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Young People's Adoption and Consumption of a Cultural Commodity – iPhone

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Hui Jiang

ABSTRACT

Inspired by the astonishing and unprecedented speed and scale of uptakes of the Apple iPhone, this study seeks to unravel the behavioural aspects surrounding young people's adoption and consumption of the device. Because the iPhone is associated with specific social practices characteristic of a specific 'way of life' of a distinct set of people, it is considered here as a 'cultural commodity' significant of the society of present times. In light of this, the present study addresses the reasons for adoption from both functional and symbolic perspectives, and explores some of the social practices, such as Domestication and Apparatgeist, surrounding its consumption. The use of the iPhone is seen as a 'compromise' with other daily activities of the participants, rather than a 'priority'. A comparison with traditional smartphones and other referent technologies has shown that, while the iPhone is seen as a superior substitute for traditional smartphones due to the unique experience that it provides, it is less so in terms of the substitution potentials of the device in relation to more established forms of personal technologies, such as the computer and digital cameras. While such findings are not necessarily generalisable to wider populations, the diary-interview method has allowed for an explorative 'probe' into users' communication behaviours and habits. This study is a small contribution to the understanding of human adoption and consumption behaviours of new technologies and the wider cultural and social aspects surrounding personal communication devices.

INTRODUCTION

'Apple consolidated its gains, marked its territory of 30M users+25K apps+800M downloads and built a very deep and wide moat around it. A moat so formidable that there's not a single smartphone player capable of overcoming it.'

(Kontra, 2009)

Mobile communication technology has been intersecting with long-standing patterns of human behavior. The increasing variety of mobile communication devices 'are affecting people's lives dramatically, directly, and on a vast scale... no technology has ever been adopted so quickly by so many people' (Goggin, 2009:3). Mobile communication has become an essential part of modern life, a necessity, a need, and a way of life. Mobile media, in particular, is the emerging digital interconnected media form that centers on cellular mobile networks and intersects with other technologies such as the Internet and portable music and video devices (ibid).

Amongst the proliferating mobile phone designs that have evolved around the mobile media concept, none of the handset manufacturers have been able to duplicate the user experience of the iPhone – 'you could say the Nokia N95, the HTC Touch, and other smartphones have similar capabilities, but they don't match the slickness, pinching, and other capabilities of the Apple device' (Farber, 2008). The present study seeks to place the currently highly popular iPhone into the field of mobile communication studies. In particular, the iPhone is seen as both 'the source of and the channels for the circulation of meanings within the culture', just as the Sony Walkman was for du Gay et al (1997).

These new forms of mobile media and the associated cultural meanings are such recent and dynamic phenomena that their influences on society and human behavior are yet to be seen. However, what remains for sure is the fact that the new smartphones, and especially the iPhone, have given users unprecedented connectivity, 'enormously magnifying their social reach and power to alter distant physical circumstances' (Katz, 2006:10). For example, 'empowering and liberating', 'escaping the confines of a particular ordering' in terms of the blurring of the boundaries between public and private space, 'domestication of the external world', constitute some of the 'important small 'p' political effects' that are associated with mobile communication technologies (Chambers; in du Gay et al, 1997:106).

It is in light of this that the present study seeks to explore the cultural and symbolic behaviors surrounding young people's Adoption and Consumption of the iPhone – the latest cultural commodity of our times. The word 'culture' is used here, in du Gay's terms, to refer to the particular and distinctive 'way of life' of a specific social group or period. In this particular context, it refers to, not the national or ethnic culture such as western or Asian, but in the sense of *sub-cultures* and *micro-cultures* of particular groups of people and lifestyles. It is common for such sub-cultural groupings to actively make use of commodities to symbolize their identity and belongingness, making a particular statement about the user's sense of identity in relationship to society and its values (Mackay, 1997).

An earlier version of this project was carried out as a preliminary pilot study, which findings have helped to narrow the research objectives to better suit the scale and depth of this study. The direction of the research changed from the initial more ambitious aim to cover cultural and symbolic behaviors of the diverse iPhone user population, to the focus on the segment that concerns young people. The type of culture that this study focuses on is that of young adult iPhone users, studying or living in London. Young adults are commonly associated with innovation and adoption behavior, especially for mobile entertainment products (Rubicon, 2008), and can, hence, provide insightful information to the purposes of this study. Moreover, in addition to methodological conveniences, the particular location is also especially representative of the iPhone's identity – modern, metropolitan and connected – which make it the perfect location to carry out communication behavior studies in relation to iPhone usage.

LITERATURE REVIEW

In 1964, McLuhan pointed out in his most influential work – Understanding Media: The Extensions of Man – that it is the characteristics of the medium itself which has an affect over society, regardless of the content being delivered or the way it is delivered. This controversial assertion attracted critiques from, for example, Williams (1974), and Marvin (1988), accusing him of technological determinism and suggesting instead ways in which technologies have rearranged themselves around social imperatives. 'Media are not fixed objects...The history of media is never more or less than the history of their uses, which always lead us...to the social practices and conflicts they illuminate' (Marvin, 1988:8). Nonetheless, the fact that media and technology have social implications remains indisputable, whether such consequences are direct results of technological progress, or that they are produced by more complex rules governing the cultural, historical and societal spheres in their interaction with technology.

The following is one of the many ways of structuring some of the key intertwined themes in the literature. The decision to choose social practices, as the starting point is due to the direction that this study takes. Following is a discussion of the concept of mobility, and what this entails for modern mobile phones, leading on to the uses and gratification perspective, a focus on young people, and how mobile phones constitute an example of cultural commodities, and how the iPhone can be seen as a modern cultural artefact.

Technology, Meaning and Social Practices

Paul du Gay et al (1997) is widely recognised for his contribution to the cultural studies literature, proposing frameworks that embrace the cultural dimensions of technology. He links the production, consumption, and even the mere existence of technological goods and their uses to broader and subtler cultural meanings and social practices. This rather antitechnological deterministic perspective emphasises the human dimensions of technological behaviours, in which a machine 'could not speak or explain itself. It did not possess, and could not express, its own intrinsic meaning' (du Gay et al, 1997:14). Hence, meaning is not simply found in 'things'; instead, it is constructed through social and cultural practices. He illustrates this with the example of the Sony Walkman: 'simply moving the hand to press the 'start' button is not, in itself, culturally distinctive... We are able to make sense of what the other person is doing by de-coding the meaning behind the action, by locating it within some interpretative framework which we and the person doing it share' (ibid:18).

Similar perspectives have also been embraced by major scholars such as Katz, whose work centres on mobile communication studies (Katz, 2008), mobile phone behaviours (see for example, Katz and Aakhus, 2002; Katz and Sugiyama, 2006), and mobile communication and social life (Katz, 2006). His well-known *Apparatgeist Theory* bases on 'the way that people use mobile technologies as tools in their daily life... and the relationship among technology, body and social role' (Katz and Aakhus, 2002:305). The device is viewed as an 'Apparatus' with a 'Geist', German word for soul. Technologies are, first of all, seen as a physical extension of the body, enabling the user to overcome space and time constraints, and secondly, with a 'spirit which influences... initial and subsequent significance accorded to (the devices) by users, non-users and anti-users' (ibid). In this respect, technological devices such as the mobile phone are attributed with, not only the functional qualities of a communication tool, but also other symbolic aspects of the communication behaviour, such as, for example, meaning, emotions, identity, etc.

Likewise, the *Domestication Framework* developed by Silverstone and Haddon (1996) seeks to describe the process with which new technologies are adopted by society and incorporated into the routines of everyday life. As a strand of the *Social Shaping of Technologies* literature, this approach takes into consideration both the practicalities surrounding the everyday uses of devices and the related symbolic aspects embedded in social settings and human communication behaviours. From this perspective, again, it is not the medium in itself that determines how society behaves, but the users, who actively negotiate and 'domesticate' the role, adoption and employment of technological innovations, in a dynamic process within the everydayness of their social practices. Technologies are viewed more in the light of 'social arrangements rendered material' (Woolgar, 2005:29).

Technology, Modernity and Mobility

Despite the word 'Domestication' might allude to the domestic home environment, Domestication studies have also been widely applied to portable technologies such as the mobile phone (Haddon, 2003; Shekar, 2009). Mobile phones are peculiar technologies in the sense that, unlike a home computer or a landline telephone, they are part of the required equipment of the modern 'nomad', whether they are used for work (Hanson, 2007; Kozlowski & Ilgen, 2006) or for play (Koskinen, 2007; Katz & Acord, 2008). The high values placed upon mobility, individuality, personality etc have long been successfully incorporated into the design of the devices by leading manufacturers. The extreme portability and relative affordability of mobile phones have made the mobile telephony 'the fastest diffusing communication technology in human history' (Castells, 2008).

The concept of *Mobile Privatization* (Williams, 1983) can be a useful lens through which to observe the modern phenomenon. Williams uses the metaphor of the road traffic to describe a condition in which social order is maintained under traffic control and regulatory bodies, however what is experienced inside the car, 'in the conditioned atmosphere and internal music, is movement, choice of direction, the pursuit of self-determined private purpose' (ibid:188). Similarly, in a lecture room where silence and respect dominate as social norms, individual students are seen fiddling around with their mobile phones, carrying on their private purposes. Mobile phone technologies have enabled unprecedented mobility of such privacies, irrespective of location constraints, blurring the boundaries between the public and the private spheres.

This phenomenon, however, cannot be considered entirely new, given that its roots can be traced to Meyrowitz's conception of *No Sense of Place* (Meyrowitz, 1985), whereby television was seen as invading households and private lives, bringing what is meant to be outside – the public – into domestic homes. Nevertheless, what is definitely new is the exponential scale, speed and pervasiveness with which the mobile telephony phenomenon has disseminated into modern everyday life, and shifted the private/public boundaries.

As mobile phones enable users to 'emancipate from local settings' (Geser, 2005a:9), the concept of *Space* can no longer be physically defined. This brings about the question whether new personal technologies such as the mobile phone 'insulate' users from the local public, 'in their own radical individuality' (du Gay et al, 1997:24), or 'connect individuals to any wider social collectivity' (ibid). It is the ongoing debate between personal technologies being antisocial (Ling, 2004; Geser, 2005b) or pro-social (Katz et al, 2008). On one hand, the use of personal technologies in public environments came to be associated with concerns over increasing individualization and atomization of the population and erosion of public life, by 'switching off from the world as and when they liked, and this was likely to make them more introverted, self-serving and less tolerant of other people and of society more generally' (du Gay et al, 1997:89; Wallin, 1986; Noll, 1987; Bloom, 1989).

To contrast this, evidence from the Walkman Case Study shows that instead of tuning out of the world, listeners are also 'tuning in a soundtrack for the scenery around' (New Yorker, 1989:19). In this sense, listening privately in public does not deny possibilities of being socially connected. Similarly, using personal technologies such as mobile phones may serve to set one apart, but it also simultaneously reaffirms individual contact to certain common

values (music, fashion, metropolitan life etc) – while one's use may be private, the codes that inform that use are inherently social (du Gay et al, 1997).

On another level, a more recent view of mobility, 'refers not to the movement of individuals... or accessing media from mobile devices, but to something else which so far has not been theoretically acknowledged: the movement of media objects between people, devices, and the web' (Manovich 2008:227). Sharing is the concept that emerges naturally from this. Content in the form of texts are shared through SMS (Short Messaging Service), more complex forms of media objects are shared through MMS (Multimedia Messaging Service), and more recently, online content can also be easily shared through Mobile Internet and SNS (Social Networking Sites). More importantly, however, what is really being shared in the modern mobile telephony phenomenon is the social, the abstract, the symbolic and the immaterial: experiences, feelings, thoughts, moods, lifestyles, identities etc. The modern conceptualization of mobility should not be limited to the physical mobility of people, or functional mobility of the technology in itself, but incorporating other less obvious types of gratifications that arise from its use.

Uses and Gratification of Mobile Phones

Traditional studies of communication technologies have focus on how technological innovations have helped solving people's problems and needs – see for example studies of how the *Uses and Gratification Theory* (Blumer & Katz, 1974) have been applied to the landline telephone (Dimmick et al, 1994) and to the mobile phone (Leung and Wei, 2000). More recently, the symbolic and affective gratifications of mobile phone usage have also been explored by authors such as Vincent (2004). In particular, studies have noted the close emotional attachment that many people give to their mobiles, 'many of them felt emotional about the information contained on and delivered via their mobile phone and had come to depend on the device (Vincent, 2005:118), by for example saving old messages or keeping an old phone. Moreover, mobile phones are not only seen as communication tools, but as an *icon* for the users, 'an articulation of who they are... reflecting the users life at that point in time... about me, my mobile and my identity' (ibid:120).

Furthermore, recent studies have also drawn closer attention to the existence of important gender differences surrounding the use of mobile phones. For example, whilst the public space is being transformed by individualized, portable information and communication technology, the use of mobiles for entertainment within one's own world (i.e. music) is more typical of males, while being in communication with others was more typical of females

(Chen & Lever, 2006). Moreover, males consider mobiles primarily as 'an empowering technology that mainly increases the independence *from*, not the connectedness *with* the social environment' (Geser, 2006:3), the latter being more typical of female mobile communication behaviour. Hence, 'boys are also more prone to explore the ever expanding new functional features of current mobile phones... while girls use a narrower scope of (exclusively communicational) functions' (ibid). These findings have reinforced some rather conventional gender patterns: male users tend to stress functional and instrumental uses of the mobile phone, whereas females tend to use it more as a medium for personal and emotional exchange (Lorente, 2002).

On one level, such findings also support studies which draw closer attention to how users themselves have domesticated the cell phone around their own particular needs — 'people seem enormously clever in being able to redirect technology designed for one reason into another direction to serve their inner needs and desires... in a process of reconfiguration and recalibration' (Katz, 2006:12). In particular, Katz distinguishes between *traditional* users of mobile devices and users who use mobile phones for its impact on those in their immediate surroundings rather than distant others. For instance, people recall pretending to be on the phone in order to avoid talking to someone that they do not wish to have a conversation with, or to escape from embarrassing or dangerous situations signalling strangers to keep away (Katz, 2006; Geser, 2005a). Obviously such *non-uses* of the mobile phones are far from what they have originally been designed for; nevertheless, they constitute the body of broader issues surrounding mobile communication behavior and the social shaping of mobile telephony.

Mobile Phones and Young People

Whilst cell phone usage has been adapted to fit around one's particular needs and environments, on another level, the inherent characteristics of mobiles have also been argued to be potentially responsible for changes in social life (Fortunati, 2002) and even threatening societal structures (Geser, 2005b). The mobile phone is seen as a 'medium of disorganization' in the sense that it overrides established forms of hierarchies, authorities and channels of communication, enabling individuals to connect directly with others (ibid). The SMS function in particular in seen as a 'a channel for low-threshold, non-intrusive contact initiation... which provides the opportunity of delaying the reception and the answering to a more appropriate time... making it easier for the new technology to enter all kinds of institutions despite dense social controls' (Geser, 2005a:18). This is especially the case in highly regulated institutions such as schools, where the adoption of mobile phones by young people has

signified that they are no longer submissive of teachers' authority, at least in the sense that cell phones provide an escape from the physical confinements of the classroom, to a wider outside connectivity.

In a case study of mobile phone usage on an Indian College Campus where cell phones are banned, Shekar (2009) explores the creative ways in which student have domesticated and integrated the devices as seamlessly as possible into their everyday lives in order to circumvent institutional rules. Such efforts also 'revealed the importance that students placed on the cell phone as a device as they risked confiscation of the device every time they used it' (ibid:33).

Being available to friends and staying in touch are important aspects of young people's social lives, giving rise to the *Hyper-Coordination* phenomenon (Ling & Yttri, 2002) typical of this age group. Moreover, the use of slang, abbreviations, smiles and homophones is also characteristic of young people's SMS behavior, defining the boundaries of this social group and providing a sense of identity, belonging, coolness and solidarity, particularly vis-à-vis older generations (ibid). Thus, despite concerns and tensions surrounding young people's use of mobile technology (Matsuda, 2005; Ito, 2005), possessing a mobile phone is also symbolic of one's autonomy, independence and freedom (Pasquier, 2001).

Other studies surrounding the symbolic aspects of mobile phone behaviour have found that 'the technological function of a new tool is not necessarily the most important consideration when people decide whether to adopt it' (Katz and Sugiyama, 2006: 322). For example, studies have reported that the perception of mobile phone as *fashion* is especially high among young people (Green, 2003), including adolescents as well as young adults (Katz & Sugiyama, 2005). *Wearable* personal communication technologies such as the cell phone are considered an integral part of the body, 'often like a second skin to its user... an important part of one's sense and presentation of self... a reflection of their sense of style' (Campbell, 2008:153). In addition, similar to the way clothing sets boundaries between social groups, brand selection (Lobet-Maris, 2003) and physical appearance of the mobile phone (Campbell, 2008) represents network membership and sends messages about the *self*. 'The design, the visual look and tactile feel of a product are crucial means of communicating with consumers, not simply about function or basic use but simultaneously about identity and meaning' (du Gay et al, 1997:65).

Mobile Phones as Cultural Commodities

A recurring theme in the literature is the one of *identity* and how mobile phone behaviour is linked to the expression of the self and to the connections to the wider sociality. From this perspective, technological goods such as the cell phone seem to possess properties of Crane's *cultural goods*, i.e. goods with 'meanings embodied in how they circulate and into the nature of the public spaces in which they diffuse' (Crane, 2000:248). This perspective of *meaning* recalls the encoding/decoding model proposed by Hall (1980), whereby the process of *encoding* produces messages or semiotics, which are in turn *decoded* by the audience or receivers. Such process demands mutual understanding between the encoder and the decoder, or the message would not get across. Similarly, for the symbolic aspects of mobile phone behaviour to be decoded, there ought to be a mutual appreciation of what the message entails.

Du Gay et al (1997) spoke of connotations and semantic networks; 'over time some meanings acquire an obvious, descriptive status because they are widely accepted, and so come to be taken as *literal*' (ibid:15). For example, the word 'Walkman' quite instinctively refers to the small, portable tape-machine even thou there is nothing in the word itself that suggests such connections – the 'so-called literal meanings are in themselves only metaphors which have acquired a broad consensual basis of agreement in a culture' (ibid). Pictures from our times, which are representative of such concepts, can be found in consumer products such as Cocacola, the dark brown fizzy drink, or Hoover, the vacuum cleaner, just to mention a few. Similarly, 'it is possible to embed the cell phone so deeply into everyday life that it almost disappears as a technology, not only in everyday language, but quite literally as well' (Shekar, 2009). Therefore, technologies such as the mobile phone have a 'set of practices associated with it – a way of using them, a set of knowledge, or know-how, what is sometimes called a social technology' (du Gay et al, 1997:23).

iPhone as a Cultural Artefact

Whilst traditional studies on mobile phone behaviour have been deliberately limited to the basic calling and texting functions of the technology, little has been advanced in the field of a combined device, which incorporates mobile phone, Internet, television, music player, digital camera etc. Such devices have been given the name of Smartphones, and of the many manufacturers, Apple Inc. has emerged from the market with its iPhone as 'easily the most publicized new mobile device in recent memory' (Rubicon Consulting, 2008). Most *Publicized* meaning, here, more than just most *advertised*, but also most *fashionable* and most *talked about*. This is shown, for example, in statistical reports, which claim that

smartphones make up 56% of the UK mobile phone market, of which an astonishing 80% is taken up by Apple's iPhone (Admob, 2010). The iPhone is an interesting object of study, not only because of its popularity, but also because it can be considered as a new *cultural artefact* and the latest medium of modern culture, just as the Sony Walkman was for Paul du Gay et al (1997:2).

In the same way as the Walkman, the iPhone is cultural because of its connection with a distinct set of social practices (e.g. listening to music while travelling in the underground), which are specific to our culture or way of life. It is cultural because it is associated with certain kinds of people (young people, technologically savvy people etc), with certain places (the city, the train, the open air, the lecture room etc). It is cultural because it has been given or acquired a social profile or identity, because it frequently appears in and is represented within our visual languages and media of communication. Indeed, the image of the iPhone – sleek, high-tech, functional, design – has become a sort of metaphor, which stands for or represents a distinctively late-modern, technological culture or way of life – a *cultural artefact*.

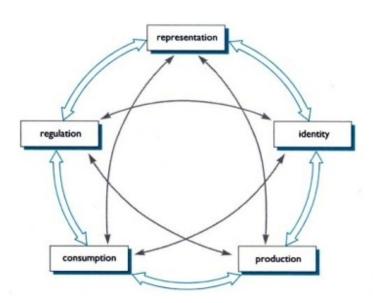
In addition, the cultural meaning of the iPhone is also constructed via specific positioning strategies, whereby the 'similarity to' and the 'difference from' other referent technologies, in a way, constitutes the mobile phone's identity. Primarily, the iPhone is a mobile phone with Internet capabilities, but so are a large number of other smartphones, and some PDAs. iPhone is 'similar to' and 'different from' them in ways in which, like coordinates on a map, allow us to 'separate it from the others in our mind's eye, to give it its own, specific, cultural meaning... to map its position precisely in relation to, as well as to differentiate it from, the other objects in the same field or set' (du Gay et al, 1997:17). The iPhone is a standardized product, however its enormous potential for personalising applications suited to one's own needs and preferences has appealed to many, leading to the multitude of differentiated uses and behaviours. How iPhone users perceive and map their mobile phone in relation to other referent technologies will be one of the main focuses of this study.

CONCEPTUAL FRAMEWORK

It would only make sense to study mobile phone behavior in relation to particular cultural settings, given the encoding/decoding argument mentioned earlier. This is because each culture thinks of and uses the same device in different ways. One of the key strengths of the Domestication framework is that it accounts for how technology is never static or neutral. 'A cell phone may potentially be an 'Anytime Anywhere' device, but it is rarely so in reality, and is never used the same way by two different communities, families or individuals' (Shekar, 2009:12).

Circuit of Culture

The *Circuit of Culture* model proposed by du Gay et al (1997) seeks to describe the process with which any technological commodity is embedded within a certain culture. He argues that, in any cultural study, one must analyse 'how a cultural artefact is represented, what social identities are associated with it, how it is produced and consumed, and what mechanisms regulate its distribution and use' (ibid: 3). The component of the circuit that is especially concerned with user behaviour is *Consumption*.



Circuit of Culture (du Gay et al (1997:3)

Consumption

The iPhone behaviour during consumption is easily the focal point of the present study. Whereas marketers and manufacturers might have relatively more power and control over the *Representation*, *Identity* and *Production* phases, 'a focus on *Consumption* helps us to understand that meanings are not simply sent by producers and received by consumers but are always made in usage' (ibid: 85). Hence, a focus on Consumption is especially relevant to the purposes of this study, because of the emphasis that is placed upon the user, social shaping and the importance that everyday life plays in mobile phone behaviour. Therefore, in this context, a focus on Consumption can also be taken as a focus on *Users*. Moreover, a focus on Consumption *alone*, rather than the circuit in its entirety, is better suited to the scale and depth of this particular study.

More specifically, this research seeks to shed some light upon the social practices surrounding the uses and non-uses, movement of media objects, gender differences, and emancipation and empowerment potentials related to iPhone usage and consumption. Moreover, consumption is said to express tastes and lifestyles as constituting one's *habitus* (Bourdieu, 1984). Therefore, by investigating the iPhone user behavior in the context of consumption, domestication and Apparatgeist Theory, it is also possible to explore the symbolic aspects surrounding mobile communication behavior.

Adoption

Despite the all-embracing qualities of the Circuit of Culture model, it is evident from the pilot study and the literature that, as the technological artefact passes from the Production phase to the Consumption phase, users exhibit another important behaviour: *Adoption*. For the purposes of this study, in particular, it is not sufficient to look at user communication behaviours at the Consumption stage alone, for it excludes important social and cultural behaviours that are exhibited during the Adoption of the iPhone. Hence, it is proposed here that Adoption is a useful conceptualisation, which can help bridging the gap between Production and Consumption in the Circuit of Culture.

One of the most widely used frameworks in Adoption studies – *Rogers' Five Factors* (Rogers, 2003) – emphasises that for an innovation to successfully diffuse into the market, it must possess *Relative Advantage* compared to the product it seeks to replace and it must also be *Compatible* to existing cultural and social norms. Added to these, the lower the *Complexity* of the product, the more the users can *Try* it out, and the more they can *Observe* others using the product, the higher the chances of the innovation being successfully adopted.

Rogers' Five Factors is a particularly useful conceptual tool for the purposes of this study, for it provides a framework in which some of the issues raised in the literature can be neatly addressed and investigated in relation to young people's *reasons for adoption* of the iPhone. In particular, it is highly relevant to explore the *Relative Advantages*, real or perceived, that iPhone users consider their mobile phone to possess in comparison to traditional smartphones, and the positioning of the iPhone in relation to referent technologies. The role of the mobile phone as fashion statement and the role of style in brand selection will also be investigated in the Adoption context.

RESEARCH OBJECTIVES

The main research question of this study is: *How do young people Adopt and Consume the iPhone?* In particular, this project seeks to address:

- What are the Reasons for Adoption?
 - o Functional Reasons
 - o Symbolic Reasons
- Consumptionally, how is the iPhone used and Domesticated around the individual's daily life?
 - Spatially
 - Temporally
 - Symbolically
 - Gender Differences
- Consumptionally, what is significantly different between iPhone and traditional smartphones?
 - o Functional Benefits
 - Symbolic Aspects
- Consumptionally, what is significantly different between iPhone and other Referent Technologies?
- Does the iPhone represent a potential for replacement of other technologies?

METHODOLOGY

Diary-Interview Method

Whilst quantitative methods can provide more statistically useful data, qualitative methods can often shed light upon non-measurable factors influencing motivation and behaviours. 'Quantifying the overall trends of cell phone usage would give us little insight into the conscious decisions that precede these styles of adoption, and the social, cultural, institutional and economic factors that lead to such decisions' (Shekar, 2009:15).

As already mentioned, an earlier research was carried out as a preliminary pilot study, involving an exploratory interview with three participants. The semi-structured interview method allowed for the exploration, a 'probe', into the respondents' life-world (Berger, 1998), which produced important findings that have informed the direction of the present study. However, the results from the interview have also helped, in a way, to reveal insufficiencies of the method applied to this particular study. For example, although participants were very talkative and willing to share their experiences, they could only do it vaguely, and could only recall behaviors and decisions that were routinely and consciously performed. Uses that were considered of minor importance or relevance, such as using the screen as a mirror, would be automatically excluded. For the purposes of this study, however, it is important for the participants to be able to speak about different kinds of behaviors, which sometimes can develop unnoticed.

The diary-interview method requires the participants to keep a record or log of their activities for a certain period of time, which is then followed by an in-depth interview regarding their own entries. This combined method has been widely applied to mobile phone studies (see for example, Shekar, 2009; Ito, 2005), and can provide 'a reliable alternative to the traditional interview method for events that are difficult to recall accurately or that are easily forgotten' (Corti, 1993). The additional advantage of this method is that, as well as providing a concrete record of iPhone usage, it also forces the participants to reflect upon their own iPhone consumption behaviour. The diary method allowed participants to monitor their own habits, which has made it a lot easier for them to recall interesting events and discuss their experiences. This proved to be very useful as the follow-up interviews, which served to elaborate relevant points and unfold participants' experiences and backgrounds, turned out to be much more productive than during the pilot study.

The participants were asked to complete a set of pre-formatted diaries over a three-day period, during which they were required to record every single instant they engaged with their iPhone. A semi-structured interview, lasting around one hour, was also scheduled to take place as soon as possible after the three days. Individual interviews were chosen over group interviews as to provide ample possibilities for the participants to share their experiences in sufficient depth. In addition, given that the use of mobile phones is predominantly an individual activity, it made sense to interview participants one-at-a-time.

At he beginning of each interview, all participants were supplied with a consent form – the same one as in the pilot study – and they were asked to read it carefully and to sign it. All interviews were carried out in London and all of them were tape-recorded for transcribing purposes.

Selection and Recruitment

The selection decision was informed by background secondary research on iPhone user demographics, supported by the findings of the pilot study. Reports (Rubicon, 2008) have shown that 50% of iPhone users are under 30 years old, which is 'significantly younger than the age distribution for many smartphones and PDA products... which underscores the appeal of iPhone to young people' (ibid:29). Moreover, 16% of iPhone users are students, with the remaining most likely to be employed in professional occupations, with higher than average income level, no children and are usually technologically sophisticated and more likely to be early adopters of new technologies (ibid:31-32).

Thus, for the purposes of this study, young people have been defined as young adults under 30s who have reached legal adulthood (thus the 18-30 age group); they have already left home, whether in higher education or in professional employment, thus enjoying freedom and autonomy, but not necessarily financial independency. They live in London, for reasons already addressed, and are current owners and users of the iPhone. One of the research objectives is to compare iPhone experiences to traditional smartphones and to other referent technologies; therefore the researched subjects must be technologically savvy, thus possessing a number of other personal technologies. By narrowing the researched subjects with these specific criteria has helped to produce as much comprehensive information as possible regarding the typical iPhone user behaviour within this age group.

Snowball Sampling is a non-probability sampling method that is usually employed when the researched subjects are hidden or difficult to approach (Heckathorn, 1997). Although the subjects of this study are not *hidden* as such, they do belong to a very specific sub-group of the iPhone population, and the most cost and time-efficient way of reaching such a sample

was indeed Snowballing. Five such personal acquaintances from a number of London universities and investment banks introduced to ten more students and professionals, giving a total of fifteen participants with the desired characteristics. Because gender differences are also part of the research objectives, the sample included similar numbers of males and females. The fifteen participants have been summarized in the following table in the time-order in which they have completed the diaries:

Participant	Gender	Age	Occupation	Diary Dates	Interview Date
Α	F	24	Investment Banker	21.22.23 July	24 July
В	М	26	Recently Graduated	21.22.23 July	24 July
С	М	24	PR	21.22.23 July	24 July
D	F	25	MSc	22.23.24 July	25 July
E	М	24	Investment Banker	22.23.24 July	25 July
F	М	22	Recently Graduated	22.23.24 July	26 July
G	М	24	Investment Banker	22.23.24 July	25 July
Н	F	23	MSc	23.24.25 July	26 July
I	М	21	BSc	23.24.25 July	26 July
J	F	22	MSc	24.25.26 July	27 July
K	F	25	Reporter	24.25.26 July	28 July
L	М	27	PhD	24.25.26 July	28 July
M	F	24	Junior Market Analyst	25.26.27 July	28 July
N	М	25	MSc	26.27.28 July	29 July
0	F	26	Junior Auditor	28.29.30 July	30 July

Interview Guide

The interview guide was designed to reflect the research objectives, including both the main research question and the sub-questions. The structure of the questions was intended to cover both the Adoption and the Consumption/Domestication contexts of the iPhone behavior. A comparison with traditional smartphones was intended to help highlight any differences in user experiences, whether functionally or symbolically, and a comparison with referent technologies, such as MP3 players, digital cameras and computers, would provide some indication as to whether users perceive the iPhone to be a substitute for them or not, indicating any potentials for replacement.

Just like in the pilot study, the use of everyday language helped to produce more natural conversations, and care was taken as to avoid any 'leading' expressions. For example, participants were *not* directly asked about the differences between their iPhone experiences and traditional smartphones, but were asked to compare them instead. If they did perceive any significant differences, they would use the word 'different' themselves.

The interview guide was used to make sure that the key themes and research objectives were addressed during the interviews, however, some freedom to the structure allowed for the possibility to divert and focus on potential unplanned information emerging from the discussion (Georgiou, 2010). Moreover, given that a significant proportion of the interview was devoted to exploring iPhone's Domestication through the discussion of each participant's diary, the design of supplementary questions beyond the guide were needed according to their own specific logs. Each participant's diary was considered individually.

Method for Analysis

Interviews were individually transcribed and analysed through Thematic Coding (Aronson, 1994). As suggested by Gaskell (Bauer and Gaskell, 2000), a matrix was used, in conjunction with traditional methods of analysis of highlighting and color-coding, to organize the themes and ideas that emerged from the interviews according to the research objectives. This was done by either quoting the participants directly, or by paraphrasing their arguments. The final column of the matrix was left blank for notes and preliminary interpretation of each corresponding theme. Likewise, the last row of the matrix was also left blank to allow for any interesting concepts that went beyond the purposes of this study.

Although the diaries have provided very detailed information regarding iPhone usage, they have served mainly as supplements to the interviews. The diaries' usefulness would be greatly reduced if analyzed on their own: the entries provide very limited information, if none, regarding the broader context in which the iPhone usage takes place. It is only when participants are asked, in the interviews, to explain and expand on their usage patterns that the wider themes emerged.

FINDINGS AND INTERPRETATION

Once all transcripts were thematically coded and organized into the Matrix, recurring themes were identified and behavioral aspects specific to the iPhone have also emerged. This section summarizes and analyzes predominantly the findings from the interviews, which, as explained earlier, have also incorporated relevant information from the diaries.

Adoption

For the purposes of this study, the Adoption stage considers users' perception, attitude and opinion of the iPhone *prior to*, or *at the time*, of buying. Rogers' Five Factors of Diffusion of Innovations (Rogers, 2003) have been used to analyze and summarize the findings from the interviews.

Relative Advantage

The iPhone was generally perceived to be *superior* to the mobile phones that the participants were considering replacing, which is the reason why they later proceeded with the purchase decision. This superiority has been described mainly on two fronts: functionally and symbolically.

Functional Advantages:

- The iPhone was perceived to be faster, more powerful, and hence more useful than the mobile phones that participants were considering replacing.
- Full size screen was considered to be more useful, brighter, easier to look into, and the iPhone's touch screen was considered to be an innovation compared to the traditional keypad, or to other touch screens
 - E: 'I hated my Samsung touch screen, I felt like I was still pressing all the time rather than touching.'
- Participants felt they were purchasing more than just a phone
 - C: 'The endless list of applications makes the iPhone more than just a phone:
 it's like having everything that you can think of in one device.'

- Fast and reliable Internet access was one of the features participants were eager to acquire
 - F: 'With my old Nokia, it took me ages to open any website. I was with Vodafone, I guess it's nothing wrong with the provider, it's just that you have to have good enough specifications on your phone in order to fully utilize the speed that your provider offers you.'
 - A: 'I wanted and needed Internet on my phone, and the best phone for Internet was the iPhone, so I went for it.'

Symbolic Advantages:

Although participants' Adoption decision was mainly due to functional reasons, symbolic aspects were also considered important.

- The outlook of the iPhone was perceived to be 'cool', 'sleek', 'pretty', 'trendy', 'modern' and superior to the other phones
 - D: 'After the iPhone came out, I thought all the other phones were so ugly in comparison. I couldn't see myself holding anything else.'
 - o J: 'The iPhone was much more wearable than my old phone.'
 - A: 'It's nothing like all the other phones on the market. You know it's an iPhone from miles away.'

Important differences between early adopters and late adopters were also noticed. Generally the early adopters had a *catalytic* effect on subsequent adopters. Referrals, advices, word of mouth and brand loyalty were seen as symbolic attributes to technologies.

- Friends were given as reasons for Adoption
 - H: 'My best friends, they all got it, and they were talking about it all the time.
 I felt a bit left out. Plus, they all pushed me to get one as well, so in the end I got it too.'
 - I: 'A friend of mine was sort of a technology geek and he spoke very highly of his iPhone, so I thought if I got one, it would put me on the very high-end as well'

Compatibility

The iPhone was perceived to be compatible with existing habits.

- The iPhone was perceived to be a device that could potentially 'replace' many of the technologies that participants were using on a regular basis, thus freeing out 'bag space'
 - H: 'I would be able to leave my iPod at home, and just use the iPhone, which works exactly the same way... I would have one thing less to carry around in my bag everyday.'
 - J: 'When I go out for dinner, I usually take a small handbag, and most of the times my digital camera would not fit in. I thought the iPhone was like a twoin-one device.'
- Replacing the old phone was not thought to be disruptive, because of the compatibility of the device to computers
 - N: 'I was already familiar and comfortable with iTunes, and I thought it would have been very easy to upload music, pictures etc to my new iPhone.'
 - C: 'You didn't have to be a Mac user, the phone connects to Windows as well, as long as you have iTunes installed.
- Most participants planned to have their iPhone unlocked and wanted to keep their existing phone numbers.

Complexity

The iPhone was perceived to be very easy to use and easy to learn.

- iPhone's interface is perceived to be more user-friendly and easier to get used to than most phones
- Some of the participants also possessed an iPod Touch, hence were well familiar with the interface even before buying the iPhone
 - J: 'I had been using the iPod Touch for quite some time already, so I was used to the interface, the touch-feel and everything'

The design of the iPhone was also perceived to be very simple.

- There are very few buttons
 - B: 'There are no confusing buttons all around the side of the phone, which made it look very clean.'
- The shape of the iPhone
 - L: 'I liked the flat shape of the iPhone, it was simple yet different from the other phones.'

Trialability

All participants had at least one chance to try out the iPhone before they purchased it, whether using a friend's iPhone or playing around with it at the Apple Store London.

- Any prejudices and worries soon disappeared.
 - K: 'At the beginning I had problems with virtual keyboards. It doesn't fell real enough. I had problems trusting touch screen phones: I would always wonder whether I've pressed hard enough. Then my friend got it, and I tried it, and I thought it was completely different to what I thought, it was pretty cool, and it also felt quite effortless.'
- In some cases, trying out the iPhone prior to purchase served to reinforce participants' purchasing decision.
 - O B: 'It was brilliant. I already knew the phone was cool, but when I tried it, I felt it was REALLY cool. I was going to buy it anyway. I already decided that I wanted it. Trying it just made me even surer that I wanted it.'

Observability

The visibility, or the extent to which participants could observe other people using the iPhone, was very high, and that had a significant effect over the adoption decision.

- All participants had at least one person within their personal networks who already possessed an iPhone.
- All participants recall they have noticed other people using an iPhone, whether on public transports or in other public places.
 - M: 'I couldn't help noticing all those people using their iPhones... That made me longing for one, more and more.'

The high Observability even led some participants to actively seek more information regarding the iPhone.

- Visiting the Apple Homepage and user Forums
- Visiting Apple Store and other places where they stocked the iPhone
- Searching for promotional ads and user videos on Youtube
 - B: 'I noticed iPhone posters outside O2 Stores, and then I started noticing more and more people carrying around iPhones. I went on Youtube and searched for promotional ads and user videos.'

However, excess Observability has also delayed the adoption decision in some cases.

O: 'Everyone was using an iPhone. I really liked it too, but then too many people were using it and I didn't want to go with the crowd. So I decided to keep my old phone, which was still in perfect conditions. But then after a few months I still felt I needed an iPhone, and the 3GS came out, so I still ended up going with the crowd.'

Consumption

Whereas the Adoption stage focuses on the participants' perceptions and opinions of the iPhone prior to purchase, the Consumption stage seeks to unfold the actual, rather than idealized, iPhone experience. This is achieved through an exploration of (1) participants' iPhone usage patterns, (2) comparison with other smartphones, (3) comparison with other referent technologies.

Use and Domestication of iPhone

How the iPhone is domesticated around, and into, participants' routines and habits has provided some insight into the role that the device plays in people's everyday lives. The use of iPhone is seen as being *fitted around* people's daily activities, and not disrupting or interfering with them. In particular, the 'Anywhere' and 'Anytime' aspects of the iPhone are evident from the ways in which the device has become an integral part of users' lives – spatially and temporally. The associated symbolic aspects are also seen as integral of the users themselves, hence, symbolically domesticated.

Spatial Domestication

Users recall using the iPhone 'everywhere'.

- At home, participants would keep their iPhone 'within reachable distances' and some would bring it with them as they move around the domestic unit
 - o B: 'I keep my iPhone close to me, because I need it quite often.'
 - F: 'I always take it with me when I make myself some food, just in case someone calls.'
- Outside of home, they would carry it in one's handbag (females), or pocket (males), and they will always make sure that they have it with them before leaving home
 - H: 'I have the habit of checking that I have my keys, my wallet and my iPhone with me before I leave.'
- The iPhone is also used when transiting from one place to another, e.g. on public transports, whilst walking, even whilst stuck in the traffic. Being physically restricted to a certain place does not limit their possibilities of connecting with the external world.

- Likewise, students explain how they bring their iPhones to lectures and always end up using it in the middle of a class.
 - D: 'I can't help fiddling around with my iPhone during lectures. That doesn't make me pay less attention to the lecture thou, I follow the PPT and I know where the lecturer is getting at. Not everything that the lecturer says is important anyway, that's when I start doing something else.'
- At work, participants recall leaving the iPhone on their desks, so that they can access it whenever need arises
 - G: 'We are not allowed to check private emails or use social networking sites. But it can still be useful. For example, I use the iCal quite often and the dictionary every now and then.'
- However, participants have found it annoying to have incoming messages appearing on the front screen, especially in public places. This has led some of them to deliberately place their iPhone faced-down.
 - E: 'Once, I was having dinner with my boss, and I left my iPhone on the table. Then, my girlfriend's text came in. Of course, my boss saw the message because it just automatically popped up, and it was rather embarrassing. I always keep my iPhone facing downwards in public places since then.'

Temporal Domestication

The 'Anywhere' property of the iPhone has allowed participants to use it at 'Anytime'.

- As the participants wake up in the morning, so does their consumption of the iPhone, starting with an alarm clock, or by turning on the iPhone, or by checking any missed calls/messages.
- Similarly, participants also explained that they would check their iPhone, or set an alarm clock, or, turn it off before going to sleep. As the day ends for most participants, so does their consumption of iPhone.
- In the case of Participant B, his iPhone consumption did not terminate with sleep.
 - B: 'I turn my iPhone to airplane mode before going to sleep, because of radiation and stuff. I used to switch it off totally, but then it took too long to turn on, besides if it's off I can't check the time whenever I wake up during the night'.
- Most participants express that the iPhone allows them to kill boredom, as they *try to fit* iPhone usage *within* their daily activities, e.g. whilst waiting for food to get ready, when stuck in traffic, during lectures, whilst in transit.

- K: 'I use it whenever I have a gap in between things, or whenever I get bored, or if I'm waiting for something or someone... I even check Facebook more often than I used to do, because it's so handy.'
- Interestingly, some simulation games are played 'real-time', and require the player to regularly check and update their game status all day long. Game playing, however, needs to harmonize with other activities.
 - o B: 'I was out on that day. So I didn't really have time to play.'

Symbolic Domestication – Apparatgeist

The iPhone experiences are not limited to the consumption of functionalities. The device has also been domesticated and appropriated within the participants' cultural domains, everyday languages, consciousness and identity. The iPhone is not only consumed as an 'Apparatus' alone, but almost personified, with a 'Geist', which is an equally important part of the iPhone experience.

- Most participants use a protective case for their iPhones. The case is seen as protection on one hand, and as decoration and expression of the self on the other. Being able to customise, not only the functionalities to suit ones needs, but also the outer appearance of the device, is considered to be, just like clothes, an extension of one's personality, almost as a fashion statement.
 - A: 'I think the case, somehow, says that this is MY iPhone, rather than any iPhone. It belongs to me, so I want it to look pretty.'
 - C: 'I have the Paul Frank case. It's colourful, fun, lively... It puts me into good mood; it reminds me of how I am.'
 - H: 'I have a total of five cases, for different occasions, you know, to suit the type of clothes that I wear.'
- The iPhone itself is also seen as an extension of the self, and as expression of one's preferences. Owning and using an iPhone was considered as part of being fashionable and different. The touch-screen, the earphones, the design, the way of holding it, the way of using it etc. are seen as visible extensions of ones' fashion senses.
 - o H: 'I'm not saying that having an iPhone makes you instantly 'in'. But it certainly adds, amongst all the other things that make up an outfit, to the way you look, and the way you want others to see you.'

The device has also been domesticated into users' daily life in ways that they are less conscious of.

- The word *iPhone* has been linguistically domesticated, i.e. domesticated into participants' daily language, to the extent that it has almost completely replaced the expression 'mobile phone'.
 - A: 'Yeah, I haven't noticed, but yeah I always say 'my iPhone', 'the iPhone'... I
 don't say 'mobile phone', or 'phone', it feels weird, it has its own name.'
- Some participants were seen having the habit of turning on the screen and turning it off, without having done anything in particular and without reason. This, though, did not crop up in the diaries because they did not consider it a meaningful 'use'.
 - L: 'I don't know why I do that, I didn't realize I was doing it, perhaps just for the sake of doing something... I wouldn't have thought it was important.'

The iPhone has become part of users' daily life also because of the very 'Anywhere/Anytime' connections that it offers to their wider socialities.

- Being available is important for most participants, and the iPhone represents one of the means through which they can stay connected
 - N: 'I keep it on at night in case by girlfriend texts me, and I would check regularly to make sure I didn't miss any calls or texts.'
- Some participants expressed that they were emotionally attached to their iPhone, they would talk to the iPhone, give it a name, would not allow others touch it, or would not give it away, even when they no longer use it. This is not due to the inherent characteristics of the device itself, but because users have associated past experiences and people to the device, giving the device a social and symbolic connotation.

Interestingly, the iPhone behavior has also exhibited some gender differences. Such differences have shown how users actively redirect technologies, domesticating them according to one's own particular needs.

- Some of the iPhone uses, such as self-photographing and mirroring, are typically female
 - H: 'I use the iPhone screen as a mirror. Of course it's not as good as a proper mirror, so you definitely can't use it for applying make-up and stuff, but it's big enough to see my own reflection, and for example to check my hair. I do that all the time, almost every hour.'

- J: 'I have the habit of taking pictures of myself. The iPhone pictures are really pretty, I prefer the iPhone over cameras, the shades are softer which makes me look prettier.'
- In line with earlier findings in the literature, male participants tend to play more games and use more applications compared with females, who are more involved in communicating with others texting, calling, Facebook-ing, Twitting and chatting.

Male participants would actively search for and try new applications, whereas females usually download the ones that their friends have recommended, or ask others to download for them. Hence, applications 'turnaround' is higher for males than for females, who seem to be more susceptible to friends' influences.

iPhone vs Smartphones

The unique user experience and the associated symbolic aspects are essentially what distinguish the iPhone experience from a traditional smartphone experience. More specifically, a direct comparison with the participants' previous smartphones has revealed functional and symbolic advantages that were only myths in the Adoption stage, as well as some more practical limitations.

Functional Aspects

Functionally, the iPhone has generally met participants' initial expectations. In some cases, participants even felt that the device has outperformed what they originally anticipated.

- Compared to other smartphones, the iPhone is thought to have made everything easier easier to use, easier to understand, easier to perform. The iPhone is considered to be more than a normal smartphone.
 - B: '[My previous phone] was much slower than the iPhone, in every respect, reaction time, access time, Internet speed etc... The iPhone is more than a Smartphone. It does everything that the Smartphone does, and does them much better.'
 - F: 'You always end up finding out something new, new features, new applications, hidden functions. It keeps surprising you from time to time, something that my old phone didn't have,'

- Despite previous phones also had in-built technologies such as camera and MP3, participants rarely used them because of perceived and practical difficulties.
 - O: 'I had the MP3 player in my old phone as well, but I never used it, because I had all my music in my iPod and it was too much effort to copy them into my phone. But I do listen to music with my iPhone now, because it works on iTunes as well.'
- Whereas previous Smartphones were sufficiently adequate for basic needs, their Internet capabilities and entertainment potentials were premature. The iPhone, on the other hand, has greatly enhanced entertainment values and other user experiences, making it suited for both work and play.
 - N: 'My old phone was good enough for everyday use, but it wasn't fun. And fun has become a big part of everyday use now.'

This is not to say, however, that the iPhone is flawless. For example, despite the initial perceived advantages of a touch-sensitive screen, the virtual keyboard has posed some practical problems in the early stages of iPhone usage.

- A number of participants have expressed that they could not, initially, get used to the virtual keyboard. They preferred the tangible feel of the physical buttons on their old phones.
 - A: 'I was very stressed by the fact that I couldn't type and walk at the same time. I could easily blind-type with my old phone, and with the iPhone, I just wouldn't know where the letters are.'
- As they familiarized with the virtual keyboard, however, participants expressed that they enjoyed the chat format of the iPhone's SMS function, which facilitates an ongoing conversation.
 - C: 'Because you can keep track of what you and the other person have said, the conversation can go on and on and on.'

Battery life has also posed significant inconveniences. The very advantage of entertainment and fun has meant that iPhone usage, during any day, is disproportionately higher compared to traditional smartphones, hence using up batteries much faster.

• O: 'There's always something to do on your iPhone, so you're probably constantly using it, and the battery just goes down in no time at all.'

Symbolic Aspects

A comparison with participants' previous smartphones has also shed some light upon what distinguishes the two experiences from a symbolic perspective. Words and expressions that have been used by the participants to describe the iPhone (taken aside the functional benefits) have been summarized in the table below.

	Smart Phones	<i>iPhone</i>
Interface	Taken-for-granted, boring,	Simple, cool, user-friendly, logical,
	always the same	original, creative, neat, innovative
Design	Boring, similar,	Cool, simple, clean, stylish, different,
	indistinguishable	eye-catching, sleek, trendy, fashionable
Lifestyle	Fast, work, end-driven, dull	Modern, youth, entertainment, fun,
		connected, enhanced mobility, creative

In general, words used to describe the iPhone have rather positive connotations, but what is more important is the fact that possessing an iPhone can distinguish one from traditional smartphone users, sending messages about one's lifestyle, personality and self.

- The highly distinguishable white earphones and the unique bodily movements associated with iPhone usage make the iPhone user easily recognisable within the crowd.
 - *I:* 'The flicking and typing is unique to iPhones, you recognise that someone is using an iPhone without having to see the actual phone.'
- Such movements can also help them to mentally classify beginner users and professional users.
 - A: 'You can instantly distinguish a beginner from a pro by the way he types on the iPhone... you have to let your fingers flow over the keyboard... you have to get that feel.'
- Female participants are found to consider the popularity of the iPhone a very important advantage over other smartphone, while male participants generally consider functionalities as the predominant advantage.

iPhone vs Referent Technologies

Although participants recognize and are appreciative of the convenience of an integrated device, many of the iPhone features are considered as inferior substitutes to referent technologies that are focused on a single purpose.

• L: 'The iPhone does many many things, but it does not do any of them very very well.'

MP3 Players

The integrated iPod is considered convenient, and it has replaced some participants' daily use of their old music player.

G: 'I listening to music in the tube, when I travel to and from work everyday.
 Rather than taking my iPod Video, I can just use my iPhone.'

However, some other participants have also expressed that the iPhone cannot totally replace the MP3 player.

- F: 'The iPhone is good for listening to music 'on the go', but if I know that I'll be listening for an extended period of time, say 2 or more hours, then I would still take my iPod Touch because it has a lot more music in it.'
- J: 'On a long haul flight, or when traveling abroad, I would still use my iPod Touch because I wouldn't want to use up all the battery, since I'll still be needing a phone.'

Digital Cameras

The iPhone camera is considered to be convenient for quick snapshots or killing boredom, but picture quality can sometimes be poor, especially in low light conditions.

 E: 'It's handy for taking quick pictures with friends, or just some random pictures on the street, but if you're at a party or in any dim light environment it's pretty useless.'

However, as also mentioned before, some female participants have emphasized that the apparent inferior picture quality are preferred over digital cameras because the picture colors and tonalities are softer, milder and more docile, hence more suited to the female image.

Moreover, when traveling to new places or during important occasions, participants would still use a 'proper' camera to ensure picture qualities.

L: 'I'd always bring my Nikon if I know that I'll be photographing, for example if I go traveling somewhere, or if I attend a special occasion, so that I can capture all the details and the scenery. I only use my iPhone when I don't have my Nikon with me.'

GPS

The incorporated GPS is considered to be too slow for participants who drive.

- G: 'I prefer a TomTom when driving, it's more reliable and it gives quicker responses. For example, if I take a wrong turn, I want to know immediately how to correct it.'
- B: 'I haven't [used the incorporated GPS], and I don't think that would be useful for driving anyway, I would think that you need a proper car navigation.'

However, participants who do not usually drive found the incorporated GPS rather convenient when walking around the city center, or when looking for specific places nearby.

• A: 'If I go out for dinner, for example, I would get off at the nearest tube station, and from there, I would use my iPhone to direct me to the restaurant.'

Personal Computers

There is widespread appreciation for the constant web access that the iPhone provides, and in some instances it has even become a substitute for personal computers.

- For example, participants recall using their iPhone when the computer is not in the immediately reachable surrounding, or just to check something quickly.
 - C: 'If I'm for example in the living room, watching TV or whatever, I can still be on Facebook or Twitter replying to threads or posts with [the iPhone], without having to take my laptop with me'.
 - B: '. I normally use [the iPhone] when I'm not near my laptop, or my laptop is playing a movie, and I need to check something quick on the Internet.'

- Browsing the net whilst sitting in a lecture room is also widely practiced by student users.
 - I: 'I used to bring my laptop to lectures to take notes and stuff, but I always ended up browsing the web, so then I decided to leave it at home, and use my iPhone instead.'

For some, receiving news feeds and updates, such as sports scores and emails, continuously and automatically on the iPhone, is considered to be more practical and more convenient.

- E: 'Instead of checking online for the WorldCup scores myself, I have an application which pops up and lets me know the scores every time a match ends.'
- K: 'I don't have to keep checking my inbox afraid of missing any important emails; I get them straight on my iPhone.'

News feed also meant that some of them read fewer newspapers.

G: 'I get FT news on my iPhone instead of carrying around the bulky papers.
 It's more practical for traveling to and from work.'

Replying to emails, however, can pose some difficulties.

• *K*: 'But if I need to reply, I would still get on a computer, unless the reply can be very short, because typing and editing on iPhone is not as practical.'

However, the computer remains the preferred device for Internet surfing and for chatting, when the duration of the activity is expected to last for an extended period of time, or when the participants are fully immersed into the activity.

• D: 'I chat for an hour or so with my mum every Sunday morning. I always prefer using a computer rather than the iPhone, because it's an important thing, it's a planned thing, we always do it, and it's easier with the computer.'

Similarly, participants are more inclined to use an iPhone for browsing short videos rather than entire programs and lengthy movies, for which, the computer remains irreplaceable.

• B: 'I have been watching short clips on Youtube and stuff, but not really lengthy programs. I prefer to watch on the bigger screen of the laptop.'

Television

Despite most participants do not possess a television set where they live, they do watch television programs regularly, either on the Internet or at somebody's house. They expressed that watching TV programs on their iPhone would be unrealistic, and would prefer a proper television, or at least a computer, given the choice.

• B: 'I would either have to hold up the iPhone for really long, or I would have to look down at it for really long. Either my arms get tired or my neck gets stiff.'

However, despite they feel mobile television is not very useful, they would not reject having it on their iPhone.

 N: 'It wouldn't be a bad thing thou to have on iPhone, you don't have to watch it very often, but it would be handy in case you don't have other means around you.'

PDAs

Most participants have not had experiences with PDAs, however, those who did, expressed that the iPhone is a good enough substitute for PDAs.

• B: 'The iPhone does everything that a PDA does, and the interface is much more user friendly... I don't think I'll need one [in the future]... I think the iPhone is good enough, if not better.'

Those who did not have previous experiences with PDAs also conveyed the feeling that having a PDA will not give rise to any added value.

• H: 'Why would you need a PDA these days? I've got an iPhone for that; it has everything you need.'

CONCLUSION

The iPhone is considered to be a real 'Anywhere Anytime' device. Whereas the portability of the mobile phone is a taken for granted property, the portability of the Internet is exceptionally valued. Being available to others, staying in touch and being able to reach distant realities are important characteristics of the young adults user group, and the Internet capabilities of the iPhone have allowed for the 'Hyper-Coordination' phenomenon (Ling & Yttri, 2002) to extend beyond the traditional calling and texting dimensions, and into the web dimension – via for example social networking applications and instant messaging.

The 'Anywhere Anytime' properties of the iPhone has also allowed for one's 'emancipation from local settings' (Geser, 2005a), whether one is within classroom confinements or stuck in London's traffic. This power of overcoming physical barriers and extending oneself into other spheres has further blurred the already unclear boundaries between what is public and what is private. In this sense, the iPhone connects individuals to wider social collectivities. 'While one's use may be private, the codes that inform that use are inherently social' (du Gay et al, 1997).

Moreover, in the modern iPhone culture, what is being shared does not only comprise of media objects such as texts and pictures, but more importantly, it has facilitated the sharing of experiences, psychological status, feelings, identities etc. In this sense, the iPhone is inherently cultural because it is identifiable with specific groups of individuals and it is associable to specific social practices and ways of life. The iPhone is also cultural because using it can send messages about the self and one's personality and preferences, as if the device has encoded specific values and meanings that are decodable by the wider society.

This is not to say, however, that the iPhone is an omnipotent device that is inherently disrupting and altering social norms and lifestyles. The study has shown the different ways in which the technology has been domesticated within and around one's daily life. Whether spatially, temporally or symbolically, the device is seen as being 'fitted' around ones needs and its use is essentially a negotiation and a compromise, rather than a priority. While the technology has doubtlessly facilitated people's lives, it has only been able to do so because it has been designed around existing habits, behaviors and other cultural and social practices, facilitating its adoption and hence penetration into people's lives. It is the way different social groups make use of such technologies, in particular social settings and contexts that cause the pervasiveness of these devices (Ito, 2005).

On one level, the convenience of the all-in-one device seems to possess some potential for the replacement of other personal technologies, such as the PDA and the MP3 player. Complemented with the unique user-interface, the iPhone consumption seems also to have provided the 'best experience so far' as compared to other smartphones. On another level, the iPhone is seen more as a complementary device to other established forms of personal technologies such as the computer and the digital camera. Rather than permanent substitutes for such technologies, the iPhone is more rightly thought of a 'part-time substitute' (Bødker et al, 2009), which becomes rather 'handy' when other technologies are not available.

Research Gaps and Future Direction

As a small contribution to the broader literature of technology and communication, the iPhone study introduces some interesting behavioral aspects surrounding the Adoption and Consumption of the device. From a theoretical perspective, however, considering Consumption in isolation from the Circuit of Culture (du Gay et al, 1997) inevitably has its drawbacks. Consumption is doubtlessly an integral part of the circuit, and must be analyzed in conjunction with all the other elements for it to be understood fully. This is because of the interactions and interconnections that exist between all components, which influence and affect simultaneously how a cultural good is integrated into the society.

For example, a central part of the circuit that has been left out, in order to better suit the scale of the study, is Representation and Identity. Critical to these, is Advertising – 'an economic as well as representational practice, but above all, a cultural practice' (du Gay et al, 1997: 25). One could argue that without advertising and other marketing campaigns, the Adoption and Consumption of the iPhone, as revealed from this study, would not have been the same. Future studies considering the entire circuit will doubtlessly generate a more complete picture of the iPhone as a cultural commodity.

Not being an iPhone user myself has given me significant detachment from the topic; however, from a methodological perspective, the chosen sampling strategy of snowballing can still be inherently flawed, since it has employed a sample of participants with similar technology-related experiences, giving rise to very similar attitudes and opinions. As it is evident from the findings, participants' general attitude towards the device tends to be very positive. This does not mean, however, that all iPhone users are satisfied, and should not be taken as a generalisable observation. What this study seeks to offer is merely some possible

explanations as to why satisfied users are so, and to explore important behavioral patterns that could be worth looking into from a quantitative perspective.

Nevertheless, because the selected participants come from different backgrounds and are enrolled/employed in different institutions, their everyday life is likely to be very different, hence providing opportunities for exploring the diverse ways in which users have adopted, domesticated and consumed their iPhone. What this study does not cover, however, is the adoption and consumption of the iPhone from other socio-economic groups, and from more distant realities, such as different countries, perhaps from non-western capitalistic settings.

Another inherent flaw that is worth mentioning is the fact that social conditions are inevitably under continuous change as new technologies are continuously introduced and replaced in no time at all. Behaviors and attitudes towards a specific technology are extremely vulnerable to new products and trends, making the findings of any study outdated in a very short period of time. For example, at the same time of writing, Apple Inc. has also launched the iPad and the fourth-generation iPhone. In particular, the former is being marketed as a total new product innovation that sits in between the personal computer and the mobile phone, and its impact on mobile communication behaviors is yet to be seen. 'Human understanding of social phenomena [is to be viewed] as a dynamic process that invites critical evaluation and ever-improving revision' (Katz, 2006:6).

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