < .1$ , \*\* $p < .05$ , \*\*\* $p < .001$

The first column tests the likelihood of being a Facebook user without the other variables in the model. Although the findings from the Canadian sample indicate that females are more likely to engage in Facebook use, this relation is not apparent at a statistically significant level. When Hargittai conducted a similar analysis, gender was the only variable that was statistically significant (2008: 285). Although her findings were consistent with the literature on “women’s larger propensity to engage in person-to-person communication online than men” (ibid.; Pew Internet American Life Project 2000), this was not the case in the present-day 2012 Canadian context. This discrepancy could be due to the fact that in the time since these studies were conducted, men have closed the gap between gender-differentiated use of Facebook and thus in 2012, are more likely to be a user of Facebook than 4 years ago when Hargittai’s study was conducted. The results in Table 5 also suggest that ‘parent’s highest level of education’ is another statistically significant determinant of Facebook use. If one’s parents’ highest level of education is ‘high school’, then one is considerably less likely to be a Facebook user than if one’s parents’ have higher levels of education (college, undergraduate). However, the likelihood of being a Facebook user diminishes if parents’ highest level of education is at the graduate level.

Perhaps the most interesting factor related to Facebook use concerns the location one uses to access the Internet. A student is considerably less likely to be a user of Facebook if he/she primarily accesses the Internet from home than if he/she primarily accesses the Internet from school. This is consistent with Hargittai’s findings that “students who live at home with their parents are considerably less

likely to use SNSs than those who live with roommates or on their own” (2008: 285). Also consistent with Hargittai’s findings, ‘number of hours spent surfing the web per day’ is significantly related to being a user of Facebook. Taken at face value, since using a SNS typically requires one to spend lots of time online, it makes sense that ‘number of hours spent online’ increases the likelihood that one is a user of Facebook. In keeping with our discussion of the factors that explain the use of Facebook, we now turn to an interpretation of some of the findings above.

## **2.5: Interpretation and Discussion of Results**

A quick glance at public and media coverage reveals that for the most part, when it comes to who is using Facebook, we primarily assume that it is teenagers and young adults who comprise the largest segment of users. Data gathered in 2007 by Ipsos-Reid confirms this assumption. The study found that two-thirds of 18 to 34 year olds (65%) in Canada have a personal profile on Facebook (Ipsos-Reid 2007). Examining our data reveals that 76.83% of the sample are between the ages of 17 and 19 and 73.94% of that age group are current users of Facebook (See Appendix 10). In Hargittai’s study, age was an important determinant of whether one used Facebook or not. She found that as respondents got older, they became less likely to use Facebook (Hargittai 2008: 286). While this trend was observed in the data in my sample (See Appendix 10), the sample size was too small to reveal enough variation in the older respondents in terms of age differentiated use. Looking at Appendix 10, we can see that the difference between Facebook using respondents and non-using respondents over the age of 29 is roughly similar (1.18% vs. 1.42%

respectively). Given this flattening out of variation between older users and non-users, we can assume that Facebook use does appear to be less likely as one gets older.

When looking at this data, it is important to keep in mind that respondents in this study are all from the same campus and are taking the same class (intro to Sociology)<sup>8</sup>. That the main purpose of Facebook is to keep in contact with one's social network explains why so many students in the sample currently use Facebook. As Hargittai contends: "Forming relationships with members of one's cohort is an important part of the college experience, and one could argue that services like Facebook facilitate such interactions" (2008: 291). People on the same campus and in the same class tend to socialize, spend time with, and form acquaintances with others like them and it is reasonable to expect that students in similar situations will tend to migrate towards the same service.

Again, as with Hargittai's findings, students' living context is significantly related to Facebook adoption (2008: 291). Students in the sample who live at home with their parents are considerably less likely to use Facebook than students who live on their own (See Table 5). One reason for this difference could be due to the fact that parents sometimes impose limits on their children's Internet use. For instance, one study found that some teens may curb or altogether halt their use of Facebook because they respect or agree with their parents' moral or safety concerns over the site's privacy issues (boyd 2007: 3). Another possibility is that computers in the home are often a shared resource and having to share the computer with the

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<sup>8</sup> Although one class is Tuesday nights (n=307) and the other is Wednesday mornings (n=116), hence the total of N=423.

rest of the household will lead to less time, and fewer opportunities to use Facebook. Students who live at home typically spend less time on campus and hence have fewer opportunities to get to know their peers, and thus perhaps feel less inclined to keep in touch with them in a way that using Facebook can provide. The fact that students who live with their parents are less likely to use Facebook and less likely to know their peers is compounded by the fact that by not using a service like Facebook, they are exposed to their peers even less because not only are they interacting with them less on campus, but they are also not keeping up to date with them online.

Looking back at Table 3, we saw that parent's highest level of education was a useful predictor of being a Facebook user. The vast majority of the sample (83.45%) have parents whose highest level of education is higher than a high school diploma. Furthermore, the majority of Facebook users had parents whose highest level of education was between a college diploma and an undergraduate degree (27.66% and 29.55% respectively), which then began to decrease with parents who hold graduate degrees (21.75%). Since parent's level of education was taken to be an indicator of family SES, then families with higher levels of education will likely have more resources at their disposal, as well as more time to spend doing things online. This suggests that students with parents with college or university degrees will have more opportunities to go online, and hence more opportunities to be a Facebook user. One possible explanation for the drop in Facebook users for students with parents with graduate degrees could be that since these families likely have even more resources than college or undergraduate families (i.e. in terms of

time and money), then perhaps these families spend more of their time on other activities, and hence, relegate 'using/having Facebook' as a less than primary concern. This argument can be reinforced when we consider whether one 'currently lives with parents' along with the 'number of hours they spend surfing the web per day'. If a student is from a family of better means, then perhaps he/she is more likely to live close to home. As mentioned above, students who currently live with their parents are less likely to be a user of Facebook. Students who come from a family of better means might also be less likely to spend more time online, since they have more opportunities to engage in other activities. As we also saw above, students who spend less time online were significantly less likely to be a user of Facebook.

While we were unable to account for the demographic factors related to non-use of Facebook in this study, we did reveal some interesting parallels to the similar study conducted in the United States in 2007<sup>9</sup>. Most of the significant predictors of SNS use identified by Hargittai (2008) were found to be important predictors of Facebook use for first-year students in the 2012 Canadian context. Younger students were more likely to be users and females were more likely to use Facebook than males, though we found the difference to be much more narrow in our data. The location a student most frequently used to access the Internet was also a significant predictor of being a Facebook user. Students who currently lived on campus were 6 times more likely to be a Facebook user than students who currently lived at home with their parents (see Table 5). In section 2.1, a hint was provided as

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<sup>9</sup> Hargittai's study was conducted in February and March of 2007 at the University of Illinois, Chicago (2008: 280)

to the main purpose of this present study: that if use was strongly patterned in terms of traditional demographic measures of social inequality (for instance, SES), then are patterns associated with 'use' reproducing existing patterns of social inequality between 'users' and 'non-users' of Facebook? If this is so, then what are the individual motivations and consequences of being a 'non-user' in contemporary society?

## 2.6: Conclusion

In sum, what can be gleaned from the interaction between these variables and the operationalized measure of family SES (i.e. parent's highest level of education) is that, when it comes to being a 'user of Facebook', students who have more resources spend more time on these sites (even though it starts to decline at a certain level of SES) and have more opportunities to benefit from them. This finding chimes with the digital divide debate that those "groups most likely to be 'digitally excluded' continue to be synonymous with those who can be characterized as being already 'socially excluded' – especially in terms of low income and socio-economic status" (Selwyn 2006: 274). At the center of this debate is the notion that 'non-use' constitutes a new source of 'marginality' and exclusion from contemporary society. If, as we conjectured above that use/non-use is related to student's living context, then, as Hargittai argues:

Students who are less likely to be around campus to build relationships in the first place are the ones who are also less likely to use online services that facilitate online interaction with their peers, then it is precisely the students for whom use of such sites may make the most difference who are *missing out*. That is, if those who are already interacting less with others are also doing less of this online, then differential uses of such services may be

contributing to a two-tiered social system in which some people make and cultivate lots of networks in college, while others benefit from this part of the experience considerably less (2008: 291 emphasis added).

While this issue raises the importance of studying 'use/non-use' in terms of a new frontier of social and digital inequality, it does not consider *why* some people make use of digital technologies while others *do not*. Furthermore, the distinction between information 'rich' users and 'marginalized' non-users "both avoids precise delineation of who these are and fails to consider the range of different positions" (Webster 1995: 97). Thus, in order to provide a more complete and rigorous sociological picture of contemporary patterns of use/non-use, we must seek to learn more about the social circumstances that underlie technological disengagement. For example, are non-users, as intimated from our discussion above, really falling into deep-rooted patterns of social and economic inequality? Is their non-use due to a structural 'digital division' or is it a 'digital decision'? When we consider the latter, the limitations of the above quantitative analysis become apparent. Indeed, the assumptions we are left with at the end of our quantitative analysis fail to consider or even acknowledge individual's agency in their use/non-use of Facebook.

In order to understand the reasons for, or the motivations behind people's use/non-use of Facebook, and other technologies in general, qualitative studies will be necessary to probe student's particular rationales for using/not using them. While much information in the present chapter has been collected and expanded upon from the quantitative analysis of survey data, the data itself is limited in that we could only really explain factors that were related to the use of Facebook. This was due to the fact that there were very few non-users in the sample and little could

be said about what contextualized their non-use, except by comparison to, and in terms of those classified as users of Facebook. In order to truly understand the driving force behind why some students do not use Facebook in the midst of its overwhelmingly popular use (again 96.2% of students in the sample are current users of Facebook), future studies will have to expand beyond quantitative analysis through the use of follow-up interview data with survey respondents.

## **Chapter 3: Undergraduate Rationales and Motivations behind Using/Not Using Facebook**

### **3.1: Introduction**

The previous chapter sought to establish an empirical basis for examining the differences between users and non-users of Facebook. We saw that factors such as an individual's age, gender, and current place of residence provided significant indicators of whether one was likely to be a user or not. Of particular interest in our data was that as the education level of the individual's parents increased they became more likely to use Facebook – a trend which reversed if their parents had attained a graduate degree or higher. When the parents' highest level of education is interpreted as a relative measure of an individual's socioeconomic status, these results chime with the findings of other studies (e.g., Hargittai 2008). In his study of users and non-users of computers, Selwyn found that age and socioeconomic status were the most important of all other demographic factors in explaining whether or not an individual makes use of computers (2006: 280). Similarly, other studies have found that the level of use of the Internet for communication and information-seeking was most likely to differ in terms of age and socioeconomic status (Katz and Rice 2002; Mossberger et al. 2003; Pew Internet 2003; Rice and Katz 2003).

While data from our survey results in Chapter 2 can provide interesting indicators of the differentiated nature of technological engagement, we are limited in the conclusions we may draw from this data. For instance, we could only offer 'possible' or 'likely' explanations as to why students of parents with graduate degrees differed from students of parents with college or undergraduate degrees in

terms of Facebook use. We suggested that perhaps since families with higher levels of education will typically have higher socioeconomic status, perhaps they spend time on other activities and regard 'using Facebook' less than a primary concern. However, this is just one possibility out of many factors that mediate an individual's engagement with the technology. In order to reduce bias in our exploration of this phenomena and to illustrate the range of possible mediating factors in students' use of Facebook, more attention needs to be paid to the structural and agentic factors that coalesce with these demographic mediating factors.

In this chapter we will explore the hypothesis that non-users employ more agency in their decision to not use Facebook than users do in their decision to use the SNS. In the process of examining this hypothesis, we might also be better equipped to provide a preliminary account of the different types of use by contrasting them to the typologies present in the existing literature. For example, the present study is predicated upon the assumption that university students are inherently inclined towards using Facebook as a source for information and communication in their everyday lives. In the midst of this structural tendency to be a Facebook user, the nature of non-use of Facebook might be too easily categorized as a form of 'resistance' or 'evasion'. While this could be the case for some individuals, it could also be that other individuals' non-use is more passive, with using Facebook being subtly denied rather than being actively resisted or evaded. Hence, given the 'inherent' structural tendency to being a Facebook user among university students, non-use is more than just a simple reaction to Facebook's overwhelming popularity; non-use may also be the result of conscious and

deliberate decisions on the part of the individual. Factors such as these cannot be adequately captured by survey data alone. Thus, in looking toward uncovering the rationales and motivations of an individuals' use and non-use of Facebook, we will now turn to an examination of follow-up interview data.

### **3.2: Methods**

The results of our quantitative analysis can be extended via the use of follow-up interviews with a sub-sample of survey respondents. To this end, this work draws upon a second stage of data collection involving in-depth, semi-structured interviews carried out in November 2011, roughly one month after the surveys were distributed. Survey respondents were given the option of providing their Carleton University email address at the end of the survey, should they wish to take part in these interviews. Knowing that the timing of the interviews would take place during a somewhat inopportune time for undergraduate students (November is typically crunch-time for final assignments and studying for exams), the following stipulations were made known to all survey respondents as part of the survey instructions:

1. Providing their email address at the end of the survey was completely optional and participation in the survey and/or the interviews was in no way connected to their course mark.
2. The email address provided necessarily had to be one's connect.carleton.ca address. This was emphasized to ensure compliance with the ethical consideration that any other email address (such as one's

Gmail address) might compromise respondent anonymity (for instance, should someone else have access to their inbox).

3. Respondents were told that the interview would last approximately 45 minutes and that if selected, interviewees would be compensated ten dollars for their time and the information they provide.

From the outset of this study, it was thought that since November was such a hectic time (especially for first-year students experiencing final assignment and exam 'crunch time' for the first time) and that since 'non-users' would, in many cases, be less willing to discuss their form of (non-) engagement with Facebook one-on-one with a researcher as much as Facebook users would likely want to (perhaps a sense of pride is at work here), that this monetary incentive was necessary to entice enough non-users to participate. The interview sub-sample was selected to include a representative selection of survey respondents including age (mean age of survey respondents: 19.57; mean age of interview respondents: 23), current place of residence, and parents' highest level of education, with the main goal of ensuring that the sub-sample had an equal number of users and non-users (n=6). These interviews focused on the individual's reasons, motivations and rationales for using or not using Facebook.

It may be acknowledged that an individual's account of their level of engagement with technology is inevitably less straightforward in practice than what is brought forth in an interview. For instance, Lenhart et al. insist that asking people about their non-use of technology is "admittedly a difficult question because people often find it hard to talk about something they do not do and find it hard to

articulate the reasons they do not do it” (2003:10). However, this was not found to be the case when examining the use/non-use of Facebook. In the face of the overwhelming popularity of Facebook use by their family members, relatives, friends and peers, I have found that non-users constantly have to reaffirm their position to themselves and to others on a daily basis and thus are quite well-versed in discussing the facets of their non-use. Users too found it relatively easy to discuss their use of Facebook, perhaps since it is an activity they regularly perform, typically multiple times a day.<sup>10</sup>

Before analyzing the interview data in greater detail, we will now provide a general description of the rationales and motivations for using/not using Facebook. We begin by examining data gathered from a survey question that asked non-users of Facebook to state and rank their top three reasons for not using Facebook from a list. This list, though not exhaustive, was adapted from a previous study (Selwyn 2006) that identified the 15 most popular/common reasons for not using the Internet. Next we continue with a look at respondents’ answers to the first two interview questions that were designed to compare their motivations for using/not using the Internet and whether or not these same reasons could be found in their motivations for using/not using Facebook.

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<sup>10</sup> Results of survey data indicate that the majority of users in the sample (48.2%) report using Facebook more than 5 times a day.

**Table 6: Survey Question 22**

(NOTE: this includes 'occasional users' that were not defined as 'non-users' (n=16). This question was also optional and some non-users may have chosen not to answer it.)

**Provide your top three reasons for not using Facebook:**

<b>Reason for not using Facebook</b>	<b>Most Important</b>	<b>Somewhat Important</b>	<b>Least Important</b>	<b>Total</b>
No Interest	12	6	5	23
Privacy	9	8	3	20
Anti-Facebook	3	4	0	7
Don't Trust it*	1	6	6	13
No Need	5	8	7	20
No Skills	0	0	0	0
Too Busy	8	6	7	21
Too Lazy	0	1	1	2
Too Technical	0	0	1	1
Proxy Use**	0	1	1	2
Other***				

\* Don't trust it with my personal information or the information it gives me.

\*\* Defined as 'I don't need to use Facebook because others use it for me'.

\*\*\* Open-ended question. See Chart below.

<b>***Other Reason to not use Facebook</b>	<b>Most Important</b>	<b>Somewhat Important</b>	<b>Least Important</b>	<b>Total</b>
Facebook is boring	1	1	0	2
Facebook is blocked in China	1	0	0	1
Forgot my password	0	1	0	1
Parents don't want me to use Facebook	0	0	2	2
I think using Facebook is redundant	0	0	1	1
Facebook is full of 'Stupid Pictures'	0	0	1	1
I feel that Facebook is a 'Time-Suck'	0	0	2	2

### 3.3: Structural Mediation vs. Active Decision

Reflecting the fact that the population under study typically has very few problems related to access and connectivity with ICTs (Hargittai 2008: 279), the reasons respondents offered most often for not using Facebook dealt with issues of need, interest and motivation rather than issues of circumstance (e.g., lack of access, issues with cost etc.). As can be seen in Table 6, the most important reason given by respondents for not using Facebook is simply that they have no interest in using it. In contrast to the popular depiction of the anti-Facebook (and SNSs in general) movement as being primarily concerned with issues of privacy, respondents in the survey indicated that issues of privacy were secondary to the issue that using Facebook is simply uninteresting to them. Adding force to this finding, the third most important reason cited by non-users was that they felt that they were too busy to use Facebook. This sense that using Facebook requires one to spend a significant amount of time is crystallized in the sentiment of one respondent who stated: “Facebook is a time-suck” (See Table 6). This feeling could be due to the fact that non-users are aware of the time some of their friends devote to identity management, browsing photos and events, and perhaps even the tendency to ‘creep’<sup>11</sup> on the popular social network site and feel that by simply signing up, they are making a commitment to do these things as well. Adding further weight to the argument that this population is somewhat wavering on the issue of privacy is the fact that the issue of trust was reported to be one of the least important reasons or rationales for not using Facebook. Issues of privacy are typically non-existent when

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<sup>11</sup> ‘Creeping’ is the act of looking through the profiles and pictures of ‘friends of friends’ who you do not have in your own network.

there is a high degree of trust in the technology. Individuals experience trust as faith in the reliability of certain forms of social and technical frameworks (Giddens 1991: 181). Hence it is not that non-users in this study felt that what Facebook provides (i.e., the information that it provides; sense of security provided by the privacy policy) is not trustworthy; rather, these issues are secondary to the broader reasons of need and motivation.

When these reasons are viewed in terms of possible rationales for not using Facebook, they provide an interesting picture of the non-user of Facebook in the population under study. The issue of privacy is often depicted as the most contentious issue when it comes to considering whether to use or stop using Facebook (Cluley 2010), and both users and non-users in this study appear to be unfazed by this issue. Having been exposed to the world of the Internet throughout their lives, many are accustomed to 'signing up' for services, agreeing to 'terms of use', and providing at least some personal information – activities that have somewhat become part of the norm of using the Internet today. Downloading movies or music, using email, using online banking, using communication services like Skype, or gaming online all require one to provide some personal information as well as for the most part agree to something along the lines of "some of this information may from time-to-time be shared with third-party clients in order to...." In fact, even simply using a search engine such as Google automatically sends personal information such as one's current location (provided by the IP address) in order to tailor advertisements to one's geographic location.<sup>12</sup> This, along with the

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<sup>12</sup> This is known as 'Geotargeting.' See <http://www.google.com/privacy/ads/>

prevalent use of smartphones by this population (75% of the survey sample report currently owning a smartphone) makes them even more exposed to the open sharing of their personal information.<sup>13</sup> Thus it may be argued that today's first-year undergraduate students are more likely to be motivated to not use Facebook because they are not willing to make concessions in terms of their time rather than in terms of the management of their personal information. This is something that perhaps they recognize is already being collected regardless of actually signing up to a social network site.

Some of the other interesting reasons students reported for not using Facebook was that it was 'boring', 'redundant', or that it was 'full of stupid pictures'. One student even indicated that the reason she did not use Facebook was simply because her 'parents did not want her to use it' (See Table 6). This adds force to our contention in the previous chapter that those who still live with their parents are more likely to not use Facebook (Hargittai 2008: 285), perhaps because they respect or agree with their parents' moral or safety concerns about the site (boyd 2007: 3). Treating this single case as an exception, it appears that for the most part, what characterizes the rationale and motivation for not using Facebook among this population is that it is a carefully contemplated decision based on the perceived structural circumstances (e.g., that it requires much of one's time) of using Facebook. Stated differently, while the decision to not use is structurally mediated, it is enacted upon the grounds of how an individual values and chooses to make use

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<sup>13</sup> The majority of smartphones send diagnostic as well as personal information such as application use, location, and amount of time certain functions are used in order to better understand user's needs and requirements.

of their resources (i.e., time, personal information, etc.). Thus non-use of Facebook is less a structural choice and more of an active decision.

It is at this point that we may now invoke our hypothesis that non-users employ more agency in their decision to not use Facebook than users do in their decision to use the SNS. In other words, the motivation to use Facebook is much more structurally mediated (i.e., by its sheer popularity, the way it enables convenient communication and sharing among friends, etc.) than the motivation to not use Facebook (i.e. not simply a reaction to Facebook use, but an active decision to not use). In order to see whether this is the case, we will now examine what motivated users to use Facebook by looking at the first two interview questions: ‘What motivates you to use the Internet?’ and ‘What motivates you to use Facebook?’

### **3.4: Motivations to use Facebook**

Three ‘Facebook users’ were interviewed and each provided different reasons for what motivated them to join and use Facebook. The first two questions in the interview were designed to be similar to see whether the reasons that one uses the Internet are similar in kind to the reasons for using Facebook (see Appendix 11). Interestingly, users provided much of the same rationales for using the Internet as they did for using Facebook. Of the three users interviewed, the main reasons given can be categorized in terms of: convenience, reduction of spatio-temporal distance, and identity management. In terms of convenience, one interviewee, “Eric”, stated that he uses the Internet “Largely [because] it’s the best

way to get information quickly; it's not always that accurate but it's quick and I often find it leads me to more accurate resources." When asked about his motivations to use Facebook he goes on to say that when he was in high school, he did not need Facebook to "organize events like hanging out on the weekend." But now in university and unsettled by the distance between he and his close friends in other cities, he feels that it would be more convenient to use Facebook in order to maintain those relationships. In fact, he states that the decision to get Facebook was not entirely his: "It wasn't really for my benefit; it was partially for their benefit. So I reluctantly gave into peer pressure, one might say." This statement adds further weight to the hypothesis that individuals are motivated to use Facebook by structural circumstances – in this case, to mitigate the sense of distance from existing relationships. Another interviewee, "Johnny" held very much the same beliefs for using the Internet as Eric, but explained that the reasons he began to use Facebook was because everyone he knew already had it and he did not want to lag behind them:

(Johnny): Everyone uses Facebook; that's why I got it – I was one of the last people of my friends who got it.

(Interviewer): You said you were the last one to join, so you succumbed to the pressure?

(Johnny): Pretty much. I never thought I needed it, but once I got it, it's good to know what's going on and stuff.

(Interviewer): So before you had it, what did you think about it?

(Johnny): I thought it was a girly thing. A lot of girls used it, more than guys anyway.

Here we can see that Johnny initially believed that using Facebook was a gender-specific activity. But once the rest of his (presumably male) friends began to join, he started to believe that “everyone uses Facebook;” it was not just a “girly thing” anymore. For Johnny, ‘using Facebook’ transitioned from a gender-specific activity to something that everyone engaged in. Perhaps it was no longer ‘cool’ to be the holdout anymore and this, combined with the added peer pressure to sign-up is likely what prompted him to join. Finally, the third Facebook user interviewed, “Patrick,” was motivated to use the Internet largely out of convenience, distance, and to continue to stay informed and play a role in his community:

(Patrick): Without the advent of the Internet I wouldn’t be connected as I am today with people. I’m able to get information instantaneously, whether it involves needing a phone number, address to info about people, current issues, political, socioeconomic, I’m able to get that in a very quick time. I’m also able to connect with family and friends if there’s a crisis going on.

However, he indicates that for him, using Facebook is more than just about convenience and decreasing the distance between him and his friends and relatives; it is also about maintaining the sense of identity and connection to issues in his community despite being “thousands of miles away:”

(Patrick): [I don’t use Facebook just to say] ‘this is what I’m doing’ and seeing what they’re doing, I’m also seeing people in distress and offering moral and spiritual support...Because my relationships are with people that are not in my vicinity - 80% of people I have historical, family or friendship ties with are thousands of miles away, so in that sense, I’ve been able to reconnect with people who haven’t been in my life since high school, grade school, and people I haven’t seen in 20 years, that sense of identity and social bonds have become reconnected. That’s allowed me to feel reconnected with either memories, or people associated with those memories, and that’s really enriched my life.

For him, distance and being in a somewhat different cultural setting than one’s own community often has an alienating effect and using Facebook can help to mitigate

that effect by maintaining pre-existing identities and social bonds with friends, family and relatives from that community. In these examples, we can observe that the reasons to use Facebook provided in the interviews are structural; that is, interviewees indicated that they were motivated to use Facebook because of prior commitments (i.e., predispositions) to the convenience or closeness of existing relationships, as well as to pre-existing commitments to one's community. Again, we argue that these reasons are motivated more out of circumstance rather than a sense of need or interest.

### **3.5: Motivations to not use Facebook**

While users provided much of the same rationales for using the Internet as for using Facebook, non-users gave separate reasons for using the Internet and not using Facebook. Three non-users were interviewed and were asked the same questions as above. One interviewee, "Neil," emphasized that he was quite adept at using the Internet for homework and for communicating with friends via email and Skype. However, when asked about his motivations for not using Facebook, he emphasized that he lacked the drive and technical ability to use it:

(Neil): While I like contacting my friends, I don't like the idea that anybody can check what I'm doing. I don't like it because it's accessible to anyone who just happens to know my name. Like let's say my boss wants to find out information about me and he can just go on Facebook and find out all of my information, and I don't think it's really that good. It's kind of the main reason I guess.

(Interviewer): You said you tried it once? That means you used to have Facebook?

(Neil): Yeah. Once. I did it basically because my friends were bothering me to get it but I looked at it and couldn't figure out part of it. [I] probably could've

figured it out but I didn't really want to start in the first place. So I just told them 'yeah, I couldn't figure it out.'

Here we can see that the issues of technical ability and the lack of interest were the driving force behind his non-use of Facebook. Echoing Neil's concerns, "Mario" also expressed discontent over his previous experiences with the social network site in terms of it being a 'time-waster' and a distraction from his studies:

(Mario): I recently deactivated [my Facebook account] because it takes a lot of my time and drives me to a loophole where I am there and just searching and going through things. It's a bit of a time waster; I spend too much time on social media (like Twitter) and it drives me away from my work. When you're on Facebook, you're on it constantly and it's a distraction.

As a first-year student, Mario realized that he would need to spend more time focusing on his studies rather than continue to use Facebook to communicate with his friends: "Right now I want to get some work done and Facebook is a bit of a distraction." By contrast, "Danielle" states that she uses the Internet out of sheer boredom, but usually 'surfs' with a purpose in mind. She stresses that she has always known that she would never 'get into' Facebook due to her first experience with it:

(Danielle): ...[M]y first experiences with Facebook were negative. I knew it was something that I did not want to be around or participate in; I did not want it to be something that I'd conform to so I never got into it.

While her reasons for not using Facebook may appear to be based on the circumstances of her 'negative experience', when asked to elaborate on that experience she indicates that it is due to the fact that she fundamentally disagreed with what the majority of 'Facebook users' primarily use it for:

(Danielle): So I just had bad experiences with Facebook. The first time I was introduced to it was through an ex-partner of mine and who was looking up

things or people on Facebook that I had issues with, so that's where I formed those bad thoughts about it.

(Interviewer): You had issues with the activity of doing that?

(Danielle): Okay, like I said, you don't talk to these people on an everyday basis. You're not communicating or sharing things with them and yet they know everything about you; they know what you did last night, they know what your status is on this, they know that you're not in a relationship, they know everything you're studying in school because you post things and you like to share. It rubs me the wrong way so that goes with the privacy issue.

It is clear that for this individual, not using Facebook is motivated by the value she places on her personal information and her personal belief that 'creeping' is not an ethical or moral activity. In these three cases we can see that, although issues of circumstance (i.e., past experience, distance from family/friends, etc.) were prominent in their motivations to not use Facebook, they still actively made the decision to either delete their account or to avoid Facebook altogether, all of which was due to their personal needs (i.e., to focus more time on school, immorality of using Facebook to 'creep,' etc.).

Therefore in our accounting of the rationales and motivations for using/not using Facebook, we might be tempted to categorize some of the forms of engagement with the technology according to typologies present in the existing literature. The forms of non-use apparent in our interview data appear to conform to what Satchell and Dourish defines as 'active resistance':

Concerns over privacy and control over personal information, control over one's time, a preference for alternative modalities of interaction and engagement... educational, environmental or health consideration are all potential motivations for actively resisting technologies from social networking websites to mobile phone to video games to television (2009:11).

However, the form of some interviewees' non-use could also be thought of in terms of 'disinterest' (Satchell & Dourish 2009: 13) or 'ex-use' (Selwyn 2006: 285) – (i.e., users who became disinterested with the experience of being a user of Facebook). That many of these existing 'varieties' of non-use overlap suggests that there can be no single comprehensive taxonomy of forms of non-use. Using the data gleaned from the survey and interviews can account for different types of non-use similar to those identified in other studies (e.g., Lenhart et al. 2003; Wyatt et. al. 2002; Wyatt 2005); however, given the limited amount of data gathered, it would be difficult to use such labels without sounding too derogatory or pejorative (see Selwyn 2006: 282). Indeed, the whole activity of attempting to classify and categorize the myriad reasons and/or motivations for using or not using a technology into an organized whole – a type – is akin to placing them into a typographic 'black box'. In the contemporary traditions of STS (Science and Technology Studies) and ANT (Actor-Network Theory), we are charged with unpacking things from the proverbial black box; we are not in the business of placing things into one. When we seek to create categories of non-user, we delimit a range of 'possible interpretations of forms of engagement with a technology' before taking into account the particular circumstances of an individual's non-use. For example, if an individual is simply seen as an 'evader' of Facebook use, we may overlook the fact that he or she is still playing an integral role in the shaping and cultural interpretation of the technology (Satchell & Dourish 2009: 11). Without examining how 'the black box functions', we will only be concerned with its 'input' and 'output' (Latour 1987: 3), and we may come to have certain expectations about how the non-user (or user) will behave.

As discussed in the first chapter of this work, this has been the tradition of existing efforts in the HCI (Human-Computer Interaction) or STS literatures that have typically employed the 'diffusion of technology' or 'technological determinist' perspectives. These were shown to be a form of examination in which the user plays a central role, with respect to an expected pattern of technology adoption and diffusion. In this vein, our 'evader' of Facebook is either expected to continue to evade, or after some point – known as 'the adoption threshold' (Valente 1995) – will eventually adopt the technology. Here it can be shown that a fundamental assumption is being made about the interaction between humans and technology: that from the outset, we are all 'potential users' and eventually, the vast majority of us will gravitate towards adopting the technology after some point of 'critical mass' is reached (Markus 1987; Rogers 1995; Mahler and Rogers 1999). However, what we have discovered in the course of examining our survey and interview data is that while we are all 'potential users' of technology, we can all be considered 'potential non-users' as well – a concept antithetical to the diffusion of innovations perspective. This statement is motivated by the contention that "there is more to be said about non-users than simply that they have not yet become users" (Satchell & Dourish 2009:11). Likewise for users, there must be more that can be said about their forms of engagement with technology other than 'who the user is', 'what they want', and 'what they can be expected to do' (see Sharrock & Anderson 1994).

Instead of working toward categorizing types of user and non-user we ought to be motivated to unpack these forms of engagement from the 'black boxes' that ultimately function to condense future renderings of use/non-use into the

expectations we already have about them. One way to continue to examine and work with the notion of users and non-users is to examine what these expectations are and where they originate. The 'diffusion of innovations' perspective is primarily concerned with 'how we adopt' technologies, but also expects us to adopt in certain ways.<sup>14</sup> However, this perspective fails to consider the possibility that adopters may at some point 'un-adopt' the technology in question.

By opening up 'black boxed' conceptions of the user/non-user and identifying the expectations we (researchers, designers, society, etc.) place on them, we can begin to examine the phenomena of 'use' and 'non-use' in much greater detail. In this same spirit, another avenue for exploring the phenomenon of use could perhaps be 'how users become non-users'. For instance, Selwyn identifies a type of user he calls "the lapsed user" – an individual who previously made use of the technology but has not done so for at least twelve months (2006:285). Mario and Neil, for example, could be thought of as having lapsed from what Kingsley and Anderson (1998) refer to as 'indifferent conscripts' – users who may personally be indifferent to the technology but using it had become an expected or institutional norm. It is towards an exploration of the where the 'expectation' to use Facebook comes from, and also how this expectation has become an 'expected institutional norm.' for undergraduate university students, that we now turn.

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<sup>14</sup> i.e., pointing to an 'inevitable' model of progressive take-up of technology from 'early adopters', to the 'early majority', the 'late majority', and eventually, 'the laggards' (Rogers 1995). This model of adoption is predicated on the prevailing ethic of instrumental rationality that using technology, such as ICTs is "an inherently desirable and beneficial activity for all individuals...[and that to choose not to use technology such as ICTs is] an irrational and ultimately disadvantageous position to adopt" (Selwyn 2003:106).

### **3.6: Facebook: To Adopt or Not Adopt?**

In the beginning of this chapter we began with the notion that university students are inherently inclined to using Facebook as a tool for information and communication in their everyday lives. This assumption was predicated, in part, on the findings of the survey data, which indicated that 96.2% (n=407) of the sample of 423 undergraduate students were current users of Facebook (Table 2).

In this section we will explore the idea that 'being a Facebook user' is an expected institutional norm for entry-level university students due to the effects of positive network externalities. In order to begin to examine this notion, we must first explore the infrastructure that enables these effects.

Infrastructure is commonly thought of in terms of 'that which runs underneath actual structures' –things such as television or telephone wires, electricity, plumbing, rail and roadways. When we look at the notion more deeply however, we discover that infrastructures are not absolute; many of the examples listed above sometimes overlap and sometimes contradict each other. Infrastructures are not absolute but have a relative utility for different populations, as Star and Bowker contend: "[Infrastructure] never stands apart from the people who design, maintain and use it" (2002: 151). Furthermore, infrastructures are increasingly being designed by one group, but may not work for the rest of us. For instance, many students and faculty may be unaware of where wheelchair accessible entrances to buildings on campus are located. This also speaks to the 'black boxed' nature of infrastructures: "Its designers try to make it as invisible as possible, while leaving pointers to make it visible when it needs to be repaired" (Star and Bowker

2002: 151). With regards to the present topic under study, the infrastructure in question at Carleton University is the campus-wide wired and wireless Internet network. Access to this network is given to all students and faculty and is available to all students living in residence and the wireless network is available in the majority of the most frequented buildings on campus (CCS 2012). In order to use the notion of infrastructure to uncover the factors behind the assumption that university students are inherently inclined to use Facebook, we will highlight some of the “salient features of infrastructure”, as defined by Star and Bowker namely: embeddedness, transparency, learned as part of membership, and links with conventions of practice (2002:152).

Embeddedness is the idea that infrastructure is often sunk into and inside of other structures, social arrangements and other technologies (ibid.). That the Internet is made to be widely available at all points on campus can be thought of as being due to the fact that pedagogy at Carleton University relies heavily (especially in undergraduate classes) on the Learning Management System (LMS) WebCT.<sup>15</sup> WebCT (Web-based Course Tools) is an educational resource that enables lecture material, mail, assignments and marks to be shared, and also acts as a place to facilitate discussion between students, the instructor and teaching assistants over the Internet. In order to facilitate the use of this resource, the university must constantly expand, update and maintain its wired and wireless (and learning management) infrastructures. WebCT, like Facebook, establishes a network of contacts (TAs, instructor, classmates) and facilitates communication and

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<sup>15</sup> Incidentally, a similar tool known as ‘Moodle’ is replacing WebCT in May 2012. <http://www6.carleton.ca/ccs/all-services/websites/webct/>

information sharing. Here we can see two points upon which the wired, wireless and LMS infrastructure intersect and may indeed promote Facebook use and adoption. First, the expansion of wired and wireless access points to the university's Internet infrastructure facilitates students' use of Internet services like Facebook. Secondly, although WebCT's features are similar to those of Facebook, driven by some of the limitations of WebCT many students opt to communicate with each other on Facebook for the purposes of group work.<sup>16</sup> Both of these points demonstrate that the 'transparency' of the infrastructure promotes the use of what it enables, as Star and Bowker maintain: "Infrastructure is transparent to use, in the sense that it does not have to be reinvented each time or assembled for each task, but invisibly supports those tasks" (2002: 152). Use of an infrastructure is also something that is learned as a part of membership in a 'community of practice' (see Wenger 1998 and Wenger & Snyder 2002). From the moment they are first given their login and password credentials, new students and faculty encounter the infrastructure as a "target to be learned" and "new participants acquire a naturalized familiarity with its objects as they become members" (Star & Bowker 2002: 152). Here the practices of communicating and sharing information with peers – things that are facilitated by Internet, WebCT and Facebook infrastructures – gradually become integrated with, and practiced as part of what it means to be a student (i.e., to be a member of the 'community of practice'). In the course of

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<sup>16</sup> Over the period of acting as TA for the course in which this study took place (intro to sociology), it was observed that many students completing the reflexivity section of their final group project indicated that they chose to communicate with group members via Facebook, even though all correspondence and some components of the assignment had to be completed on WebCT, and even though communication with instructors, TAs and prospective group members began on WebCT.

learning 'what it means to be a student', the infrastructure also becomes linked with conventions of practice. "Infrastructure both shapes and is shaped by the conventions of a community of practice e.g., the ways that cycles of day-night work are affected by and affect electrical power rates and needs" (Star & Bowker 2002: 152). Evidence of this fact is provided by one non-user's account of being pressured to use Facebook to work on a group project:

(Interviewer): Why do you think they pressured you?

(Neil): A lot of reasons I guess. I heard a lot of people were arranging parties online, and I heard about a couple of parties after the fact, and the reason is because 'oh yeah, that was on Facebook.' The main reason why I was pressured is because I was working on a group project and they wanted to send me everything over Facebook, but I told them I don't have Facebook; I just used email at that point so it was there, but I didn't really use it much.

What these four 'salient features' of infrastructure have demonstrated is the way in which the infrastructure itself promotes the use of what it enables. While this observation may seem trivial in the sense that perhaps it is obvious that as the number of access points to the Internet increases, the more the 'members' of that infrastructure will use that service, it does however demonstrate how the 'infra-structural' properties of a service or technology shape and are shaped by those who use it. Of central importance in our current application of these ideas is the effect of the 'network' of users, not only on the infrastructure itself, but also on the nature of adoption of that service. We have now taken a crucial step towards answering the question that this section began with. It is only after exploring the effects infrastructure may have on adoption that we may now introduce the 'logic of network externalities'.

The concept of ‘externalities’ is primarily used in economics to denote a cost—in the case of a negative externality—or benefit—in the case of positive externality—incurred by a third party who was not part of the transaction that caused this cost or benefit (Mankiw et al. 2006). A bystander being struck by a piece of debris from a nearby car crash is an example of negative externality, whereas a bystander that stands to gain from a nearby car crash is an example of a positive externality (perhaps he meets his future wife). A positive *network* externality, by contrast, is the idea that “the value of a network to a given member increases with the size of the network” (Lievrouw 2002: 187). The ‘increased value’ does not only benefit members but also benefits non-members and not-yet-members of the given network. Consider the following example: A game is released for the iOS platform (iPods, iPhones, iPads) with limited features and sells for \$4.99. If the game has low ratings, buyers will have less incentive to buy the game, and the developer has less incentive to improve the game if no one is buying it and the ratings are low. The developer then improves the game by enabling players to compete with each other online, making the game much more valuable to initial customers (the increased size of the network increases the value of the network). The game’s ratings begin to improve and the developer implores users to “keep the 5-star ratings coming to continue to see updates in the future”. Some time later, the developer recoups the costs of developing the game and then lowers the price to \$1.99. This, coupled with the higher rating of the game and the new value of the network of players, makes the playing the game even more valuable to prospective users. This situation describes positive network externalities. The more users there are in a network, the

more services that network provides and the more those services appear to be valuable to members, prospective members and (perhaps inversely) to non-members of that network.

As we discovered in our discussion of the Internet infrastructure on the university campus, this infrastructure is designed to promote the use of the Internet (i.e., for research) and WebCT (i.e., for learning and communication) and it conventionalizes the practice of using these services. Facebook, the *de facto* tool for communicating and sharing information among this age group (Ipsos-Reid 2007) is much more 'embedded' in these practices than WebCT and maintains this position through the development of positive network externalities. Use of Facebook and the university infrastructure by one's peers increases the value of adopting those services to others not or not-yet in the network. In other words, the benefits of positive network externalities are not equally distributed across users. "Ironically," says Lievrouw, "early adopters of a technology receive less of a benefit than later adopters do; in fact to some extent they subsidized the benefits of later adopters" (2002: 187). Of particular interest here is the notion that individuals indirectly experience the unintended collective consequences of others' use. For example, in the 1950s as shopping by automobile not only encouraged the 'diaspora' into the suburbs (See Miller & Nowak 1977: 142), it also encouraged the dispersal of stores and so perhaps increased everyone's need to have an automobile. These examples of externalities demonstrate both the constraining and enabling effect of technologies. They illustrate that "a technology can be both a *tool* for an individual user and, aggregated, become a *structure* that constrains the individual" (Fischer

1992: 19 emphasis in original). An individual may choose to not have Facebook, but they must still contend with the use of Facebook in popular culture, politics, consumerism, and in institutions like the university. In fact, this process was at work behind many interviewees' rationale for adopting or not adopting Facebook:

(Johnny): Everyone uses Facebook; that's why I got it – I was one of the last people of my friends who got it.

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(Interviewer): Have there been instances that have weakened your motivation not to use Facebook?

(Neil): A couple times. My friends were into this Facebook game and kept challenging each other back and forth and it got into this intense challenge back and forth where everybody was trying to get a high score and I kind of wanted to get into that, because I felt kind of left out but at the same time I didn't really have to...it weakened a little bit but then again I thought it's just a game and the trade-off isn't that great.

Today it can be observed that in high schools and post-secondary institutions across Canada, the majority of students generally regard using Facebook as a necessity, as Johnny explains:

(Johnny): [Having Facebook] is part of being a teenager. Everyone has it so you're expected to have it I guess. It's easier to get to know people when you're just meeting people. You can go on their Facebook page and find out what they like and stuff. It's easier.

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(Interviewer): Is having Facebook tied up in institutions?

(Patrick): I could understand that thinking because there is this whole [idea of] participation in an institution like the post-secondary institution. It harkens back to the definition of success or status, if you look at society 20-30 years ago, your role in society, and your status, you should have 1.2 kids, the attached garage, and all these things that allow you to have a sense of identity and belonging and so my thought is that if you're in an institution with 15,000 people all within the same age group, and the opportunities to create more networks because everyone else is using it is essential, and crucial part of adding it to your social toolbox. So, yeah I believe that it almost becomes something you have to just check off as something normal, necessary when you're an undergraduate student.

The use of Facebook in these institutions is so popular and frequent that using it has become woven into the daily lives of students and is regarded as 'normal'. As cultural definitions of what is 'normal' change, it may become humiliating or stigmatizing for one in these institutions not to have Facebook. Facebook is not something that is required to sustain life, but being a first-year student in a social context where 96% of your peers (percentage from survey data) are current users of Facebook, to be without one may engender feelings that one is 'missing out' on something. This feeling of 'missing out' was evident in our interviews with non-users:

(Interviewer): Since you don't have Facebook, do you feel like you are 'missing out' on something?

(Danielle): Yeah, for sure. Yeah sometimes I do. I think that sometimes people are using it to...well, no. I feel like I'm missing out, yes I do. I feel like I'm missing out on a lot of things just like updates with people.

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(Mario): Sometimes, the first couple days I felt like I was missing out on everything. Because Facebook was my homepage, I could see everything that's going on and know everything that's happening around campus. But afterwards, I realized I'm not missing that much. I really clung onto Facebook because I thought it was everything, but now that I don't have it, I have more human interaction and find other ways of knowing things, like going onto 'This is Your BA' to find activities instead of going on Facebook and just reading what people are doing

The pressures to join Facebook are so great that some of our interviewees admitted to being criticized for not using, and some have even discovered that a Facebook profile was created for them behind their backs.

(Eric): Have I ever been criticized for not being a user? Yeah. I have a friend who would post a comment stating 'wiping the monthly dust off your wall or something. When I wasn't, they were like 'why don't you have Facebook? You

have to get Facebook, blah blah blah blah blah.' So there was definitely negative reinforcement there.

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(Interviewer): Have people ever threatened to make an account for you?

(Danielle): I have had an account made for me, yes... A friend in second year went out of her way to set up an account for me, with my information, and sent me some information regarding it and I completely disregarded it.

(Interviewer): Knowing that you have a profile on Facebook that wasn't created by you, that doesn't pressure you to join or to have control over how you're being presented?

(Danielle): I mean, if I were being presented in a way that made me look bad maybe I would be. I think the kind of pictures you see in profiles kind of says to what kind of person they are. If you're constantly seeing pictures of a person with alcohol in their hand and their pictures always look like they're intoxicated, that's a way to say something about that person. And I also know some people who have gone on Facebook and have been weaned out of jobs because their possible employer went on and looked at them, right? So, no if anything I know I don't have it, I'm happy with that decision and I keep seeing why I'm happy.

The data collected from our interviews has been presented in a way that demonstrates the forces at work behind the adoption (use) and/or non-adoption (non-use) of Facebook faced by first-year university students in Canada. First, using Facebook is something that, to paraphrase some of our interviewees, 'everyone in this social group does'. Afterwards, on the basis of this popularity, 'using Facebook' is woven into the cultural fabric of the university and becomes seen as 'normal'. When it is viewed as 'normal' in the institutional and cultural context of the university and is further promoted by the infrastructure that shapes (and is shaped by) its use, many are prompted to adopt Facebook in the midst of it being 'an expected structural, institutional norm'. This finding provides support to our thesis that students are structurally inclined to use Facebook. In this context, non-use

becomes something potentially stigmatizable<sup>17</sup> on the grounds that it is a deviation from the institutional and cultural 'expectation' to use Facebook. Faced with the possibility of potential stigmatization (of themselves in the case of non-users, or of their non-using friends in the case of users), some may feel an urge to create a Facebook profile in order to preemptively save themselves (or their friend) from possible deviant status. This feature of identity management describes the inherent tendency to use Facebook by the undergraduate population. We have thus uncovered the reasons behind why many individuals in this age group and in this social context begin to use Facebook and have detailed the ways in which they are structural.

However, many of the non-users interviewed saw this as an opportunity to maintain an identity separate from this structural norm. It can be argued that these non-users employed agency in their decision to not use Facebook in opposition to the reasons that undergirded users' motivations to use Facebook. Mario, an ex-user, felt that using Facebook gradually devalues his time – something he believed would be more valuable if it was spent focusing on his school work:

(Mario): When you tell yourself 'I'm going to go check Facebook for 10 seconds' and that 10 seconds turns into, what, 20 minutes and that turns into an hour, and it just drives you into a hole.

Halting his use of Facebook was a conscious reaction to the changing circumstances he faced in his transition to university education. In contrast, Danielle, who knew

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<sup>17</sup> See Goffman (1963) on the distinction between the stigmatized (discredited) and the stigmatizable (discreditable). Non-use of Facebook is 'stigmatizable' because it is not something "immediately apparent" or "known beforehand" (Goffman 1963: 42) to 'the normals' – "those who do not depart negatively from the particular expectations at issue" (1963: 5).

from early on that she would never 'get into it', was completely disinterested with what using Facebook had to offer. She felt that it was insufficient for her needs and also cited the privacy issues associated with using it:

(Danielle): I just think that more often than not people are not aware of the repercussions of using Facebook. More often than not, people don't mind that a lot of people know their business, or that a lot of people know who they're dating, who they're not, who they're in a relationship with [and] you hear about the drama or the gossip, I'm a strong believer that [it doesn't matter] if I do not have 500-800 friends that I communicate with on a daily basis. I really value my privacy and I don't want to share that with these people I have met once or twice or that want to follow me on Facebook... I just don't feel there's a need to post things on Facebook because who cares, right? ... I don't feel that need that other people feel so I personally think that my relationships are fine without it.

Echoing the disconnect between 'using Facebook' and one's personal preferences or needs, Eric simply took the stance of anti-conformity:

(Interviewer): You admitted to reluctantly joining Facebook once because your friends pressured you to join, why were you so reluctant? In other words, what motivates you to not use Facebook?

(Eric): My reason is that it's very conformist and I'm kind of stubborn in that sense. [Once I had it] I knew from the beginning I wasn't going to be into it, and the reason why is because I didn't think it was a very good way to socialize. I think that it replaces face-to-face interaction, which I really don't like.

He reinforced these sentiments by replying to criticism of his lapse in Facebook-use

(see quote above):

(Interviewer): Have you ever criticized Facebook users?

(Eric): Absolutely. I tell them one day you're going to lose your vocal chords for being a Facebook user. That was one of my favourite things to say, next to Facebook is an abomination.

Clearly an individual's specific needs – in these cases, a high value placed on time, personal information control, and anti-conformist tendencies – were at work behind

non-users' rationales for not using Facebook. These can be interpreted as instances of agency or what Giddens calls the 'reflexive monitoring of action' (1979) in response to structural circumstances.

### **3.7: Conclusion**

We have thus uncovered two forms of engagement: one underpinned by structural circumstances, the other characterized by subjectivity. We must stress, however, that these two forms are not separate or distinct from one another. Of course, it is well known that even subjectivity is embroiled in structures, as Giddens asserts: "the notions of action and structure presuppose one another" (1979: 53). Social structures can both enable and constrain; it is not a barrier to action, but is essentially involved in its production (ibid.: 70). The dualism between structure and agency has a long tradition in the social sciences and we have not been arguing that users are fundamentally less reflexive than non-users. Indeed, both 'the individual who decides to adopt Facebook simply because everyone else is' and the 'individual who avoids or un-adopts the technology because it does not meet their needs' are engaged in a reflexive monitoring of action. The difference is that, as a fundamental feature of action, an agent is one that is aware that they 'could have acted otherwise'. This 'reflexive moment of attention' involves a 'contemplated causal intervention' (ibid.: 55) on the part of the non-user, while the user's actions appear as a 'mobilization of practical and discursive consciousness' (ibid.: 80). Instances of 'practical and discursive consciousness' appear in our interview data as the reasons and motivations that underlie users' rationale(s) to join Facebook.

These were observed to be largely in terms of reasons of convenience and a reduction in spatio-temporal distance from friends and family. It is precisely these types of properties – ones that provide the ‘binding’ of time and space – that Giddens refers to as properties of structure (ibid.: 64). Therefore, our analysis has shown that university students’ reasons for adopting Facebook are often based on a mobilization of the structural properties afforded by the technology, while non-users’ rationales are more often characterized by a ‘reflexive awareness’ that these properties do not meet their needs and a subsequent ‘causal intervention’ in the processes that structurally predispose them to use Facebook. The predisposition to use Facebook by this population was shown to be due to the momentum of the site’s overwhelming popularity, the infrastructural properties of the university that stimulate the use of technology like Facebook, and the effects of positive network externalities.

Again, it must be stressed that we are not advocating a view that considers users as incapable of enacting agency. Technology and modern social life is frequently framed (by perspectives heavily indebted to Marx – e.g., Marcuse 1964; Feenberg 1991) as something that impoverishes human action, but simultaneously fosters new possibilities for human action. As Giddens comments: “[I]t is alienating, yet at the same time, human beings react against social circumstances which they find oppressive” (1991: 175). Non-users were generally found to be spurred on by such an awareness and a recognition that they could act otherwise. Users, on the other hand, did not feel as though using Facebook was something ‘alienating’ or ‘constraining’. Their voice was charged with the belief that using Facebook enables

more than it constrains and that since a great majority of people already use it, to not use it would be an act of self-alienation. This discussion has clearly shown that the experience of users is sequestered in the structures that support 'using Facebook', while non-users were much more calculative and contemplative – in short, reflexive – in their position toward Facebook use and these structures.

In this chapter, we began by pointing to the limitations that a purely statistical examination of users and non-users would inevitably encounter. While such a study provides interesting connections between using or not using a technology and the demographic factors that mediate that form of use, its explanatory power is limited because it presents results as probabilities or 'likelihood ratios'. In our case, since there were so few non-users in the sample, we were unable to make significant inferences about what influences non-engagement, except by comparison to the probability of being a user, which begs the question.<sup>18</sup> Urged on by the desire to correct these limitations, we continued with a look at follow-up interview data with survey respondents in order to delve deeper into the social circumstances and rationales that characterized university students' form of engagement with Facebook. We argued that such an account would attempt to uncover the influence of structure and agency in individuals' decisions and rationales to use/not use Facebook. We started with the premise that there is an inherent tendency among university students to use Facebook given the widespread adoption of the service by this population (96.2% of the sample are current users) and its integration into the popular consciousness of that culture. In fact, the name

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<sup>18</sup> A type of logical fallacy in which a proposition that requires proof is assumed without proof.

itself comes from a colloquial name for a book given to students at the start of the academic year at many U.S. Colleges and Universities to help students get to know each other (Blaine 2012).

In the course of interviewing users, we examined what underlined their motivations to use Facebook and found them to be largely composed of reasons that were deemed structural – i.e., convenience and a reduction in or a ‘binding’ of time and space. Incidentally, these features are typical ingredients in an instrumental rationality, something that is predominantly characteristic of social structures and institutions in modern society since the Enlightenment (Flyvbjerg 2001: 53). If users can be seen as exercising a predominantly instrumental rationality, then perhaps non-users fall more on the side of a value-rationality. The latter is typically concerned with the reflexive analysis of goals, values and interests (ibid.), something that our data has shown to be characteristic of the nature of non-users’ engagement with Facebook.

Non-users’ motivations to not use Facebook were based on a ‘reflexive monitoring’ of values, needs and interests – things they felt would be undermined if they were to use Facebook. Based on these characteristics, we were initially tempted to categorize their forms of non-use in terms of the typologies extant in previous studies (e.g., Wyatt et al. 2002; Lenhart et al. 2003; Satchell & Dourish 2009). However, we found that such attempts unnecessarily created sets of expectations of how users and non-users ought to act. Seeing these ‘expectations’ as another ground upon which we might further elucidate factors that contribute to individuals’ use/non-use of Facebook in the university setting, we continued by

looking at certain features that help generate these expectations in an institutional setting. Carleton University's Internet infrastructure was shown to help and foster Facebook use by not only increasing the accessibility of the Internet on campus, but also by promoting the use of WebCT as integral to the experience of being a student. Students have voiced displeasure<sup>19</sup> over the use of WebCT and instead, some students have opted to create groups for specific classes on Facebook in the place of WebCT, an activity that was observed first-hand acting as TA for the class in which the study took place. As one interviewee recounts, even some professors have recognized that the majority of in-class correspondence is taking place over Facebook and have created class-specific pages on Facebook in response:

I was in a popular culture class last semester and the professor created a Facebook page for announcements, discussion, file sharing, and even for the purpose of facilitating participation – something that we were given a mark for. [The professor did this] despite the fact that there was a WebCT page officially for that purpose as well. It turned out that the majority of the class, and even the professor, preferred the Facebook format, when I started to notice that online participation shifted to the Facebook page and WebCT participation started to dwindle. It was still a required component of the course to post 'weekly journal entries' on WebCT, but since the majority of discussions took place on Facebook, extra participation marks were given to being a part of the discussion on Facebook.

The interviewee was very irritated with this situation because, as a non-user, she did not have, nor intend to have Facebook, and felt that her participation mark would suffer as a result.

The effect that a 'network' of users has on the adoption of that technology was also discussed in terms of the notion of positive network externalities. The idea here was that as the network of users of a technology grows, the benefits of using

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<sup>19</sup> See <http://www.charlatan.ca/2011/03/carleton-explores-webct-alternatives/>

that technology are 'externalized' and become more valuable to future members of that network. We hinted that this inflation in value might have an opposite, and at times, stigmatizing effect on non-users of that technology. Due to the growing size and overall popularity of the network, the inflated value creates a sense of what constitutes 'normal' engagement with the technology in the specific context in which it is used. This was reflected in the sentiments of one interviewee, Patrick, who believed that using Facebook is fundamental to being an undergraduate student and an active participant in the university: "... I believe that it almost becomes something you have to just check off as something normal [and] necessary when you're an undergraduate student". The normalization of using Facebook in the university setting has a polarizing effect for both forms of engagement. Some may fear being labeled as 'abnormal' and choose to reluctantly adopt the technology, as in the case of Eric; others may find this to be further grounds upon which to avoid the technology in the spirit of anti-conformity, as in the case of Danielle. In either case, the normalization of 'using Facebook' functions to promote adoption of Facebook, prompting some to be more self-reflexive about their motivations to join or avoid, while others consider it as a matter of fact and simply choose to take the path of least resistance.

This section has demonstrated that the motivations that underlie many students' decisions to use Facebook are due to the structural circumstances that define 'what it means to be a student'. We have also shown that students exercise much more 'reflexive contemplation' in their decision to not use Facebook than the majority of their counterparts who choose to use Facebook. Reflective moments

characterized non-users much more than users because they are constantly pressured from nearly every aspect of their everyday lives (school, peers, family, friends, culture, media, etc.) to join Facebook, and yet some of them are able to maintain unconditioned by these constraining efforts.

This chapter and indeed this entire work has been working toward a recognition of the predicament the non-users often find themselves in. Looking back at the interviewee's comments above on page 82 for instance provides us with a glimpse at some of the issues that non-users, and specifically non-users of Facebook, encounter every time they confront a generalized social, cultural, political or institutional force that tends to promote and support one form of technological engagement over another. This work concludes with a look at some of the issues that non-users of technology face that could be further explored by future studies. It also explores some of the shortcomings of the current study – what went wrong, what could have been improved– as well as a general overview of the data, results and discussions that have been presented.

## Chapter 4: Discussion and Concluding Remarks

### 4.1: Summary

This work began with a critique of existing perspectives that viewed use and non-use as distinct forms of engagement with technology. These perspectives were shown to be derived from two theoretical frameworks known as technological determinism and diffusion theory. In the former view, commentators argue that technological development follows a predictable path, unhindered by cultural or political influence and that the benefits of a technology are “inherent”. The latter not only sees technological development following a predictable path, but also that ‘adoption’ gradually and inevitably follows. Diffusion theorists argue that when we statistically examine how the use of a technology expands from initial adopters through to the majority of the population at a later date, a recurring ‘s-curve’ of adoption is revealed, which in the long run indicates that the majority of the population will ‘inevitably’ adopt the innovation. In these perspectives, the phenomenon of ‘non-use’ is framed as an impediment towards an innovation’s saturation in society. “Thus,” as Selwyn argues, “to date, most academics have focused on non-use of ICT as a ‘problem’ that needs to be ‘solved’” (2003: 107). In Chapter 1, we ultimately saw that if we are to develop a broader and more objective understanding of people’s non-use of technology then we must avoid assumptions about the implied benefits of a technology. We must also avoid framing use or non-use in terms of a deficit in need of rectification. We argued that such an understanding would be characterized by the following: it will not assume ‘use’ to

be an inherently desirable and beneficial activity for all individuals; it will have no moral connotations (no pathological, pejorative, or normal/abnormal categories); it will not be based on the perceived information needs of society but rather in terms of understanding the information needs of the individual (ibid.); and finally, users and non-users do not represent distinct categories but are rather a part of a broad spectrum of different types of use and non-use.

With this in mind, we proceeded to outline the conceptual character of this new perspective on users and non-users. In order to better understand the underlying pattern of an individual's form of engagement, we argued that one must take care to note the opportunities, needs, motivations, material circumstances, and lived experiences of the particular user/non-user. In other words, such a conception is "best understood both in terms of social *structuration*<sup>20</sup> and an individual's personal circumstances" (Selwyn et al. 2005:22, emphasis added). The idea that structure and agency play a fundamental role in how an individual adopts (or not) and engages with the technology, helped us formulate our hypothesis in Chapter 3 that non-users employ more agency in their decision to not use Facebook than users do in their decision to use of Facebook.

Following this insight, a new methodology for researching users and non-users was proposed. First, a survey is distributed whose goal is not only to categorize respondents according to their frequency of use, but also to chart the demographic circumstances of that use. Afterwards, a follow-up interview is carried

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<sup>20</sup> cf. footnote 4 in Chapter 1.

out situating use or non-use in terms of the (enabling or constraining) circumstances, rationales and motivations of the individual (Selwyn 2006: 276).

Chapter 2 detailed the results of the first part of such a research methodology. Modeled after a similar study conducted in 2007 seeking to identify 'systematic differences between who is and who is not a SNS user' (Hargittai 2008: 276), a survey was distributed in October 2011 that sought to compare the 'demographic predictors' of use/non-use of Facebook identified in the two studies. To avoid presenting all of our results once again, one of the 'predictors of Facebook use' that our survey identified that is particularly worthwhile of our attention is 'student's living context'. Students in the sample who currently reside at home with their parents were considerably less likely to use Facebook than students who live on their own (See Table 4). Students who currently live on campus were 6 times more likely to be a Facebook user than students who currently live at home with their parents. One reason for this difference, we argued, could be due to the fact that computers in the home are often a shared resource (Barkardjieva 2005: 145-6) and having to share the computer with the rest of the household allows less time, and fewer opportunities for one to use Facebook. Students who live at home also typically spend less time on campus and hence have fewer opportunities to get to know their peers, and thus, may feel less inclined to keep in touch with them in a way that using Facebook encourages. We argued that the likelihood to not use Facebook by students who live at home with their parents is magnified by the fact that by not using a service like Facebook, they are exposed to their peers even less because not only are they interacting with them less on campus, but they are also

not keeping up to date with them online. However, we argued that contentions like these only skimmed the surface of the circumstances that underlie individuals' forms of engagement with technology like Facebook. In order to provide a more complete and rigorous sociological picture of contemporary patterns of use/non-use, we insisted that studies must delve further into the underlying circumstances, reasons and motivations that enable and constrain different forms of engagement with technology. It was toward this end that we continued our analysis with an examination of follow-up interviews with survey respondents with questions designed to probe the structural and agentic circumstances of their use/non-use of Facebook.

Chapter 3 began with the assumption that there is an inherent, structural tendency for first-year university students to use Facebook, given that 96.2% of the survey sample currently used Facebook. We began to explore this assumption by comparing interviewees' rationales for using the Internet to their rationales for using/not using Facebook. First, we found that users provided much the same rationales for using the Internet as for using Facebook. These rationales, we argued, were motivated out of users' predisposition towards the structural qualities (seen as benefits) that characterize the use of Facebook, namely: convenience and a reduction in spatio-temporal distance in relationships. Because many interviewees had changed geographic locations in order to attend Carleton University, the benefits of using Facebook to mitigate these structural circumstances were readily apparent to them. Non-users, on the other hand, were observed to be motivated to not use Facebook based on their own personal needs or interests. We were able to

interpret this because, being subject to the same structural circumstances that Facebook users faced, they were still able to remain firm in their position to avoid engaging with the SNS. We expanded upon our notion of the 'inherent structural tendency to use Facebook' by this population by examining whether Facebook use was an 'institutional expectation' for first-year university students. This notion was explored by looking at the effects of institutional infrastructures and positive network externalities. We demonstrated that the propensity to use Facebook was facilitated and promoted by the infrastructural features of: 'embeddedness,' 'transparency,' 'integration with membership,' and 'linking with conventions of practice.' These features functioned to help and promote an institutional sense of 'what it means to be a university student' – e.g., sharing, producing, and communicating information in a 'community' of scholars. Since the university's Internet infrastructure facilitates the already predominant (Ipsos-Reid 2007) use of Facebook by this population (who, as we saw, use it for much the same reasons as well), 'using Facebook' becomes part and parcel with 'what it means to be a student'. As one interviewee noted, since one of the main purposes of the university learning environment is to facilitate socialization with peers and colleagues, so too does using Facebook become "something you have to just check off as something normal and necessary when you're an undergraduate student" (Patrick). The consequences of 'positive network externalities' intensify the tendency to view 'being a user of Facebook' as 'a normal part of being an undergraduate student.' As more and more people become part of a network of 'Facebook users' on campus, the more services that network provides and the more those services appear to be valuable to

members, prospective members and (perhaps inversely) to non-members of that network. When 'using Facebook' is something that the majority of people in the same context 'does', it becomes integrated into undergraduate student culture as 'normal.' When it is viewed as 'normal' in the institutional and cultural context of the university and is further promoted by the infrastructure that shapes and is shaped by its use, many will be prompted to adopt Facebook in the midst of it being 'an expected structural, institutional norm,' while others may see this as a chance to exercise their own set of expectations about 'what it means to be a student.'

In either case, the normalization of 'using technology' in the university setting functions to promote adoption of Facebook, prompting some to be more self-reflexive about their motivations to join or avoid, while others consider it as a matter of fact and simply choose the path of least resistance. We ultimately found that students exercise much more 'reflexive contemplation' in their decision to not use Facebook than the majority of their counterparts who choose to use Facebook.

Above all, this study has been working towards making a case for the importance of conceptualizing both users and non-users as important 'relevant social groups' (Pinch & Bijker 1987) for any study in the traditions of SCOT (Social Construction of Technology) or STS. As we work toward uncovering some of the issues that non-users in this conceptualization face, we will first detail some of the shortcomings of the present study in order to offer better methodological considerations for future studies.

## 4.2: Room for Improvement

There are certain guidelines to be followed when writing a Master's thesis and certain oversights become apparent once the research is complete. While the methodology followed in the above research design provided an excellent overview of the nature of university students' differential engagement with Facebook, certain features would have certainly improved our analysis. As alluded to in Chapter 2, a larger sample size would have afforded a much greater proportion of non-users, which would have greatly facilitated testing various 'predictors' of their non-use of Facebook for statistical significance. A bigger sample size would have also reduced the bias of our estimators because in general, as sample sizes increase, the mean of the sampling distribution shifts closer to true value of the parameter being estimated (i.e., Central-Limit Theorem). Another issue that concerned our statistical analysis was the level of measurement used to scale our variables. In order to properly utilize the procedures of regression analysis, dependent variables must be measured as interval-ratio – meaning that there is constant distance between any two adjacent categories in the variable. In the original survey, when respondents were asked 'How many hours per day do you spend on Facebook' (Q 18a) the options they had to answer did not have constant distance between them (See Appendix 12). This prevented us from measuring the effect that other predictors had on how much time a student devoted to Facebook. This problem was fixed during the coding stage by transforming the values of this question in terms of the mean of each original category (i.e. "b. 10-14 hours" → 12.5 hours) in order to produce a workable, interval-ratio dependent variable.

While we encountered only one 'level of measurement problem,' another issue that we encountered more frequently during the course of statistical analysis was that some survey questions were not used in the final analysis. This was due to a host of factors such as: respondents misinterpreting the question (an issue with the clarity of some questions), missing cases (some respondents chose not to answer certain questions), and results that were found to be irrelevant to the task at hand (e.g., Q 11a, 18b, 18c, 18d). When wading through new waters it is often difficult to know the direction one ought to take. To mitigate this uncertainty, the researcher often includes more questions than is necessary in order to hedge their bets. The problem with the clarity of some questions is something that can be improved with successive revisions and implementations of this survey design. These should not be taken as weaknesses in our quantitative analysis, but rather as points upon which it can be ameliorated.

In hindsight, our qualitative analysis also had some flaws. More subjects could have been interviewed, which would have provided much broader perspectives on how individuals engage with Facebook in university. Due to the semi-structured nature of the interview and the fact that some of the concepts were quite advanced for first-year students, some of the questions were difficult to understand and required constant clarification. As with the survey, it was the researcher's first foray into this type of research and future iterations of the interview design would be edited to make questions more clear and easier to understand. Likewise with the survey, some interview questions were, at last thought deemed to be peripheral to the central focus of the thesis. Some interview questions attempted to address the

issue of morality surrounding Facebook use/non-use. For instance, interviewees were asked whether they felt – due to Facebook’s growing popularity and integration into mass culture as ‘normal’ – that there was a sense of ‘right’ and ‘wrong’ attached to different ways individuals engage with the technology.

#### **4.3: Future Directions and Conclusion**

While some of these issues were presented as limitations of the current work, they can actually be more usefully interpreted as points that can make the current conceptualization of user/non-users more robust. The overall scope of a Master’s thesis is more focused and though some of the data we gathered is indeed interesting, there comes a point when an author needs to remain concise. Hence, the decision was made to focus on the ‘structural and reflexive moments’ that characterized individual’s use/non-use in order to maintain within the purview of STS, instead of continuing in a direction that may have jeopardized this focus (i.e., the ‘morality’ of using/not using Facebook may have brought us into the realm of cultural/legal studies).

Some of the ‘limitations’ outlined above can also be interpreted as new directions that future studies on user/non-users could take. Though we sought to avoid taking a cultural/legal studies stance, the author does not wish to discount these as potentially viable ventures for future research. In particular, this work has provided grounds upon which the current notion of ‘the non-user’ will become an

important precedent in policy documents. For example, the recent legal action<sup>21</sup> taken by German officials against Facebook for accessing, collecting and saving the personal data of people who do not use the site. German officials say they have received a number of complaints from people who had not signed up to Facebook, but whose details friends had added to the site. They have accused Facebook of saving private data of non-members without their permission for marketing purposes (Shiels 2010). This example raises the issue that privacy policies (and even regulations at the state level) generally only concern the privacy rights of users<sup>22</sup>, sometimes at the expense of non-users. By invoking the importance of the non-user in relation to the user, the present work problematizes a wide range of policies that either implicitly or at least unknowingly favour one form of engagement over another, demonstrating that the technological determinist perspective lives on in many of these policies. Take the following as an example:

In 2010 the Secretary General of the UN, Ban Ki-moon, argued that increased access to the Internet has the effect of alleviating poverty and speeding up social and economic advancement in poorer countries. He argued that: “Experience has shown that greater access to broadband technologies has meant faster progress

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<sup>21</sup> Another group has also filed a similar complaint against the collection of non-users’ data by Facebook. See: <http://www2.macleans.ca/2011/10/19/think-youre-not-on-facebook-think-again/> and <http://europe-v-facebook.org>

<sup>22</sup> For instance, the Obama administration’s recently proposed ‘Consumer Privacy Bill of Rights’ that seeks to protect consumers of mobile gadgets and internet services from the tracking and collecting of their personal information (CBC 2012). This proposed Bill however makes no mention of the privacy concerns of the non-user or ‘non-consumer’ of these devices/services.

towards...driving trade and education [and] improving health-care”<sup>23</sup> (UN News Center 2010). Here, people with little to no access to the Internet are understood as non-users and non-use of the Internet is linked to ‘impoverished’ forms of commerce, education and healthcare. Does the non-use of a technology always and necessarily involve inequality and deprivation as the Secretary General of the UN infers? While issues of social inequality are worthwhile concerns, as Wyatt says, “it is nonetheless based on the assumption that Internet ‘haves’ will be in a better socio-economic position than Internet ‘have-nots’” (2005: 68). Making policy recommendations or positing development goals are by no means easy tasks. At times it may involve investing in infrastructure or education, and at other times it may involve standardization to improve accessibility and training to better equip citizens with the knowledge on how to use new technologies. In much of the academic literature and in many policy documents, non-use or “informed, voluntary rejection of technology” is hardly ever mentioned (ibid.). Policies that focus attention on the importance of use and users, “...implicitly accept the promises of technology and the capitalist relations of its production” (ibid.: 69). The invisibility of non-users at the policy level can be seen as a reflection of the “continued dominance of the acceptance of the virtues of technological progress” (ibid.: 68), in

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<sup>23</sup> The full quote is: “Experience has shown that greater access to broadband technologies has meant faster progress towards all the Millennium Development Goals. The Internet drives trade, commerce and even education. Telemedicine is improving health care. Earth-monitoring satellites are being used to address climate change issues. And green technologies are promoting cleaner cities” (UN News Center 2010). It is interesting to note that he juxtaposes the Internet and earth-monitoring satellites with ‘green technologies’ when it is strikingly obvious that the Internet is also linked to the problems of ‘e-waste’ and satellites to the problems of ‘space pollution.’

other words, a reflection of the continued dominance of instrumental rationality, technological determinism, and diffusion of innovations perspectives.

By offering a critique of the assumptions of these perspectives (in Chapter 1), we sought to arrive at a new understanding of the non-user using both empirical (Chapter 2) and theoretical (Chapter 3) methodologies. In the course of our discussion we found that students' rationales for not using Facebook were characterized by similar criticisms of these perspectives, while users' rationales owed a great deal to them. We saw that students predominantly chose to use Facebook because of the things that the technology enables (convenience of communication and reduction in spatio-temporal distance between others in their social network) have become structurally linked with 'what it means to be a student' via the effects of the university's Internet infrastructure and positive network externalities. Non-users on the other hand, did not as easily accept 'the promises of technology' and ready-made definitions of what it means to be a student. Instead we saw that they exercised much more agency than users: 'having Facebook' was viewed as a noncompulsory aspect of being an undergraduate student, which freed them from the constraints normally imposed on Facebook users (e.g., devoting time to using Facebook, maintaining identity and privacy, etc.). This was the central argument of our thesis: that undergraduate students' rationale for 'using Facebook' is underpinned by structure while students' rationale for 'not using Facebook' is underpinned by agency. This is perhaps the most provocative statement in this work and some may contend that it is not just non-users who exercise agency in their decision to not use Facebook. Some might argue that users too are making a

voluntary and well-informed decision to use Facebook. In contrast to this view, we have argued that we cannot discount the power of cultural and institutional expectations that mediate this decision. It is reasonable to expect that non-users' decision to not use Facebook is mediated by these structural expectations as well, however only insofar as it provides the grounds for them to construct and support alternative expectations, needs and interests for themselves. If this study were to be repeated again for instance, as a topic for a PhD dissertation, some of these broader issues can certainly be taken into consideration. Future research on non-users of Facebook would also contribute to the growing research on the cultural aspects of SNS use as well.

Future research could also outline the methodological and conceptual steps necessary for any technology/system designer to better understand the needs of all those who engage with the technology, even if some of them do so indirectly. For instance, another direction the conceptualization developed in this thesis could take us would be an exploration of the nature of 'second-hand' or proxy use of technologies like Facebook. Being in close proximity to Facebook without actually using it was a repeated experience for the non-users we interviewed. As undergraduate students, it was common for non-users to have a range of social contacts that used Facebook regularly and were sometimes called upon as vicarious sources<sup>24</sup> of information usually exclusive to Facebook (e.g., social events, relationship status, etc.). If proxy use is a reality in contemporary forms of engagement with new technologies and SNSs, then it is certainly something worthy

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<sup>24</sup> cf. with the notion of 'warm experts' in Bakardjieva 2005: 98-101

of our attention. Above all, this form of engagement not only provides proof that the existing user-non-user dichotomy is fallacious; it also provides an indication that no matter how we form our relationship with technology, in that process both we and the technology are mutually transformed.<sup>25</sup>

In sum, our discussion has shown that of the manifold way that we can engage with technology, what seemingly appears as 'non-engagement' or 'non-use also' plays an important role in the cultural appropriation and social shaping of technology.

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<sup>25</sup> cf. with footnote 4 in Chapter 1 and with our discussion of the role of structure and agency in the adoption of Facebook in Chapter 3.

## **Appendices**

**\*\*\* Note on Appendices and Tables:**

Where variable 'Duse' is mentioned, 0='current non-user of Facebook' and  
1='current user of Facebook'

**Appendix 1: List of Current Programs Respondents Enrolled in  
(Survey Question 6):**

**Bachelor of Arts:**

Journalism, Sociology, Anthropology, Criminology, Psychology, Environmental Studies, Law, Human rights, Economics, Communications, Social Work, History, English, Linguistics, Political Science, Women's Studies, Music, Greek and Roman Studies, Religion, Geography/Geomatics, Film Studies, Humanities

**Bachelor of Science:**

Biochemistry, Computer Science, Health Sciences, Forensic Science, Integrated Science, Neuroscience

**Bachelor of Mathematics:**

Mathematics

**Bachelor of Architecture:**

Architecture

**Bachelor of Commerce (Business):**

Accounting (Commerce), Marketing, International Business, Finance

**Bachelor of Engineering:**

Civil, Mechanical, Aeronautical, Computer

**Bachelor of Information Technology:**

Information Technology

**Aboriginal/Enriched Support Program:**

**Undeclared:**

## **Appendix 2: Survey Question 21 – 21a**

<b>Why do you use Facebook instead of other means of Communication?</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	25	5.9	26.6	26.6
	1.00	69	16.3	73.4	100.0
	Total	94	22.2	100.0	
Missing	System	329	77.8		
Total		423	100.0		

**1.00=** because of distance: "other forms of communication (email, phone, text) are less convenient/require more effort/more costly (time/money)", "harder/not as easy as Facebook(to contact)(e.g. "sometimes they don't check/respond to emails/text often")", "harder to know what they are up to/relationship is less accessible ".

**0.00=** "they are out of the loop/constantly have to update them/can't add them to events/they don't have a wall to write on", "too busy to find another method of communication", "I only use Facebook", "I don't know anyone who doesn't have Facebook/They only use Facebook (no other way to contact them)", "I expect my friends to have Facebook", "so many people to connect with on Facebook that you forget about non-users", "hard for me to stay in touch because I don't use Facebook much' (in the case of occasional users)".

Missing= "Not Stated", "Don't Know", "Not Applicable"

### **Appendix 3: Survey Question 3**

<b>Where are you from?</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ontario	337	79.7	79.7	79.7
	Quebec	6	1.4	1.4	81.1
	British Columbia	6	1.4	1.4	82.5
	Alberta	5	1.2	1.2	83.7
	Manitoba	2	.5	.5	84.2
	Prince Edward Island	1	.2	.2	84.4
	Newfoundland	2	.5	.5	84.9
	Nova Scotia	3	.7	.7	85.6
	New Brunswick	2	.5	.5	86.1
	Nunavut	1	.2	.2	86.3
	Europe	9	2.1	2.1	88.4
	Middle East	13	3.1	3.1	91.5
	Africa	11	2.6	2.6	94.1
	Asia	17	4.0	4.0	98.1
	United States	2	.5	.5	98.6
	South America	6	1.4	1.4	100.0
	<b>Total</b>		<b>423</b>	<b>100.0</b>	<b>100.0</b>

<b>Provinces Collapsed</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Canada	365	86.3	86.3	86.3
	Europe	9	2.1	2.1	88.4
	Middle East	13	3.1	3.1	91.5
	Africa	11	2.6	2.6	94.1
	Asia	17	4.0	4.0	98.1
	USA	2	.5	.5	98.6
	South America	6	1.4	1.4	100.0
	<b>Total</b>		<b>423</b>	<b>100.0</b>	<b>100.0</b>

### **Appendix 4: Survey Question 4**

<b>Parent or guardian's highest level of education</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
<b>Valid</b>	None**	9	2.1	2.1	2.1
	High School	70	16.5	16.5	18.7
	College	119	28.1	28.1	46.8
	Undergraduate ("e.g. Bachelor"s)	129	30.5	30.5	77.3
	Graduate ("Masters, Phd")	96	22.7	22.7	100.0
	<b>Total</b>	<b>423</b>	<b>100.0</b>	<b>100.0</b>	

**\*\*Note:** the variable 'none' was not included in the original survey and some respondents chose to simply write 'none', while others did not circle any of the 4 original answers. Students who responded to this question in this fashion were interpreted as indicating that their parents' had attained less than a high school diploma.

**Appendix 5: Survey Question 10**

<b>Do you currently own a computer?</b>					
		<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
<b>Valid</b>	<b>'Yes' Currently Owns a Computer</b>	<b>418</b>	<b>98.8</b>	<b>98.8</b>	<b>98.8</b>
	<b>'No' Does not Currently Own a Computer</b>	<b>5</b>	<b>1.2</b>	<b>1.2</b>	<b>100.0</b>
	<b>Total</b>	<b>423</b>	<b>100.0</b>	<b>100.0</b>	

### **Appendix 6: Survey Question 13**

How often do you use the Internet?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Often (10+Times/day)	209	49.4	49.4	49.4
	Fairly Often (2-9 Times/day)	189	44.7	44.7	94.1
	Frequently (once a day)	20	4.7	4.7	98.8
	Occasionally (2-6 Times/week)	4	.9	.9	99.8
	Never (None in past 12 months)	1	.2	.2	100.0
	Total	423	100.0	100.0	

### **Appendix 7: Number of hours spent surfing the web per day**

How many hours do you spend actively surfing the web per day?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.50 hours	17	4.0	4.0	4.0
	2.50 hours	227	53.7	53.7	57.7
	7.00 hours	127	30.0	30.0	87.7
	12.00 hours	31	7.3	7.3	95.0
	15.00 hours	21	5.0	5.0	100.0
	Total	423	100.0	100.0	

Statistics		
LinSurf		
N	Valid	423
	Missing	0
Mean	5.0875	

**Appendix 8: Survey Question 16**

Have you ever heard of Facebook?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	'Yes' I have heard of Facebook	422	99.8	99.8	99.8
	'No' I have never heard of Facebook	1	.2	.2	100.0
	Total	423	100.0	100.0	

### **Appendix 9: Survey Question 1 and Crosstab**

<b>Q1 Gend</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	175	41.4	41.4	41.4
	Female	248	58.6	58.6	100.0
	Total	423	100.0	100.0	

<b>Q1 Gend * Duse Crosstab</b>				
		Duse		Total
		Current Non-User of Facebook	Current User of Facebook	
Q1 Gend	Male	1.7%	39.7%	41.4%
	Female	2.1%	56.5%	58.6%
Total		3.8%	96.2%	100.0%

## **Appendix 10**

**Table of Teens ages 17-19 \* Current User/Non-User of Facebook Crosstab**

<b>Ages</b>	<b>Current User of Facebook</b>	<b>Current Non-user Of Facebook</b>	<b>Total</b>
17-19	74.94%	1.89%	76.83%
20+	21.28%	1.89%	23.17%
Total	96.22% (n=407)	3.78% (n=16)	100%

**Table of Adults ages 20-29 \* Current User/Non-User of Facebook Crosstab**

<b>Ages</b>	<b>Current User of Facebook</b>	<b>Current Non-user Of Facebook</b>	<b>Total</b>
17-19, 30+	76.36%	3.07%	79.43%
20-29	20.57%	0.71%	20.57%
Total	96.22% (n=407)	3.78% (n=16)	100%

**Table of Adults ages 30+ \* Current User/Non-User of Facebook Crosstab**

<b>Ages</b>	<b>Current User of Facebook</b>	<b>Current Non-user Of Facebook</b>	<b>Total</b>
17-29	94.80%	2.60%	97.40%
30+	1.42%	1.18%	2.60%%
Total	96.22% (n=407)	3.78% (n=16)	100%

## **Appendix 11: Semi-Structured Interview Questions**

1. *What motivates you to use the Internet?*  
(This question will identify what the respondent believes the Internet is for, their rationale for using/not using it.)
2. *What motivates you to (not) use Facebook?*  
(e.g. give further explanation on your choices for survey questions 17, 18, 19 for users, or question 22 for non-users).
3. Users: *Do you actively try to recruit your family, friends and acquaintances to join or 'add you' to their Facebook?*
4. Users: *Do you feel that using Facebook is a prerequisite for living and working in an 'information society'? (see "Received wisdom..." in Selwyn 2003:100)*  
(this question attempts to address the extent of Facebook's "domestication into the moral economies/micro-politics of institutions" see Selwyn 2003:109).
5. Non-users: *Do you still hear about things happening on Facebook even though you don't use it (like through friends/family who use it then tell you about it?). What is the frequency that you are informed (by friends or family who use Facebook) of things happening on Facebook?*
6. Non-users: *Do you see it (non-use) as a 'tactic of resistance' (See Selwyn et al. 2005:22) that enables you to assert some control over your life (in the same way that for some people there is a symbolic value to using Facebook)? Do you feel like you have a greater sense of having more meaningful relationships/connections (e.g. symbolic value) with people (than users do)?*  
(This question attempts to identify how they rationalize the existence of Facebook in their everyday lives.)
7. Non-Users: *Do you respect or agree with your parent's moral or safety concerns about using Facebook? Do you feel that "Facebook is just for the cool kids" or perhaps rather "you are too cool for Facebook"?*
8. Users: *Do you think you have an advantage over non-users? If so, what is the advantage? IF NOT, Do you envy non-users? (e.g. is it advantageous that they are not bound up in the "drama of Facebook")*
9. Non-users: *Do you think you are 'missing out' on something? Are/is Facebook use/skills becoming a necessity? Do you feel there is (surmounting) pressure to join?*

10. Users: Could you elaborate on what you use it for (e.g. expand on survey question 18)? **OR** What is so “addictive” (as some people say) about Facebook? Where does the expectation “to have Facebook” come from?
11. Non-users: Do you think that if you had Facebook, it would become a normal part of your life? What is so “addictive” (as some people say) about Facebook? Where does the expectation “to have Facebook” come from?
- (This question will serve to measure the extent that Facebook IS NOT a meaningful or relevant extension of offline activities in the case of non-users.)
12. Non-users only: Why haven't you tried it/used it/started using it again? (Anxious/scared/mistrust/frustrating?) Why don't you like it?
13. In your own words, what does it mean to ‘be a Facebook user’? (e.g. public's perception, is there a stigma?, does it make you ‘cooler’ than non-users (and vice versa) Is it “the most normal thing someone can do”?)
14. Users: Do people criticize you for being a Facebook user?
15. Non-users: Are you criticized for being a non-user? **If yes** Why do you think these people pressure you? Have people threatened you to set up a proxy account for you?
16. Non-users only: Which category of ‘non-user’; would you say you fit into? How might you categorize it otherwise?

**1. Lapsed users/“Indifferent Conscripts?” (← the latter is when one finds oneself in an institutional situation where the use of technology is an expected institutional norm (Selwyn 2006:285)).**

Lagging adoption: “not-yet-user” of Facebook

Postponers: Hold off (being a user) for as long as they can

Acquiescers: Go along with what friends or those closest to them do.

E.g. Goes along with the social or institutional norm

Disinterest/ ‘Ex-users’: User who became disinterested with the experience of being a user (also: ‘potential non-users’).

**2. Absolute Non-users:**

Active resistance/Ideological refusal: Facebook insufficient for their needs.

Resistant to changes in familiar ways of socializing and existing/being in society. Happy with existing forms of social relations and practices.

Disenchantment: (a reason to actively resist): feel that technologically-mediated interaction is wholly inauthentic, nostalgic invocation of ‘the way things were’.

Early articulators: Know from early on that they won't be a user

**3. Apparent (Minimal) users:**

Displacement/ 'Second-hand Users (Surrogate/Proxy): Primary use of Facebook has become a service for non-users. They can gather (persuade someone to provide) exclusive Facebook info or hear about events through friends that are regular users.

## **Appendix 12: Survey Questions**

1. Gender: *Male, Female*
2. Age: \_\_\_\_\_
3. *Where are you from?:*
  - a. *Canada (which province):* \_\_\_\_\_
  - b. *Out of Canada (which country/nation):* \_\_\_\_\_
4. *Parent or Guardian's Highest level of education:*
  - a. *High school,*
  - b. *College,*
  - c. *Undergraduate (e.g. Bachelor's),*
  - d. *Graduate (e.g. Master's or PhD),*
5. *Do you currently live with your parents?: Yes, No*
6. *What is your current program/major? (e.g. 'economics'):* \_\_\_\_\_
7. *Number of years in your current program:* \_\_\_\_\_
8. *Do you live on campus?: Yes, No*
9. *How much time do you spend on campus in an average week, including class-time, studying and any extra-curricular activities?:*

Full-time students:

  - a. *20+ Hours,*
  - b. *15-19 hours,*
  - c. *6-14 hours,*
  - d. *1-5 hours*

Part-time students:

  - a. *15+ hours,*
  - b. *9-14 hours,*
  - c. *3-8 hours,*
  - d. *1-2 hours*
10. *Primary source of Internet access: Home, Work, School, Mobile*
11. *Do you currently own a computer? (desktop, laptop, or tablet): Yes, No*
  - 11a. *If 'Yes', Please list number of each:*

Desktop: \_\_\_\_\_

Laptop: \_\_\_\_\_
  - Tablet (e.g. iPad): \_\_\_\_\_
12. *Do you currently own a smartphone? (Blackberry, Android, iPhone, etc.):*  
Yes, No

13. How often do you use the Internet?:
- Very often (10+ times a day),
  - Fairly often (2-9 times a day),
  - Frequently (once a day),
  - Occasionally (2-6 times a week),
  - Very Infrequently/Rarely (once a month),
  - Never (none in past 12 months).
14. How many hours per day do you spend actively surfing or using the Internet?:
- 15+ hours,
  - 10-14 hours,
  - 5-9 hours,
  - 1-4 hours,
  - Less than an hour
15. What do you mostly use the Internet for? **Circle up to three:**
- Social Networking,
  - Reading the News,
  - Reading Articles (e.g. Wikipedia)/blogs,
  - Listening to Music or Watching Videos,
  - Downloading/Uploading,
  - Publishing Content,
  - Buying/Selling,
  - Gaming
16. Have you ever heard of Facebook?: Yes, No
17. What is your level of experience with Facebook? (i.e. as a registered member):
- Never used it (**skip to question 22**),
  - Tried it once (**skip to question 22**),
  - Use it infrequently (**answer all questions**),
  - Currently use it (**answer all questions but not question 22**).
18. How often do you use Facebook?:
- Very Rarely (once a year or less),
  - Rarely (once a month),
  - Occasionally (2-6 times a week),
  - Frequently (once a day),
  - Very Often (5+ times a day).
- 18a. How many hours per day do you spend on Facebook?:
- 15+ hours,
  - 10-14 hours,
  - 5-9 hours,
  - 1-4 hours,
  - less than an hour
- 18b. Which device do you use most often to access Facebook?:
- Desktop
  - Laptop
  - Mobile Device (e.g. smartphone or tablet)

18c. How long have you had an active profile on Facebook? (e.g. 'since March 2008'): \_\_\_\_\_

18d. Did you have Facebook in High school?: Yes, No

19. Please rank in order of importance the reasons why you decided to join Facebook (Place a number beside each choice):

- a. School-life,
- b. Home-life,
- c. Work-life,
- d. Stay up to date with social events,
- e. Because everyone has Facebook.

20. Do you actively try to stay in touch with friends who don't have Facebook?: Yes, No

20a. If 'Yes', how?: a. email, b. phone, c. text-message, d. conventional mail, e. other

21. Do you find it difficult to maintain relationships with friends/family who do not have Facebook?: Yes, No

21a. If 'Yes' briefly explain why: \_\_\_\_\_

22. What are your **top three** reasons for not using Facebook (1=highest, 3=lowest): (Place a number beside your top three choices):

- a. No interest/Motivation
- b. Privacy Issues
- c. Anti-Facebook
- d. Don't trust it (with my personal info and/or the info it gives me)
- e. No Need
- f. No skills/inability to use Facebook
- g. Too busy/life full outside of Facebook
- h. Not clever enough/too lazy
- i. Frightened of Facebook/too technical
- j. Family/Friends use it for me
- k. Other: \_\_\_\_\_

23. Would you be willing to take part in a follow-up interview?: Yes, No  
(If yes please provide your **connect.carleton.ca** email address in the space below.)

**Email:** \_\_\_\_\_

**If you have any questions or concerns please do not hesitate to contact me:**

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## References

- Akrich, M. (1992). "The De-Description of Technical Objects". In Weibe Bijker & John Law (eds.) Shaping Technology Building Society. Cambridge, MA.: MIT Press: 205-224.
- Bakardjieva, M. (2001). *Internet Society: The Internet in Everyday Life*. Thousand Oaks, CA.: Sage Publications.
- Blaine, C. (2012). "Facebook IPO filing due next week." Accessed January 28, 2012 from: <http://money.msn.com/top-stocks/post.aspx?post=ecb75fb7-c26c-4b10-92ff-19d2a7abbc26&nwpt=1>
- boyd, d. (2007). "Why Youth (Heart) Social Network Sites: The Role of Networked Publics in Teenage Social Life." in David Buckingham (ed.) MacArthur Foundation Series on Digital Learning – Youth, Identity, and Digital Media Volume. Cambridge, MA.: MIT Press: 1-26
- Bucy, E. (2000). "Social Access to the Internet". The International Journal of Press/Politics 5 (1): 50-61
- CBC. (2012). "U.S. proposes online privacy bill of rights". Accessed February 27, 2012 from: <http://www.cbc.ca/news/technology/story/2012/02/23/technology-online-privacy-bill-of-rights.html>
- CCS (Computing and Communication Services). (2012). "Wireless Coverage." accessed January 28, 2012 from: <http://www6.carleton.ca/ccs/all-services/wireless-and-internet/wireless-services/wireless-coverage/>
- Cluley, G. (2010). "60% of Facebook users consider quitting over privacy". Accessed February 6, 2012 from: <http://nakedsecurity.sophos.com/2010/05/19/60-facebook-users-quitting-privacy/>
- Colby, D. (2001). "Conceptualizing The "Digital Divide": Closing The "Gap" By Creating A Postmodern Network That Distributes The Productive Power Of Speech". Communication Law and Policy 6 (1): 123-173
- Collins, H.M. (1983). "An Empirical Relativist Programme in the Sociology of Scientific Knowledge". in Cetina, Karin-Knorr and Mulkay, M. (eds). Science Observed: Perspectives on the Social Study of Science. London, UK.: Sage: 85-115
- Facebook. (2011). *Statistics*. Accessed December 7, 2011 from: [www.facebook.com/press/info.php?statistics](http://www.facebook.com/press/info.php?statistics)

- Feenberg, A. (1991). *The Critical Theory of Technology*. New York, NY.: Oxford University Press
- Fischer, C. (1992). *America Calling: A Social History of the Telephone to 1940*. Berkeley, CA, University of California Press.
- Flyvbjerg, B. (2001). *Making Social Science Matter: Why Social Inquiry Fails and how it can Succeed Again*. Cambridge, UK.: Cambridge University Press
- Giddens, A. (1979) *Central Problems in Social Theory: Action Structure and Contradiction in Social Action*. London, UK.: Macmillan
- Goffman, E. (1963). *Stigma*. Englewood Cliffs, NJ.: Prentice-Hall Inc.
- Giddens, A. (1991). *Modernity and Self-Identity: Self and Society in the Late Modern Age*. Cambridge, UK, Polity Press.
- Hargittai, E. (2008). *Whose space? Differences among users and non-users of social network sites*. Journal of Computer Mediated Information **13**: 276-297.
- Houston, A. L., Y. Yao, C. Okoli, E. Watson. (2005). "Will Remote Electronic Voting Systems Increase Participation?". Electronic Government, an International Journal **2** (3): Accessed August 4, 2011 from: <http://chitu.okoli.org/images/stories/bios/pro/research/other/Houstonetal2005latestversion.pdf>
- Howland, J. S. (1998). "The 'Digital Divide': Are we becoming a world of technological 'haves' and 'have-nots?'" , The Electronic Library **16** (5): 287-289.
- Ipsos-Reid. (2007). "Nearly Four-In-Ten Canadian Adults (37%) Have Visited Online Social Networks And Three-In-Ten (29%) Have A Personal Profile On One." Accessed January 29, 2012 from: <http://www.ipsos-na.com/news-polls/pressrelease.aspx?id=3664>
- Katz, J., & P. Aspden. (1998). "Internet Drop-outs in the USA: The Invisible Group". Telecommunications Policy **22**(4-5): 327-339.
- Katz, J. & R. Rice (2002). *Social Consequences of Internet use: Access, Involvement and Interaction*. Cambridge, MA.: MIT Press
- Kingsley, P. & T. Anderson. (1998). "Facing life without the Internet." Internet Research: Electronic Networking Applications and Policy **8**(4): 303-312.
- Latour, B. (1987). *Science in Action: How to Follow Scientists and Engineers through Society*. Cambridge, MA, Harvard University Press.

Latour, B. (1992). "Where are the missing masses? A sociology of a few mundane artefacts". In Wiebe Bijker and John Law (eds.), Shaping Technology/Building Society: Studies in Sociotechnical Change. Cambridge, MA.: MIT Press: 225-258

Lenhart, A., Horrigan, J., Rainie, L., Allen, K., Boyce, A., Madden, M., O'Grady, E., (2003). *The Ever-Shifting Internet Population: A new look at Internet access and the digital divide*. Washington D.C.: Pew Research Center. Accessed December 7, 2011 from:  
[http://pewinternet.org/~media//Files/Reports/2003/PIP\\_Shifting\\_Net\\_Pop\\_Report.pdf](http://pewinternet.org/~media//Files/Reports/2003/PIP_Shifting_Net_Pop_Report.pdf)

Lievrouw, L. A. (2002). "New Media Design and Development: Diffusion of Innovations v Social Shaping of Technology." In Leah Lievrouw & Sonia Livingstone (eds.) Handbook of New Media. Thousand Oaks, CA.: Sage Publications.

Livingstone, S., & E. Helsper (2007). "Gradations in digital inclusion: Children, young people, and the digital divide." Pg. 671-696 in New Media and Society (9).

Madon, S. (2000). "The Internet and socio-economic development: exploring the interaction." Information Technology & People 13 (2): 85-101.

Mahler, A., & E. Rogers. (1999). "The Diffusion of interactive communication innovations and the critical mass: the adoption of telecommunication services by German Banks." Telecommunications Policy 23(10-11): 719-740.

Maibach, M. C. (1999). *The Internet: The Great Equalizer*. Accessed August 4, 2011 from: [http://www.cipe.org/publications/ert/e32/e32\\_3.pdf](http://www.cipe.org/publications/ert/e32/e32_3.pdf)

Mankiw, N.G., R. Kneebone, K. McKenzie, & N. Rowe. (2006). "Chapter 10: Externalities." In Principles of Microeconomics, 3<sup>rd</sup> Canadian Edition. Toronto, ON.: Thomson Nelson

Marcuse, H. (1964). *One-Dimensional Man*. Boston, MA.: Beacon Press

Markus, M. L. (1987). "Towards a 'critical mass' theory of interactive media: universal access, interdependence and diffusion." Communication Research 14: 491-511.

Miller, D. & M. Nowak. (1977). *The Fifties: The Way we Really Were*. Garden City, NY.: Doubleday.

Mossberger, K., C. Tolbert & M. Stansbury (2003). *Virtual Inequality: Beyond the Digital Divide*. Washington, DC.: Georgetown University Press

Pew Internet and American Life Project. (2000). *Tracking online life: How women use the Internet to cultivate relationships with family and friends*. Washington D.C.: Pew Research Center

Pew Internet and American Life Project. (2003). *The Ever-Shifting Internet Population*. Accessed August 4, 2011 from:  
[http://www.pewinternet.org/~media//Files/Reports/2003/PIP\\_Shifting\\_Net\\_Pop\\_Report.pdf.pdf](http://www.pewinternet.org/~media//Files/Reports/2003/PIP_Shifting_Net_Pop_Report.pdf.pdf)

Pinch, T. & W.E. Bijker (1987). "The Social Construction of Facts and Artifacts: or how the Sociology of Science and the Sociology of Technology might Benefit each other". In *The Social Construction of Technological Systems*. Edited by W.E. Bijker et al. MIT Press

Rice, R. & J. Katz (2003). "Comparing Internet and Mobile Phone Usage: Digital Divides of Usage, Adoption and Dropouts," *Telecommunications Policy* 27(8-9): 597-623

Rogers, E. M. (1995). *Diffusion of Innovations*. [4<sup>th</sup> edition]. New York, NY.: The Free Press

Satchell, C., & P. Dourish (2009). *Beyond the User: Use and Non-use in HCI*. Proceedings of the 21st annual conference of the Australian computer-human interaction special interest group: Design: Open 24/7, ACM Digital Library.

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., S. Gorard, & J. Furlong (2005). "Whose Internet is it anyway? ." *European Journal of Communication* 20(1): 5-26.

Selwyn, N. (2006). "Digital Division or Digital Decision? A study of non-users and low-users of computers". *Poetics* 34(4-5): 273-292.

Sharrock, W. & R. Anderson. (1994). "The User as a Scenic Feature of the Design Space." *Design Studies* 15(1): 5-18.

Sheenan, K. B. (2002). "Towards a Typology of Internet Users and Online Privacy Concerns". in *The Information Society* 18 (1): 21-32

Shiels, M. (2010). "Germany officials launch legal action against Facebook". Accessed February 6, 2012 from:  
<http://news.bbc.co.uk/2/hi/technology/8798906.stm>

Star, S. L. & G. C. Bowker. (2002). "How to Infrastructure." In Leah Lievrouw & Sonia Livingstone (eds.) Handbook of New Media. Thousand Oaks, CA.: Sage Publications.

UN News Center (2010). *UN Chief Emphasizes the use of Broadband Internet to Accelerate Development*. Accessed February 6, 2012 from:  
<http://www.un.org/apps/news/story.asp?NewsID=36332&Cr=telecom&Cr1>

Valente, T. (1995). *Network Models of the Diffusion of Innovations*. Cresskill, NJ.: Hampton Press.

Watson-Verran, H. & D. Turnbull. (1995). "Science and Other Indigenous Knowledge Systems". in Sheila Jasanoff, Gerald E. Markle, James C. Petersen and Trevor Pinch (eds), Handbook of Science and Technology Studies. Thousand Oaks, CA: Sage Publications: 115-139

Webster, F. (1995). *Theories of the Information Society*. New York, NY.: Routledge

Wenger, E. (1998). *Communities of Practice: Learning, Meaning, and Identity*. London, UK.: Cambridge University Press

Wenger, E & W. Snyder. (2002). "Communities of Practice: The Organizational Frontier." Harvard Business Review 78(1): 139-145

Wilson, A. (1987) "The information rich and the information poor". ASLIB Proceedings 39 (1): 1-6

Woolgar, S. (1991) "Configuring the user: the case of usability trials". in John Law (ed), A sociology of monsters: essays on power, technology, and domination. London, UK.: Routledge: 57-99

Wyatt, S., G. Thomas, & T. Terranova. (2003). "They Came, they surfed, They went back to the beach: Conceptualizing use and non-use of the Internet". In Steven Woolgar (ed.) Virtual Society?. Oxford, UK.: Oxford University Press: 23-40.

Wyatt, S. (2005). "Non-Users Also Matter: The Construction of Users and Non-Users of The Internet". in Nelly Oudshoorn and Trevor Pinch (eds), How users matter: the co-construction of users and technologies. Cambridge, MA.: MIT Press: 67-79.