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Mobile nodes: mobile and locative media, everyday life and sense of place

Didem Özkul

Faculty of Media, Arts and Design

MOBILE NODES:
MOBILE AND LOCATIVE MEDIA,
EVERYDAY LIFE AND SENSE OF PLACE

D. ÖZKUL

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DİDEM ÖZKUL

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ABSTRACT

This thesis presents an analysis of the relationship that exists between the use of place-specific information in mobile communication technologies and the different aspects of place-making and self-presentation in London. Through a study of empirical data collected from seven focus groups, during which a total of 38 participants were asked to draw sketch maps of London to shed light on social and spatial interactions in the urban space related to the proliferation of mobile communication technologies and their location-aware features. To this end, the development of locative media within specific types of location-aware mobile devices and services is shown to be intimately interrelated with different aspects of place-making and self-presentation in London.

This thesis demonstrates that mobile and locative media serves as a platform through which the user can communicate different aspects of themselves and their relationship with specific places, while also constructing a sense of those places by sharing individual narratives of their everyday lives. Highlighting the significance of sharing and retrieving locational information through mobile and locative media, this study not only analyses the use of mobile and locative media in everyday life, but reflects also on how the perception of places is transformed as a result of social and spatial interactions, and the practices of sharing and remembering, as well as navigating. Employing a holistic approach in the framing and research of locative media, and introducing sketch-mapping as a creative methodology in the form of focus groups for a research into communication and media, this thesis makes an original contribution to existing literature, especially in the field of mobile and locative media.

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I hereby declare that all the material contained in this thesis is my own work.

Didem Özkul

CHAPTER 1: INTRODUCTION AND IDENTIFYING THE FIELD

I recall talking with my friends in the summer of 2007 about a new mobile technology: the iPhone. 'Mobile phones with touch screens', I thought to myself, 'are quite overrated and even unnecessary'. I had always been very happy with my relatively "primitive" mobile phone, in that it functioned well and did all of the things expected of it in terms of placing calls and texting. So 'why would I need an iPhone?' For me a phone was a phone, and that was all I needed. Failing to understand what the fuss was about, I became a subject of ridicule among my friends. Living in a country that at the time had high rates of mobile phone adoption and diffusion when compared to other technologies, I was not surprised to see people with not only one, but two iPhones just one year after its launch in Turkey. Just one-and-a-half years later all of the GSM operators in Turkey were advertising the next-generation iPhone, but still I could not understand the attraction. My friends began talking about something called 3G that allowed them to connect to the Internet while on the move, but I already had WAP on my old phone that allowed me to check my emails, which I hardly ever used, and at home I had my PC and a tiny netbook through which I could do all my online communication, store my photos and Skype/chat with my friends. It was simple; I did not need an iPhone.

A couple of years later I saw "mobile TV" ads. 'Come on!' I said, 'why would anyone want to watch TV on a tiny mobile device!?', but I was wrong. Technology was developing faster than I had ever imagined, and all my friends were happily changing how they communicated with each other and consumed media content. At some point after the introduction of 3G, the scene became rather depressing at the same old bar that I used to hang out at with my friends. A couple of friends were watching football on their mobile devices in the bar, while others were busy "poking" their friends on social networks, taking photos of their pint glasses and uploading them quickly to Facebook or Twitter, and commenting underneath, all without moving from the bar. As a result, my perception of that bar started to change slowly; it was still the same old bar that we had hung out in since we were 18, but something did not look or feel right. Blaming a particular technology for the changes in my life at first seemed overly simplistic; but it was a fact many things in my life started to change after the launch of the iPhone.

Although I was not a smartphone user at that time, the ways I interacted with my friends and with the familiar places also started to change for me. Now, instead of having to guess the song playing in the bar, we could turn to the "Shazaam" application; instead of taking photos only on special days, such as birthdays, and making a print of each photo for each of us, we could take photos of silly and random things and delete those that we did not like, simply because they would look uncool on Facebook.

My initial thoughts and observations on the iPhone remained until the summer of 2010, when my parents bought one for me. As it had Google Maps and I was going to move to London, I accepted the gift with glee. I would not need an A-Z, I would not need to check my laptop for directions before going anywhere, nor would I be dependent on the Transport for London (TFL) website to figure out how to commute in London. I had my new shiny iPhone, and I could share "my moments" with friends and family through WhatsApp, Viber, Skype, Facebook, Foursquare, LinkedIn, and many other mobile applications. I could take a photo and send it to my sister and say 'Wish you were *here*!' In less than 3 years since I got my iPhone, it became the centre of all my daily activities. I could use it to listen to my favourite music when I wanted to avoid any unpleasant interactions on the tube during rush hour; for my travels around London, I became dependent on postcodes and the blue dot on my iPhone's map application; and I even downloaded an application to quit smoking (developed by a doctoral student to analyse how smokers respond to positive reinforcement as part of his PhD in Psychology). The one application that was missing was something to minimise my smartphone use. I then synched my phone with my laptop and started using cloud technology so that I could "work" and "interact" with people and *things* from anywhere so long as I had my coffee, my smartphone and an Internet connection on my phone. I had become one of those mobile nodes, connected to a network, physically mobile, but attached to places with which I had associations and explored.

This thesis is a narrative of my academic journey through the world of mobiles in London. Through a critical discussion of literature on mobile communications, everyday life and spatial perception, it explains and presents 38

stories of Londoners who use their mobile devices[1] and location-awareness for a variety of reasons and purposes.

1.1. Framing and defining the field: The mobilities paradigm, mobile media and location-awareness

Social sciences, starting particularly during the 1980s, witnessed a "spatial turn" (Urry, 2007). 'This involved theory and research, which demonstrated that social relations are spatially organized, and such spatial structuring makes a significant difference to social relations' (p.34). This turn can also be described through reflecting on the global transformations of the 1980s and 1990s (Massey and Thrift, 2003), and it is no surprise that analogies can be found between the political and economic conjuncture of the 1980s and 1990s and the corresponding spatial turn in social sciences. Graham (2004), on the other hand, argues that research into spatial relations attracted more attention from the mid-1990s onwards, focusing more on the links between Information and Communication Technologies (ICTs) and urban life: 'Since the mid-1990s, high quality theoretical, empirical and policy research on the links between ICTs and the changing nature of cities and urban life has rapidly emerged in many disciplines across the world' (p.3). However, the social sciences have largely ignored the importance of movement in their analysis of spatial relations, and hence have been accused of being "a-mobile" (Sheller and Urry, 2006a).

In time, the increasing use of ICTs brought stirred up questions relating to space, everyday life and social relations, including media and sense of place (Meyrowitz, 1985), global networks and political economy (Castells, 1989; 1996), mobility (Sheller and Urry, 2006b), interpersonal communication (Ling, 2008) and mobile communication technologies (Ling and Campbell, 2009; de Souza e Silva, 2004; 2006; Gordon and de Souza e Silva, 2011). This rising interest occurred especially in the fields of media and communications studies and sociology proliferated the attention drawn on these notions in relation to modernity, everyday life and urbanity. As mobility and mobile communications began to take centre stage, the existing interest in urban space in understanding was expanded even

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[1] The mobile devices used by the research participants include mobile phones, smartphones, tablet computers, laptops, MP3 players, e-book readers (such as Kindle) and cameras. However, as the

further to take into account how these technologies are used and adopted in everyday life.

As Urry (2007, p.47) argues, 'social life involves a continual process of shifting between being present with others and being distant from others'. In other words, in a mobile world, where social life revolves around one's presence or absence, communication technologies, especially mobile modes of communication, gain fundamental importance in everyday life. '(Social) presence is thus intermittent, achieved, performed and always interdependent with other processes of connection and communication' (Urry, 2007, p.47). As a result, mobility studies have expanded into the field of mobile communications, along with other modes of communication, in their discussions of space and place.[2]

This focus on mobility and modes of communication that has arisen in social sciences can be explained also by the "new mobilities paradigm" and the "mobility turn" in everyday life.

> And partly as an effect a "mobility turn" is spreading into and transforming the social sciences, transcending the dichotomy between transport research and social research, putting social relations into travel and connecting different forms of transport with complex patterns of social experience conducted through communications at-a-distance. It seems that a new paradigm is being formed within the social sciences, the "new mobilities paradigm" (Sheller and Urry, 2006a, p.208).

Sheller and Urry launched their discussion of the mobilities turn with the important global fact that 'All the world seems to be on the move' (p.207)'. When they published their article in 2006, the number of worldwide Internet subscription was close to 1 billion (1.17 billion, according to International Telecommunication Union, 2013), but by 2011 this figure had reached 2.5 billion, and it was being estimated in 2011 that at the end of 2013, 40 percent of the world would be online (International Telecommunication Union, 2013). Although at first glance it could be understood that the world being on the move was associated with physical mobility (i.e. transportation), 'new forms of "virtual" and "imaginative" travel are emerging,

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[2] An indicative but certainly not exhaustive list includes: Elliott and Urry, 2010; Sheller and Urry, 2006b; Urry, 2003; 2006.

and being combined in unexpected ways with physical travel' (Sheller and Urry, 2006a, p.207), aided by advances in communication technologies (especially the Internet and wireless communication technologies) and fast diffusion rates. In particular, mobile telephony offers a new means of interaction while on the move, or of 'being in a sense of present while apparently absent' (Sheller and Urry, 2006a, p.207), which can be conceptualised as "absent presence" (Gergen, 2002).

Mobility in everyday life can lead to different perceptions of the importance of place and location, which, as argued by Simonsen (2008), is due to a general understanding and representation of mobility as the opposite of place. Mobility is usually associated with one's detachment from a place, "placelessness" or having "no sense of place" (Meyrowitz, 1985; Relph, 1976), while also being 'associated with a lack of connection and commitment' (Larsen and Urry, 2008 p.92). Mobility (and mediation) has been blamed for accelerating the erosion of place (Augé, 1995), which is threatened further by the hypermobility of flexible capital, mass communications and transportation (Cresswell, 2002).

The popularity of communication technologies has contributed to the loss of significance of distance and location, and has led to our detachment from place as a trigger of physical mobility. As Meyrowitz (2005, pp.27–28) states, 'travel is more easily managed as distant places seem less strange and less dangerous and as contacts with those "back home" (or anywhere) can be maintained wherever we roam'. Increased mobility, information technologies and consumer society, when combined, have been blamed for accelerating the erosion of place (Simonsen, 2008). 'More and more of our lives, it is said, takes place in environments that could be anywhere – that look, feel, sound, and smell the same wherever in the world we might be' (Simonsen, 2008, p.13). However, our attachment to places will always exist, no matter how mobile we become (Gustafson, 2002; Relph 1976), because mobility can also be understood as 'a way of finding meaning and ways to places and belonging' (Bærenholdt and Granås, 2008, pp.6–7). As such, it can be said that mobile communications increase our chances of forming an attachment with new places, while also helping us to maintain old ones. On the other hand, it allows its users to detach from places *willingly,* so as to avoid certain unpleasant situations (Gergen, 2002; Ling and Campbell, 2011) or to experience different aspects of the spatial environment (Gordon and de Souza e Silva, 2011; Humphreys, 2007; Özkul and Gauntlett, 2014).

As will be explained in detail in the following literature review, today, cities contain information from various networks of both people and devices, and our perception of a place now goes well beyond what is physically in front of us (Gordon and de Souza e Silva, 2011). Through mobile communication technologies such as smartphones, users can now assign meanings to places by attaching geo-tagged information to locations that others, in turn, can access while in the same location (de Souza e Silva and Frith, 2012). This may enhance the awareness of the multiple meanings of places, as users can explore many aspects of a place that do not exist explicitly in the visible physical fabric. In some cases this use of locational information may allow users of mobile communication technologies to create and share their own genuine experiences of places (Özkul and Gauntlett, 2014), bringing different senses of a place into a conversation (Humphreys, 2007) and creating new forms of attachment.

Physical mobility and ICTs have altered our perception of space and time. They influence the way we perceive distances as shrinking (Harvey, 1989) or decreasing (Giddens, 1990) by providing users with the potential to communicate while on the move. Although this may lead to a false perception of location and distance, which become less important as long as one can communicate with family, friends and work, 'distance still matters a lot to people, as does place' (Bærenholdt and Granås, 2008, p.7). It may also be argued that mobile communication technologies have the potential to foster an attachment to a place by creating a renewed interest in a location. Networking and mobile technologies can 'only contribute to material, social and cultural *reconfigurations*³ of places and distances' (Bærenholdt and Granås, 2008, p.7), and as such they have the potential to influence what a place represents and embodies for its inhabitants.

As a conventional tool for communication, the telephone was used typically for communication with people at closer distances (due to the lack of technical infrastructure and the high cost of long distance calls) or for more local relationships (with close friends, colleagues and/or family) (Katz, 2006), however, with the advent of portable devices, the norms of social and spatial interaction were challenged (Green and Haddon, 2009; Katz, 2006; Ling and Campbell, 2009; Ling and Donner, 2009). Researches into mobile communication technologies, especially mobile phones, have focused on the changes that these technologies have fostered

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³ Emphasis added.

in the social and spatial practices of everyday life (Goggin and Hjorth, 2009; Katz, 2006; Ling and Campbell, 2009), and mobile communication technologies have come under scrutiny concerning the extent to which they blur the lines between public and private space, and work and personal life in their coordination of social networking (Lee, 2009; Ling and Campbell, 2009; Humphreys, 2008). With the arrival of locative media, the focus of mobile media research has shifted emphasis towards an analysis of location-based applications and their use in everyday life (de Souza e Silva and Sutko, 2009; Humphreys, 2007; Humphreys and Liao, 2011; Licoppe and Inada, 2009). Although recent scholarly works explain the use of locative media in relation to theories of space and place (Farman, 2012; Gordon and de Souza e Silva, 2011; Wilken and Goggin, 2012), further empirical studies are needed to explore how people use locational information in everyday life.

As Lukerman (1964) and Relph (1976) argue, location has always been an aspect of place and an important attribute of many practices of everyday life. Accordingly, sharing the location of a place may not turn a place into a location, just as a location cannot simply be turned into a place (de Souza e Silva and Frith, 2012). Following this line of argument, this thesis explores how sharing locational data through mobile devices can change or contribute to the sense of a place, how users of these technologies perceive and construct places and what those places may mean to them.

1.2. The research

This research investigates how users of mobile communication technologies make use of their mobile devices and their location-aware features in their everyday lives to navigate in London and share locational information with their networks or with a broader public. Particular focus is on the different aspects of place-making and self-presentation in London, and whether the sharing of locational information affects the processes of place-making and spatial and social interactions, and if so, how this occurs. Situated alongside the theoretical debates in social sciences on "spatial turn" (Urry, 2007; Warf and Arias, 2008) and the "mobilities paradigm" (Sheller and Urry, 2006a), this study proposes that a paradigm shift is taking place in the field of communication and media studies that can be explained by location-awareness. Hence, this research makes an analysis of the interesting aspects of place-making and place attachment in London, aiming to explore the connections

between the use of locational information in mobile communication technologies and the reconfiguration of place. By grounding the empirical research in recent scholarly frameworks and classical theories of place and location, this thesis aims also to further the understanding of location and the use of locational information in mobile communications.

It is anticipated that a dialectical relationship will be found among mobility-driven lifestyles, the fast pace of metropolitan life and mobile communications, and that this relationship affects many aspects of everyday life: from face-to-face interactions to social networking, from work/life boundaries to the micro-coordination of everyday life, from living with a dependency on mobile communications to resistance against them, and from how we try to overcome differences in space and time to forming our own personal spaces within public places. In this way, the research investigates and focuses on different components of everyday urban life and points to a contradiction – that although location and distance have lost their importance as obstacles in the way of communication, through mobile and locative communication technologies they have entered into many facets of everyday life, and so for some people, to some extent, they have (re)gained a different significance. The common practice of beginning a telephone conversation with the question "where are you?" allows us not only to identify the whereabouts of our significant others by way of these technologies, but also sometimes ourselves.

1.2.1. Research questions

People may choose whether to retrieve or disclose locational information in everyday life for many reasons: To deal with the anxiety of getting lost, to organize their daily activities, to ensure punctuality, to gain a feeling of security, to discover new places, to establish social relations, to maintain close ties with others among other things. It is these kinds of activities that form the basis of this study in its attempt to answer the main research question: How and why do people make use of locational information and mobile communication technologies in their everyday lives? This main research question is supplemented by four research questions:

(1) How do people identify and represent themselves via their physical locations, and in what ways do they refer to place – or not – while using mobile and locative media?

(2) How do people perceive and represent urban space through mobile and locative media?

(3) What are the differences between the sense of place produced by "imagined travel", through the voice from that of a pinpoint that in fact presupposes a further imaginative effort, or from that of media forms that represent the same places?

(4) What are the different aspects of place-making in London?

The findings of this study will form the basis of a discussion and demonstration of how locational information can be used to renew senses of places and reconfigure social and spatial practices in London.

1.2.2. Methodology

In order to find answers to the above research questions, I conducted two separate studies in London, in 2011 and 2012. A global city like London is an extraordinary conglomeration of information and communication technologies (Amin and Thrift, 2002, p.43), and the cosmopolitan nature of London's inhabitants is related to the complex social ties, both near and distant, that are maintained through the use of mobile phones. In this regard, London's rich ecosystem serves as an ideal base for the testing of different constellations of place, location and mobile technology use, and accordingly, as the optimum site for research into the different aspects of place-making through mobile and locative media.

The research began with a pilot study to identify the extent of the empirical data gap in current literature, and after transcribing and analysing the gathered data, the results were used in the design of the main study. For the main field work, sketch-mapping focus groups were organised, which was a method adapted from the "cognitive mapping" approach in environmental psychology (Tolman, 1948), urban planning (Lynch, 1960) and human geography (Downs and Stea, 1977; Gould and White, 1986), and this was then combined with "creative research methodologies" adopted from communication studies (Gauntlett, 2007). Since the pilot study was only intended as a guide for the main study, its findings were not

incorporated into the analysis of the main study. Hence, each research was evaluated according to its own merits.

1.3. Contribution to knowledge:

This research contributes to existing literature on mobile and locative media in both its findings and methodology. First of all, rather than considering specific demographics, it focuses on the problematic on an urban scale – London. An extensive review of literature uncovered no similar research, and as such it can be said that this is the first such study of mobile and locative media that analyses the construction of the sense of place in urban spaces in London. While many studies have been made around the world analysing a similar topic, they differ both in their scope and approach.

Previous studies related to mobile phones, as the primary devices of mobile communications, have focused on the transformation of personal space and how the face-to-face interactions of different age groups (Castells *et al.*, 2007; Haddon and Vincent, 2009; Oksman, 2010),[4] genders (Fortunati, 2009) and cultures (Castells *et al.*, 2007; Goggin 2006; 2011; Ito, Okabe and Matsuda, 2005; Miyata and Ikada, 2008)[5] are affected. In addition, there are many studies focusing on the diminishing boundaries between the work and social spaces resulting from the introduction of mobile phones into our everyday lives, as well as the coordination of our work and personal life activities through mobile phones (Humphreys, 2008; Ling and Campbell, 2009; Wajcman, Bittman and Brown, 2009).[6]

With the rapid developments in mobile communication technologies, and with location-aware technologies becoming more accessible and affordable every day, a shift has occurred in mobile media research that is based on the need to understand the changing perceptions of sense of place and locality (de Souza e Silva and Frith, 2012; Farman, 2012, Fortunati, 2005; Gordon and de Souza e Silva, 2011;

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[4] These works analyse only how mobile phones are used among teenagers and children.
[5] Goggin (2006; 2011) analyses mobile phone culture globally, by focusing on different use patterns in Europe, America, Africa and Australia. Castells *et al.* (2007) also analyse mobile communication in relation to different cultures and societies. Ito, Okabe and Matsuda (2005), and Miyata and Ikada (2008) focus their analysis of mobile phones on Japanese everyday life.
[6] Wajcman, Bittman and Brown (2009) investigate how the introduction of mobile phones affected work/life boundaries and intimate connections. An edited collection by Ling and Campbell (2009) investigates transformations in space and time that mobile phones have introduced in everyday life. Humphreys (2008) analyses how social networking and social spaces are affected by mobile phone use.

Harper, 2005; Höflich, 2005; Meyrowitz, 2005; Nyirí, 2005).[7] Existing studies have focused either on specific location-based applications and services, or specific interest groups, such as mobile and locative arts (Frith and de Souza e Silva, 2011; Humphreys and Liao, 2011; Sutko and de Souza e Silva, 2010),[8] and this research distinguishes itself from these by focusing holistically on the use and sharing of locational information rather than making a study of specific location-based mobile applications. In this regard, it does not exclude users of other mobile technologies who do not have access to location-aware features. In other words, it analyses users of mobile media, but includes also non-users of locative media. As the use and sharing of locational information can take different forms,[9] a surprisingly exclusive focus on location-based services and applications is limiting the scope of mobile media research.

This thesis makes a further contribution to existing knowledge through its employment of a creative visual methodology to investigate the proposed problematic, thus filling a methodological gap in the field of mobile and locative media research. Sketch maps have been used as a research tool in the fields of geography, anthropology, sociology (especially tourism and migration studies), architecture and urban planning, as well as in psychology (especially environmental and cognitive psychology);[10] and since the focus of mobile and locative media research is also profoundly related to space and the spatial and social environments, adapting and employing such a methodology has brought new insights to the field. Previous researches have also faced limitations in terms of their methodologies. Mapping geotagged mobile media data (garnered through such applications as Foursquare, Flickr, Facebook) can help researchers understand different usages and digital divides, and can be very useful in demographic clustering. However, during

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[7] Fortunati (2005), Harper (2005), Meyrowitz (2005), Höflich (2005), Nyirí (2005), Gordon and de Souza e Silva (2011), Farman (2012), de Souza e Silva and Frith (2012) analyse and focus on locality in a global mobile era as well as location-awareness and its implications in maintaining local and global relationships.

[8] Frith and de Souza e Silva (2011), Sutko and de Souza e Silva (2010), Humphreys and Liao (2011) analyse location-awareness by focusing on mobile and locative arts (UK's mobile arts group Blast Theory, Mark Shepard's Seredipitor), location-based social networking (such as Foursquare, Dodge Ball, Uncle Roy All Around You).

[9] Locational information use should not be subordinated to a group of location-based services and applications. Users of mobile media had always been using locational information in different forms such as a 'where are you?' question directed to the other during a phone call, when got lost calling or texting to people whom we might think of being by a computer or a map, or simply sharing a photo without any locational information attached but which could communicate our location.

[10] It is important to note that due to this multidisciplinary nature there are variations in different disciplinary definitions of sketch mapping and cognitive mapping (Kitchin, 1994, p.5).

the present research, I found that people do not always share or geotag information about their everyday lives, although they may sometimes communicate different aspects of their lives and places through locational information. In addition, they may not always "check-in"[11] at every place they visit. Hence, as researchers, the bigger picture of mobile media use may not be understood by way of the mapping of geotagged data. To better understand the users of mobile and locative media, it is necessary to understand their mental images of the urban space, and also to learn about other places they frequent but do not share the locational information of.

When I first introduced my research methodology at an international academic conference,[12] I received a number of positive reactions and feedback from well-established and pioneering academicians in the field. Soon after presenting my methodology and my initial findings, I began publishing parts of my research (and parts of this thesis) in peer-reviewed academic journals and edited mobile and locative media collections.[13]

1.4. Chapter outline

The empirical data in this thesis is grounded in the existing theoretical debates of space, place, location and mobile communications, with the intention being to explore the spatial and social implications of the use and sharing of locational information in everyday life. Comprising five sections, following the introduction, Chapter 2 provides an outline of mobility and socio-spatial practices in everyday life, and is used to situate the research within the broad range of literature dealing with mobile communication technologies, location and location-awareness, and senses of place.

In this regard, this research can be considered alongside the spatial turn that occurred especially after the 1980s, when a rapid increase was witnessed in the

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[11] A 'Check-in' is the process by which users of location-based mobile applications share their locations with the help of GPS features on their devices. A detailed but not exhaustive list of such applications includes: Foursquare, Facebook, Google Latitude, Gowalla, Brightkite, Glympse and Marco Friend Finder.

[12] Local and Mobile Conference 2012: 3rd Joint Conference of the Cosmobilities Network and the Pan- American Mobilities Network and 3rd CRDM Annual Research Symposium (Raleigh, USA), ICA 2012, Mobile Communication Preconference (Phoenix, USA), Internet Research 13.0: Technologies / The 13th Annual International and Interdisciplinary Conference of the Association of Internet Researchers (AoIR) (Manchester, UK), Social Media and Global Voices: ECREA 2012, 4th European Communication Conference (Istanbul, TURKEY), ICA 2013, Mobile Communication Preconference (London, UK).

[13] See Appendix B for a list of publications.

number of researches into the effects of spatial structuring on social relations (Urry, 2007; Warf and Arias, 2008). As Warf and Arias (2008, p.i) argue:

> Space, place, mapping, and geographical imaginations have become commonplace topics in a variety of analytical fields in part because globalization has accentuated the significance of location. While this transformation has led to a renaissance in human geography, it also has manifested itself in the humanities and other social sciences.

Within the broader field of social sciences, media and communications, scholars have shown also that 'an explicit awareness that spatiality has to be taken into consideration when studying the use of mobile communication technologies' (Ek, 2012, p.39). At the centre of their discussions was an understanding equating the notions of space and place to physical distance and physical locality, which was no longer valid (Ek, 2012). Outlining and depicting retrospectively the context in which the spatial turn took place, Chapter 2 continues with a discussion on conceptualisations of space, place and location, indicating a paradigm shift within the spatial turn that establishes a link between my research and broader literature dealing with social and spatial interactions in urban space, mobility and mobile communications. Chapter 2 also outlines the effects of mobile communication technologies on the changing perceptions of place and location in relation to the changing boundaries between the public and private, and work and personal life, as well as on the coordination of everyday activities. By introducing theoretical discussions on the sense of place, placelessness and location-awareness, I draw a theoretical framework within which the empirical data for my analysis and discussion chapters is grounded.

Chapter 3 covers the methodology of the research, and begins with an introduction to the design and implementation of the pilot study. Since the pilot study served as a guide in the design of the main study, I introduce the methodological difficulties faced and provide a brief analysis of the pilot study in terms of its methodological outcomes. In the second part of the chapter, an explanation is made of the sketch-mapping focus groups, how I incorporated Lynch's (1960) free-hand sketch-mapping study into my research and how I

combined it with creative research methods (Gauntlett, 2007), situating this methodology within the broader literature of visual elicitation.

Chapters 4–7, which make up the third section of this thesis, make an analysis and discussion of the empirical data collected during both the pilot study and the main study. With full awareness that the pilot study should serve only for the consideration of ideas and observations in the field in the design of the main study, no analysis of the pilot study is included within the analysis and discussions of the main study.

Chapter 4 makes a discussion of the findings of the pilot study, and I present my analysis by contextualising location as a sense of place, and discuss four different categories related to the use and sharing of locational information:

(1) navigation and creating a sense of new places,

(2) self-presentation and communicating different aspects of the self through locational information sharing,

(3) renewing old senses of places through recall and recollect, and

(4) exploring different aspects of urban spaces by retrieving locational information.

In Chapters 5–7, I present the findings of the main study and discuss the three main themes that emerged from the sketch-mapping focus groups. In Chapter 5, by grounding the empirical data within Goffman's (1990) well-known "situational analysis" and theory of "presentation of self in everyday life", and Sutko and de Souza e Silva's (2012) theory of "presentation of place" through location-based services and applications, I argue that by sharing locational information, users of mobile and locative media present different aspects of both themselves and places. Building upon the main discussion of the previous chapter, that location is a sense of place, I develop the idea that we use location also as a means of communicating our own identities. Extending Sutko and de Souza e Silva's (2012) and de Souza and e Silva's (2012) analyses of self-presentation through the location and presentation of places, I argue that while what one chooses to share or not share is an important aspect of checking-in, also how often one engages in such activity plays a crucial role in one's self-presentation. Furthermore, I also make an analysis of the specific habits of some of the research participants, such as places they visit most frequently,

places of social significance, as well as how they present their localness by trying to check-in as many places as possible in London. Alongside a historical narrative of the self, focusing mainly on the timing of particular events in one's everyday life, by sharing locational information one can create a *topographical* narrative that emphasises the most important aspects of places and how they communicate different aspects of the self, as in Gaston Bachelard's (1964) "topoanalysis". The central idea in Bachelard's *The Poetics of Space* is that the self can be discovered through an investigation of the places it inhabits, which he refers to as "topophilia" (the love of place) and "topoanalysis" (the investigation of place) (Malpas, 1999, p.5). As such, it can be understood that the main focus of analysis in this chapter is the presentation of the self to others in the form of a topographical narrative of the self.

Chapter 6 builds on my conceptualisation of self-presentation for the future self, and presents an analysis of how one would remember the present self and places in the future by reviewing what was once shared or how they were shared. Situating my analysis of the sharing and use of locational information within the broader research field of memory, place and nostalgia, I argue that sharing locational information results in an autobiographical narrative that blends different elements of place and time. Unlike the topographical narratives discussed in the previous chapter, Chapter 6 uncovers the nostalgic elements hidden beneath each sharing activity that the research participants used later as a tool to reflect upon their past selves.

In Chapter 7, I present my findings related to the navigation and use of locational information in London, with specific focus on such smartphone map applications as Google Maps. As contextualised in the previous chapters as a sense of place, location allows users of mobile and locative media to make sense of new places, and may work as a tool for the transformation of our spatial experiences. Grounding this analysis alongside theoretical debates of spatial cognition and the use of maps as secondary sources within a spatial experience, I argue that users of mobile and locative media can create different experiences of places through the use of mobile maps and by retrieving mobile annotations.

The thesis concludes in Chapter 8, where I make a discussion of the different uses of mobile and locative media in London

CHAPTER 2: MOBILITY AND SOCIO-SPATIAL PRACTICES IN CONTEMPORARY EVERYDAY LIFE

> The more we extend our connection, the more insular we become. The more we control our communication environment, the less is surprise or chance a daily expectation. The more we connect, the more we seek to control the connection. The more we detach from immediate surroundings the more we rely upon surveillance of the environment. The more communication choice offered, the less we trust the information we receive. The more information and data available the more we need. The more individuality we achieve, the more communities we seek. The more we extend our senses, the less we depend upon our sensorium. (Gumpert, 1996, p.41)

Today, the understanding that traditional notions of space and place are equal to physical distance and locality no longer applies, or that they have to be complemented or nuanced to a significant extent (Ek, 2012, p.39). Accordingly, our spatialities and experiences of places have also changed, and part of this change originates from mobility, as argued by Ek (2012), 'place becomes very much constituted in and through mobility' (p.40). On the other hand, the use of contemporary mobile and locative media has altered also how we perceive and experience space, and how we define and represent it. As such, mobility, in this day and age, has become something that has not only changed how we perceive physical distance and physical locality, but also how we experience the social and spatial in everyday life.

Social practices always coexist with spatiality, and one supplements the other (Lefebvre, 1991). Today, it can be said that we experience their relationship at a different level, one at which location and distance begin to connote different structures and levels of social life and identity. This chapter follows the traces of such transformations in everyday life in relation to mobility and mobile communication technologies, and establishes a framework through which today's location-aware mobile technologies, or locative media, may be understood and analysed. Grounded in previous discussions of spatial and mobility turns in social

sciences, this chapter investigates how mobility and mobile communications are interrelated, and the significance of this relationship in the transformations experienced in everyday life and the understanding of social and spatial interactions. A brief discussion is also made of the place of mobile communication technologies within these transformations, as well as how concepts of space and sense of place have changed as a result of this mobile world.

2.1. Mobility and experiencing the urban space

'In a mobile world there are extensive and intricate connections between physical travel and modes of communication and these form new fluidities and are often difficult to stabilise' (Urry, 2007, p.5). In such an unstable world (of fluidities), the terms "mobile" and "mobility" can take various meanings. As Urry depicts, the term "mobile" is a property of things and of people, referring to something or someone that moves or is capable of moving, which is mainly understood as a positive category (Urry, 2007, p.7). On the other hand, something that is mobile can also be thought of as being disorderly, and hence untraceable and harder to regulate socially. Urry (2007) refers to this sense of mobile as the "mob", which can denote 'a rabble or an unruly crowd' (p.8). Thirdly, mobility exists also in the sense of upward or downward social mobility, defining clear-cut vertical hierarchies (Urry, 2007), referring to which Urry says 'There is debate as to whether or not contemporary societies have increased the circulation of people up and down such hierarchies, making the modern world more or less mobile' (Urry, 2007, p.8). Finally, in a horizontal sense of movement, migration (or other forms of semi-permanent forms of geographical movement) can be understood as another type of mobility (Urry, 2007).

Building on these four different understandings of the terms 'mobile' and 'mobility', and analysing them within the context of social interactions and communication activities of everyday life, Elliott and Urry (2010, pp.15–16) suggest the existence of five interdependent mobilities in the production of social life: corporeal movement, physical movement of objects, imaginative travel, virtual travel and communicative travel. As defined by Elliott and Urry (2010, p.16), imaginative travel is 'effected through the images of places and peoples appearing on, and moving across, multiple print and visual media', which is also referred to as "co-presence", affecting the act of mediation and communication in simultaneous

contexts. On the other hand, virtual travel is 'often in real time and thus transcending geographical and social distance', while communicative travel is 'through person-to-person messages via messages, texts, letters, telegraph, telephone, fax and mobile' (Elliott and Urry, 2010, p.16). Accordingly, mobile and locative media, their *being technically mobile,* and also the mobilities that they bring with them into everyday life, such as imaginative, virtual and communicative travel, should be taken into consideration when defining mobility.

Under imaginative, virtual and communicative travel, the understanding of mobility can also be extended based on the mobility of the user, the mobility of the device and the mobility of services, since they can be accessed from any point (Cooper, 2001, pp.24–25). In this thesis, the term 'mobility' is used to refer to the mobility of all three: The mobility of the user refers to the modern individual who has many responsibilities in everyday life and must be mobile to keep up with the fast pace of modern, while the mobility of the device refers to mobile communication technologies that *serve* the mobility of the user. As summarised by Adey (2010, p.xvii):

> The mobility of something moving through space seems to provide a very certain kind of position, standpoint or way of relating – it is a way of addressing people, objects, things and places. It is a way of communicating meaning and significance […] It is the predominant means by which one engages with the modern world.

Mobility, it can thus be understood, maintains a dialectical relationship with transformations in urban space and everyday life, and in this thesis my discussions and analyses will centre on all three different meanings that the terms mobile and mobility connote, being the user, the device and the services. In doing so, an attempt will be made to understand if and how users of mobile media and location-aware applications (which I will refer to as "locative media" from here on in) differentiate between real and mobile space, and how they perceive and construct their presence in relation to locational information.

The concept of mobility and its relationship with space and place, as well as presence, is therefore important while discussing perceptions of space and identity formation alongside and within that space. As a result of transformations in

everyday urban life, we have started to think of cities in terms of the particular sites or moments that construct them (Amin and Thrift, 2002). As argued by Amin and Thrift (2002, p.1), 'the traditional divide between the city and the countryside has been perforated'. It may be argued that mobility demarcates the lines between the urban and the rural, and sometimes even between two cities, in the sense that it allows people to travel from one place to another. Nowadays, it is even harder to distinguish Simmel's (1969) "metropolis psychic life" from that of the rural. As worded by Amin and Thrift (2002), 'if the urbanised world now is a chain of metropolitan areas connected by places or corridors of communication (airports and airways, stations and railways, parking lots and motorways, teleports and information highways), then what is not the urban?' (p.1), while Graham and Marvin (2001, p.10) argue that the 'economic, social, geographical, environmental and cultural change in cities is closely bound up with changing practices and potentials for mediating exchange over distance through the construction and use of networked infrastructures'. Today, urban spaces, which are characterised and enriched by the media environment, ubiquitous computing, and mobile and wireless communication technologies (Aurigi and de Cindio, 2008, p.1), act not only as centres of physical movement, but as hubs of communication technologies, especially mobile communications. It can thus be argued that everyday life in the city has become more fragmented and more speeded up as a result of those distant connections of metropolitan areas with places and corridors of communication. Since the 'so-called "information society" is an increasingly urban society' (Graham, 2004, p.3), focusing on the urban provides a richer context than the rural when analysing the transformations in everyday life.

2.1.2. Mobile nodes: Attachment to places and liberation from places

Today, amid the increased local and global mobility, face-to-face social interactions are supplemented with what Urry (2008) calls an "imagined presence" or "transport to a virtual place", which is actually a means of understanding contemporary technology and communication practices (Aakhus, 2003), especially in the urban space. Hence, in addition to the argument of time-space distanciation, mobility and mediated technologies cause not being self-present, it may also be argued that the very same mediating technologies and mobility have led to an imagined presence that can be achieved by way of the telepresence that those technologies provide.

When considering the experience of a certain place, that place comes to mind not only as the centre of the meaning constructed through experience, but also in terms of its time component (Tuan, 1977). Castells (1989) conceptualised changes in space and time when formulating his theories of "the space of flows" and "the timeless time". As Castells (2000, p.696) argues, 'physical proximity continues to be a major source of experience and function for many people and in many circumstances' and asserts that 'distant, interactive communication does not eliminate space; it transforms it'[14]. He refers to this newly emerging form of space as the *space of flows* (and the "space of places", to define physical proximity and its importance in experiencing everyday life). However, with the introduction of mobile communications into everyday life, physical location has started to lose importance as an obstacle to communication (Haythorthwaite and Wellman, 2002), which, in this thesis, is conceptualised as a *liberation from place*.

That said, in the new mobilities paradigm, places themselves are considered mobile and dynamic (Sheller and Urry, 2006a), and 'Places are about relationships, about the placing of peoples, materials, images, and the systems of difference that they perform' (Sheller and Urry, 2006a, p.214). Accordingly, uncertainty about a physical location, which is supplemented by mobility in urban interactions, can be a reason for the raising of monitoring/locating questions (Townsend, 2001, p.62), and as a consequence, this is still the first thing that comes into mind when talking to someone on the phone – "Where are you?"[15]

Kopomaa (2000) describes this attribute of mobility and transformation in the time/space distinction with a metaphor, referring to this new *mobile society as* a new "nomadic tribe", which, with the elimination of distance, have made an appearance on the urban landscape. 'To the new nomads, no place is entirely foreign, because they can always contact their telefriends and acquaintances wherever they are' (p.6). In other words, the more physically mobile we become, the more we feel the need for newer ways of communication and an ability to be somewhere else "virtually". Within this dialectical relationship, mobile media started to be seen as a significant component of everyday life, but the opposite is also

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[14] It is important to note that Castells first used the notion of 'space of flows' in his book entitled; "The Informational City: Information Technology, Economic Restructuring, and the Urban Regional Process" which was first published in 1989).

[15] For a detailed discussion on people asking the location of the other party during a mobile phone call, see: "Why people say where they are during mobile phone calls" (Laurier, 2001) and "Where are you? Mobile ontology" (Ferraris, 2006).

possible: after checking-in at a random place with your smartphone, your friends, who may not have been aware initially of your whereabouts, can come and say 'hi' if they are nearby. As such, this relationship between physical mobility and mobile communication serves to transform space, as discussed within the concepts of space of flows and sense of place (although it is also worth noting that transformations of the urban space do not occur due solely to the relationship between physical mobility and mobile communication technologies, but with any mode of communication and media):

> Not that long ago, a move from one city to another was marked by a loss of, or at least major changes in, contact with family, friends, and the overall texture of daily experience. However, as more of our interactions and experiences have become mediated through radio, TV, telephones, email and other devices, we can now transport most of our nexus of interactions with us wherever we go. To the extent that people, using phones and e-mail, construct individualised social networks […], the "community of interaction" becomes a mobile phenomenon (Meyrowitz, 2005, pp.25–26).

These connections to places may actually enhance some aspects of the connection (Meyrowitz, 2005). Ridding one's self of cables and being online anywhere and at any time, which was once a dream, has now become a cliché. In terms of wireless and mobile communication technologies, most of these transformations started in the late 1990s,[16] however, it wasn't until the late-200s that academic interest started to increase. 'Sometime in late 2010, the number of mobile cellular subscriptions worldwide exceeded the 5 billion mark, more than doubling since 2005' (Wilken and Goggin, 2012, p.3). Mobile phone use in everyday life, plays a determining role in many social practices, has been quite well analysed.[17] However, as noted by Wilken and Goggin (2012, p.4), 'surprisingly, there has been a great deal less research and thinking on these technologies and the important role of place'. Additionally, as Farman (2012, p.2) argues, 'many discussions of emerging media tend to focus on the device rather than the embodied and spatial actions to which

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[16] In Castells *et al.* (2007), the authors present numerical data about wireless communication technology diffusion, focusing mainly on mobile communications, and argue that mobile phones are the most pervasive form of wireless technology in the 20th Century.
[17] An indicative but not exhaustive list includes: Castells *et al.*, 2007; Ling and Campbell, 2009; Goggin, 2006; Katz, 2008.

our devices contribute'. Hence, as a field of research, despite the growing interest in research into mobile communications, the field is still immature and fertile.

On the other hand, based on the mobilities turn in social sciences and advancements in mobile technologies, I assert that when this research was conducted, a new paradigm shift was already taking place, especially in mobile media and communications studies. This shift, which may be classified as an extension of the spatial and mobilities turns in social sciences, focuses on the importance and role of the use of locational information and place in everyday life. With its roots in the 1980s, after being shaped by communication technologies in the mid-1990s and dominated by mobile and wireless technologies in 2000s, the present decade has seen a significant change in the locus of social research into mobile technologies and place, with particular focus turning to mobile media and locative media. Hence, the paradigm shift in the mobilities turn can best be explained by introducing the term "locative media" to the current literature. Goggin (2012, p.198) conceptualises this paradigm shift as the "locational turn", which he defines as the new direction in 'the works of making place that has been occurring with mobile technologies'. However, before going into detail about the social and spatial practices involving mobile communication technologies and locative media within this paradigm shift, or the locational turn, it is essential to highlight some important discussions on the definitions of space, place and location.

2.2. Defining space, place and location

> If two different authors use the words "red", "hard", or "disappointed", no one doubts that they mean approximately the same thing […] But in the case of words such as "space" or "place", whose relationships with psychological experience is less direct, there exists a far-reaching uncertainty of interpretation (Einstein in Jammer, 1970, p.xii).

The concepts of space and place are sometimes a source of confusion. As Casey (1997, p.x) argues, *place* started to be assimilated into *space* in the 6th century A.D., and as a result, while the former has started to be considered simply as a modification of space, the latter has come to be regarded as an infinite extension. Place and space have many generic qualities. According to Harvey (1993), place can be understood as and used to refer to milieu, locality, location, locale,

neighbourhood, region and territory, while also reflecting on the wide range of its metaphorical meanings, emphasising that 'we internalize such notions psychologically in terms of knowing our place, or feeling we have a place in the affections or esteem of others' (p.4). On the other hand, as Heidegger argues, 'place is the locale of the truth of Being' (Heidegger, cited in Harvey, 1993, p.9), according to which, it is a source of existence, identity and experience. Following this Heideggerian approach, Relph (1976) also conceptualises the understanding of place as an integral part of our existence. Place has been taken for granted, given our existence within in it, which Casey (1997) defines as 'a priori of our existence on earth' (p.x). The importance of place 'leaves place itself an unclarified notion' (Casey, 1997, p.xii). Following this phenomenological tradition, Tuan (1975, p.165) conceptualises space as an abstraction:

> Space is abstract. It lacks content; it is broad, open, and empty, inviting the imagination to fill it with substance and illusion; it is possibility and beckoning future. Place, by contrast, is the past and the present, stability and achievement ... Place is created by human beings for human purposes ... To remain a place it has to be lived in. This is a platitude unless we examine what "lived in" means. To live in a place is to experience it, to be aware of it in the bones as well as with the head.

On the other hand from an anthropological perspective, especially in Augé's (1995) definition of "anthropological place", it is clearly stated that place is in fact a 'concrete and symbolic construction of space' (p.42); which somehow strengthens the argument of place's assimilation into space. However, critical theorists such as Michel de Certeau (1984) argue that as places can transform into spaces, so can spaces also transform into places, with the help of narratives and language (p.65). Space, for de Certeau, is a "frequented place", "an intersection of moving bodies", and claims that 'it is the pedestrians who transform a street (geometrically defined as a place by town planners) into a space' (p.64).

This wide range of academic interest makes it difficult to define space and place, in that the two concepts are 'notoriously complex and fraught' (Wilken and Goggin, 2012, p.5). Edward Casey, in his impressive study *Getting Back into Place*, defines place as being present everywhere, but defined nowhere (1993). Similarly,

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Cresswell (2004) asserts that 'place, then, is both simple (and that is part of its appeal) and complicated' (p.1). On the other hand, as Harvey (1993, p.4) argues, this 'immense confusion of meanings' can also be quite advantageous, in that 'it suggests, perhaps, some underlying unity which, if we can approach it right, will reveal a great deal about social, political and spatial practices in interrelation with each other'.

As a result of this "immense confusion" in the understanding and definition of space and place, location is usually defined as place. As Creswell (2004) argues, although the definition of location is usually subordinated to the notion of place, location and place are not the same thing, in that location is strictly more specific than place (Relph 1976), and 'Place is made up of a number of things that can be specifically located' (May, cited in Relph, 1976, p.4). Cresswell (2004, p.2) explains the difference between place and location with an example from New York City:

> 40.46°N 73.58°W does not mean that much to most people. Some people with a sound knowledge of the globe may be able to tell you what this signifies but to most of us these are just numbers indicating a location – a site without meaning. These co-ordinates mark the location of New York City – somewhere south of Central park in Manhattan. New York and Manhattan are place names with rich meaning. We might think of skyscrapers, of 9/11, of shopping or of any number of movie locations. Replacing a set of numbers with a name means that we begin to approach "place". If we heard that two planes had flown into 40.46°N 73.58°W it would not have quite the same impact as hearing that they had flown into New York, into Manhattan, into the Twin Towers.

Therefore, in everyday English language we usually use the word *place* when referring to a location (Cresswell, 2004). However, 'a place is not just the "where" of something; it is the location plus everything that occupies that location seen as an integrated and meaningful phenomenon' (Relph, 1976, p.3). In agreement with Relph (1976), Cresswell (2004) argues that places are meaningful locations, meaning that location has usually been conceptualized as 'neither a necessary, nor a sufficient condition of place' (Relph 1976, p.29), in that places can also be mobile (Langer, 1953; Sheller and Urry, 2006a). This line of thought degrades the importance of

location in place-making while prioritizing other aspects of place attachment, such as the cultural and emotional meanings.

On the other hand, with the advent of mobile and locative media, location became more discernable and important as a feature of place (the sharing of locational information started to acquire dynamic meanings with the use of mobile and locative media, and statements or markers of location began to contribute to the sense of a place). As argued by de Souza e Silva and Frith (2012), locations can gain meanings, in that 'locations are important aspects of people's identity, but locations also have identities of their own that are formed through a combination of factors' (de Souza e Silva and Frith, 2012, p.167). They assert that the place acquires different meanings, not only for those who share locational information, but also for those who receive it. It could be argued that locational information is an important attribute of a place that plays a part in place-making, which constitutes our understanding of a place. Hence, location and mobility can play a vital role in the constructing and reconstructing of places, in that 'geographical position is a relevant factor that partially forms the identity and meaning of place' (de Souza e Silva and Frith, 2012, p.167).

The location of a particular place is distinct from that of every other, and hence that place's inhabitants. As such, it is important to think of a specific place in relation to the people who live in it, in that they create a meaning for that place through certain physical, social, cultural and spatial interactions, with locational information being one such element that can be used to identify such places. Although theories of space revolve around social, cultural, political, economic and spatial practices, this study analyses only the social and spatial practices of space in relation to the use of mobile and locative media in urban spaces.

2.2.1. Social space and spatial practices

It is almost impossible to think of an urban space without the above-mentioned social and spatial interactions. As Lefebvre (1991, p.12) theorised, '(social) space is a (social) product', although the understanding of space as a social construct can also be traced in its anthropological definitions. For instance, Augé's (1995) description of the "anthropological place" conveys that place should be thought of in terms of its inhabitants as well as its physical characteristics, which leads to a social and immaterial construction of place as being 'occupied by the indigenous inhabitants

who live in it, cultivate it, defend it, mark its strong points and keep its frontiers under surveillance' (Augé, 1995, p.35). Tuan (1977), a humanist geographer, also highlights the construction of a specific place in relation to the social space: 'Space and place are basic components of the lived world; we take them for granted. When we think about them, however, they may assume unexpected meanings and raise questions we have not thought to ask' (p.3), meaning that a space becomes a place when it is experienced both physically and emotionally. As such, space can be considered as a multiple, fragmented and socially constructed phenomenon (Graham and Marvin, 2001), assumptions which I use in the conception of space throughout this thesis.

Lefebvre (1991) defined social space as 'the space of society, of social life' (p.35), meaning that the social space is also a part of the urban space. Norberg-Schulz (1971), in agreement with Lefebvre (1991), defines the urban space as the space that is lived-in, referring to it also as "existential space". For Norberg-Schulz, the "existential space" is a composite of many spaces, such as a "pragmatic space" in which man meets his biological needs; a "perceptual space" and the more stable "space schemata"; an "abstract space" of pure logical relations; a "cultural space" formed by the collective activity of the community as a community; and an "expressive" or "artistic space", as a field in which man's intent to change his environment is manifested (Lefas, 2009, p.124).

> Pragmatic space integrates man with his natural, 'organic' environment, perceptual space is essential to his identity as a person, existential space makes him belong to a social and cultural totality, cognitive space means he is able to think about space, and logical space … offers him a tool to describe others (Norberg-Schulz, 1971, p. 11).

Both Lefebvre (1991) and Norberg-Schulz (1971) base their arguments on the urban space, and it is therefore practical and reasonable to refer to the "human existential space" as the "urban space" that hosts biological, perceptual, abstract, physical, cultural and expressive spaces simultaneously (Norberg-Schulz, 1971). This precedes Heidegger's phenomenological space, or in other words, spatiality.

2.2.1.1. Spatiality

'Spatiality might be crudely characterized as our experience of space as we act within it. Heidegger argues that one can only come to know any more abstract conception of space – such as that described as "physical space" – through innate spatiality' (Light, 2009, p.195). Heidegger (1963) opposes the separation of man and space. In his influential work *Being and Time*, he uses his famous metaphor of the room door to envision how people can become/be parts of a space: 'When one goes to open the door of a room, one is already part of that room. A person already pervades the space of the room they are about to enter' (Heidegger, 1963, p.359). He argues further that man's existence is inseparable from space, which he explained by introducing the concept of "dwelling" *(Aufhalten)*. 'For Heidegger, the notion of dwelling, *wohnen*, is precisely this way of inhabiting the world in a lived, experienced manner instead of one of calculative planning' (Elden, 2004, p.92). As Lefas (2009, p.28) argues, dwelling occurs 'in the full sense of this world', and the space in which it occurs is the 'space formed of places', thus it cannot be described 'by means of algebraic or geometric formulae'. In this regard, man dwells in places, not in an abstract space, which builds his existential relationship with his social and spatial environment. Lefas (2009, p.8) also argues that Heidegger's dwelling is 'connected with every act of construction, every act of building', which places itself straightforwardly in the discussions of architecture, built environment and the urban.

In explaining space and spatiality, Heidegger also uses the word "Ent-fernung", which can be translated into English as *de-severance* (Heidegger, 1962, pp.138–139), although as Dreyfus (1991) notes, the literal translation of Ent-fernung is *remoteness* or *distance* (pp.130–131). Using these two concepts and adapting them to mobile communication technologies, it can be said that these technologies *bring the distant other closer.*[18] Thus, in Heideggerian terms, mobile communication technologies are able to establish and overcome distance. They bring the ones or the things in the range of the user's concern, just as 'Dasein brings things close in the sense of bringing them within the range of its concern' (Dreyfus, 1991, p.131). As also briefly discussed by Tuan (1977, p.12), 'space is experienced directly as having room in which to move', which he relates to direction and movement (and which

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[18] Bringing the distant other closer has been discussed by Heidegger (1963), especially in his discussions on Dasein and Dasein's spatiality.

can also be conceptualised as mobility). Tuan (1977, p.12) argues that 'space is given by the ability to move', defining place as a special kind of object, 'It is a concretion of value, though not a valued thing that can be handled or carried about easily; it is an object in which one can dwell' (Tuan, 1977, p.12).

2.2.1.2. The physical and the social

Moving away from philosophy and humanistic geography into the field of media and communications, for example, human-computer interaction, the distinction between space and place is anticipated typically as the distinction between the physical and the social (Dourish, 2004). For more contemporary thinkers, such as Dourish (2004, p.89), 'while "space" refers to the physical organisation of the environment, "place" refers to the way that social understandings conveyed an appropriate behavioural framing for an environment'. He argues that 'it is not for nothing that we use the term "out of place", but not "out of space"; the idea of "place" often plays a much more central role in determining behaviour' (Dourish, 2004, p.89). As also discussed by Casey (1997, p.xiii), 'place brings with it the very elements sheared off in the planiformity of site: identity, character, nuance, history'. That said, it is hard to distinguish between different kinds of space (either geometrical, Euclidian, infinite or social), as the boundaries between the material and the immaterial have started to disappear. In this regard, as discussed by Elden (2004, p.96), 'in order to make progress in understanding space, we need to grasp the concrete and the abstract together', which are basically 'lived experiences of place and abstract representations of space (such as physical, political, cultural and historical)' (Brown and Perry, 2000, cited in Gay, 2009).

Among the above-mentioned definitions and discussions of space and place, what is common to many is that space is associated more with physical interpretations, while place is associated more with the social and the emotional. Hence, today's mobile and locative media, acting both as a social and physical space, should be thought of and analysed under these conceptions. While a physical space can be defined in locative terms, it is hard to think of space as a separate phenomenon to human interactions and their attributed values and attached meanings in a social world. Space is ontologically volatile, as in everyday life 'the social and the physical are always intertwined' (Dourish, 2004, p.99). Although many disciplines and theorists have tried either to differentiate space from place or to find

similarities between them and use them interchangeably, in this thesis, space and place are not discussed as a dichotomy. It is believed that these two notions maintain a dialectical relationship that is based on both their oppositions and similarities, and that this is carried also into the discussion of digital/cyberspace. That said, most of the discussions on the digital realm refer mainly to the word *space,* and use it rather than *place* when discussing reality, virtuality and/or mobility. For instance, the Internet and the World Wide Web are discussed not as cyber*place,* but as cyber*space.* The Internet, as the fastest growing communications medium in the late 1990s, was sometimes referred to as an anti-*spatial* world,[19] and thus it can be argued that in new media and digital media, space is used to refer to something that is *abstract*, as something in which the user can *dwell*.

In this thesis, I discuss different constellations of space and place under the notion of "sense of place". My use of this approach not only provides a framework to overcome the confusion caused by different disciplinary descriptions and approaches to space and place, but also deals more with the users' experiences and perceptions of space, and their affections and social interactions through mobile and locative media when interacting with the social and spatial environments.

2.2.1.3. Sense of place

> […] the word 'sense' and the word 'place' have two meanings each: 'sense' referring to both perception and logic; 'place' meaning both social position and physical location (Meyrowitz, 1985, p.308).

> We are always in place, and place is always with us (Meyrowitz, 2005, p.21).

> It seems commonplace that almost everyone is born with the need for identification with his surroundings and a relationship to them – with the need to be in a recognisable place. So sense of place is not a fine art extra, it is something we cannot afford to do without (Nairn, 1965, p.6).

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[19] The anti-spatial world is defined by Graham (2004, p.7) as a 'world where digital streams of information, data, images and video – manipulated and processed through an infinitely complex global skein of computer networks which pervaded every domain of contemporary society – seem to operate like some giant "nervous system" for the planet'.

The term "sense of place" has been widely employed across many disciplines and in different contexts, just as the conceptions of space and place. Sense of place is usually associated with the identity of a place and the self-identifications of people both with and within that place (Nairn, 1965 cited in Relph, 1976, p.63). As such, sense of place can be analysed under 'a social-psychological model of human-environment interaction' (Stedman, 2002, p.563).

Sense of place refers not only to positive or negative feelings about a place, but also derives from the totality of one's individual life (Eyles, 1985). It lies within our existential relationship with the world (Simonsen, 2008, p.14) and can take various forms, based on the perception of the individual. As Relph (1976, p.63) discusses, 'the most meagre meaning of "sense of place" is the ability to recognize different places and different identities of place'. The identity of a place provides individuality to a place in comparison to other places as separable entities, and allows a specific place to gain some distinction (Lynch, 1960). Accordingly, because the location of a particular place is distinct from that of others, locational information may be one of many elements that is used to identify different places. Consequently, the location of any specific place can connote and communicate different attributes of that place, and thus, can gain meaning; and a meaningful location can also be understood by its sense of place, since it means 'the subjective and emotional attachment people have to place' (Agnew cited in Cresswell, 2004, p.7). Place attachment is a multi-faceted concept that can be defined as a 'bonding that occurs between individuals and their meaningful environments' (Scannell and Gifford, 2010, p.1). Central to the concept of place attachment are the notions of affect, emotion and feeling (Altman and Low, 1992), but for some scholars, place attachment is a sub-concept of the sense of place (Scannell and Gifford, 2010).

The meanings of a place are created through human interactions and experiences. According to theories of the "social construction of space", place can be constructed socially (Lefebvre, 1991), such that the sense of place is *only* a social phenomenon. Within this tradition of thought, 'places are never finished, but are always becoming' (Simonsen, 2008, p.15). As argued by Relph (1976, p.47), 'the meanings of places may be rooted in the physical setting and objects and activities, but they are not a property of them – rather they are a property of human intentions and experiences'. On the other hand, the meanings of places and our identities are built together, as people identify themselves with a spatial environment when they

experience that environment as meaningful (Norberg-Schulz, as cited in Lefas, 2009, p. 129). The identity, and thus the sense of place, can be constructed socially by way of spatial practices, representations of space and representational space itself, as discussed by Lefebvre (1991), referring to this as "the conceptual triad".

Lefebvre (1991, p.33) uses the term "spatial practice" when talking about the production and reproduction of social formations, and refers to "representations of space" to explain how the relations of social production are linked to knowledge, signs, codes and *frontal* relations, and "representational space" to describe the complex symbolisms 'which may come eventually to be defined less as a code of space than as a code of representational spaces', such as art. According to Lefebvre (1991), the concepts in the triad are interrelated and can influence each other. For instance, a representational space, i.e. a work of art may influence an individual's spatial practices. Understood in this way, a location-based smartphone application that reflects the image of a building along with details about its history and use on the same screen can influence how a person experiences that space. From this it can be understood that how an individual experiences a given place, as well as its location, function and occupants, are important components in creating the essence of that place, and in turn, its meanings and significance. This element of meaningfulness in any given spatial environment when speaking of sense of place can also be understood as the "spirit of place" or the "genius loci" that assigns a deeper, ritualistic and mythical meaning to a place.

On the other hand, in order to understand the concept fully, it is also possible to define sense of place through individual meanings of the words "sense" and "place". Meyrowitz (1985), in his influential work *No Sense of Place*, argues that the meanings of the words "sense" and "place" together represent a significant concept, and form the foundations of two basic arguments:

> (1) that social roles (i.e. social "place") can be understood only in terms of social situations, which, until recently, have been tied to physical place; and (2) that the logic of situational behaviours has much to do with patterns of information flow, that is, much to do with the human senses and their technological extensions (p.308).

As defined by Meyrowitz (1985), "perception" and "logic", as the two meanings of sense, and "physical location", as one meaning of place, are questioned in this thesis in an attempt to understand everyday social and spatial interactions in relation to the use of mobile and locative media in the urban space. One cannot consider the matter of the construction of place without taking into account personal and social associations with space, which are influenced and shaped also by an individual's position in society. That said, in investigating and shedding light on specifically the use of mobile and locative media and their effects on the perception of space in everyday life, the attributes of "social position", as the other meaning of place defined by Meyrowitz, do not fall within the scope of this research, and so has been left out of the analysis and discussions.

Meyrowitz (1985) explains further the relationship between social situations and places by employing Goffman's conceptualisation of the "situation":

> Sociologists have long noted that people behave differently in different social "situations", depending on *where* one is and who one is *with*. Implicit in such an approach is the idea that behaviour in a given situation is also affected by where one is *not* (p.viii).

Consequently, while social interactions may affect how one perceives any given space, and hence its sense of place, any given place can also establish an understanding of the surrounding social environment and the interactions within that environment. Hence, the spatial environment also affects individual perceptions of space and any associations made with specific places, which can be conceptualised as *the way we experience the everyday world*.[20] According to Relph (1976, p.61), the identity of a place consists of three interrelated components – 'physical features or appearance, observable activities and functions, and meanings or symbols'. In a similar line of argument, Farman (2012, p.17) asserts that 'spatial relationships have always determined the way we understand ourselves, our place in the larger context, and the cultural meanings infused into gestures, objects, and sign systems'. The perception of space and the meanings attached to a certain place

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[20] A detailed discussion on the 'embodied interaction' and how people perceive their environment differently with different interactions and within a certain space can be found in Dourish, 2004, p.17.

change and vary from one person to another, depending on the experiences and associations built with and within that space.

Relph (1976) discusses a similar meaning of the term sense of place (as the one used by Lynch, 1960), defining it as the *authentic*, genuine identity or sense of place. Relph also defines the *in*authentic, or the contrived and artificial sense of place, as the opposite of the authentic sense of place that provides the individual with a sense of belonging in the community. This sense of belonging is believed to construct personal identities, and in turn, communities (Relph, 1976, pp.65–66). Authenticity, Relph argues, lies in the directness of the genuine experience, which is *not* 'mediated and distorted through a series of quite arbitrary social and intellectual fashions about how that experience should be' (Relph, 1976, p.64). Referring to Heidegger (1963), Relph (1976, p.28) defines authenticity in phenomenological terms, arguing that the meaning of a place, or its authenticity, 'comes from the existential and perceptual places of immediate experience'. In a contrasting argument, the inauthentic sense of place has also been discussed either as having *no* sense of place or as "placelessness" (Relph, 1976, pp.82–121). Relph (1976, p.82) defines having *no* sense of place as 'an inauthentic attitude to place', and adds that 'it involves no awareness of the deep and symbolic significances of places and no appreciation of their identities'. Within this tradition of early humanist geography in the 1970s, as Cresswell (2002, p.12) argues, 'place was seen as the root of human identity and experience and was often too particular and too exclusionary – not taking the sexed and raced differences of experience of being in the world into account'. Hence, having *no* sense of place was associated with *unrootedness*, especially in Tuan's (1977) works. This exclusionary attitude towards the understanding of place and human existence was later extended to the modern understanding of mobility and mass media by Relph (1976), who gave strong emphasis to a *lack* of meaning, commitment, attachment and involvement. However, in the works of Relph, mobility is not automatically associated with placelessness, in that even for short periods of time, he argues, human beings can establish a sense of place (Cresswell, 2002, p.13).

Gumpert and Drucker (2007, p.12) have suggested the use of the term "a-location" as a consequence of media mobility: 'A-location refers to the redefining of social space and psychological presence with its potential emancipation from the

physical place'. The release of social space from the physical space has led to another form of presence along with "dis/replacement":

> The "wired" individual entering public space is physically located in immediate surroundings and simultaneously disconnected from that physical environment. What we have is psychological disconnection prompted by media connection. Public spaces provide interactional potential, contacts both welcome and unwelcome. Psychological presence, a state of subjective perception, is filtered through the mediated experience. Presence, the conscious state of awareness and attendance, shifts back and forth from the physical to the media space (Gumpert and Drucker, 2007, pp.14–15).

Urry (2007) agrees with this idea, that one consequence of new communication technologies is a reduced need for physical movement (p.17). Additionally, as Kopomaa (2000, p.102) discusses:

> One foretaste of the digitality of the information age is the new meaning of the concept of address. Of a person's five addresses, four may be electronic: telephone, telefax, mobile phone and e-mail. The telephone number is a virtual address comparable to street coordinates. Nowadays, it is possible to live, spend time, work in either one or several places ... the need to name urban places or specific stretches of street may increase, so as to be able to pinpoint precisely one's special position.

Hence, it can be argued that starting with the "tele" and culminating in the "mobile", information communication technologies and mobile media, in this sense, *multiply* the practices of mediation.

2.3. Transformations in communication practices: From "tele" to "smart" phones

According to Katz (2006), the mobilisation of the telephone began with the diffusion of the phone booth, which merged the convenience of location, the privacy of the user and the containment of performance. As Katz (2006, p.51) argues, seen as a socio-technical artefact, 'the phone booth conjoined a sense of

place for users to communicate to distant others, as well as degrees of separation from immediately co-located others'. In this regard, the resemblance of the phone booth to the mobile phone, it can be argued, originates from these two aspects of the (tele)phone; both provide contact with distant others, while also separating people from the co-present others and helping with *avoidance.*[21] On the other hand, mobile technologies are considered to be an integral part of everyday life, meaning that they are not only carried around, but are also responsible for many social and individual interactions (Ito *et al.*, 2005).

Individuals use telecommunication and mobile communication technologies not only to keep track of their significant others, but also for maintaining their social relationships (among many other uses, such as in emergencies, which in turn can make us feel secure and safe) or even establish new ones. As such, by helping their users maintain social relations, mobile communication technologies have gained more significance in everyday life. As argued by Ito (2005, p.1), 'mobile communication is not so much about a new technical capability or freedom of motion, but about a snug and intima techno-social tethering, a personal device and communications that are a constant, light-weight, and mundane presence in everyday life'. Based on a study conducted in Japan, Miyata *et al.* (2005, p.146) argue that 'ethnographic studies of webphone use indicate a concentrated, active use of mobile phones to expand and enhance contact with close friends and immediate family.' It can also be argued that these mobile communication technologies, rather than connecting different physical places, actually connect people. Hence, 'the person has become the portal' (Miyata *et al., 2005,* p.161).

Mobile phone users started being able to interact in ways never before possible with the advent of devices that possess both communication and computing capabilities (Rheingold, 2002, p.xii).[22] Smartphones with always-on Internet features have added new ways of use both to the Internet and to the device itself, which in turn has made them more popular in many ways than other mobile technologies that offer only a *connected* presence.

According to their needs and usage patterns, users of mobile communication technologies can alter the designed use and functionality of their

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[21] For a detailed discussion on avoidance, see: Katz, J. E., (2006). *Magic in the Air: Mobile Communication and the Transformation of Social Life*, p.3.
[22] In this context, smart phones can be defined as devices that merge the functionalities of Personal Digital Assistants (PDAs) with mobile phone functionalities, offering ubiquitous computing as a result.

devices. Programs can be written for the operating systems of mobile phones, as is the case for personal computers, and this means that more third-party applications are available for these phones (Livingston, 2004, p.48), giving users a wider range of choices and flexibility, although they are still restricted by the number of available applications. 'The range of appealing applications is increasing rapidly and it spans across urban navigation, sudden events management, cultural heritage information – through to entertainment and peer-to-peer communication' (Papakonstantinou and Brujic-Okretic, 2009, p.121). As Livingston (2004, p.49) discusses, the way people use mobile phones in everyday life has begun to resemble how they use Swiss Army knives – 'as devices that they remove from their purses, pockets or holsters in specific situations to help them perform specific tasks'. The tendency to customize content and/or to create new ways of using the provided technology other than designed and predefined uses is also discussed by Castells *et al.* (2007, p.2), 'we know from the history of technology, including the history of the Internet, that people and organizations end up using technology for purposes very different from those initially sought or conceived by the designers of the technology'. As also discussed in Oksman (2010, p.13),

> It is important to note that both technology and users have influence on each other; technology is not something fixed which only adjusts to the everyday life of people: users interpret and develop the usages of devices and the actual usages are rarely something that has been planned at the desk of designers.

This tendency to use a technology other than for its intended use, which does not only apply to telephones and mobile phones, is more visible in the case of downloadable applications for the customisation of smartphones. Today, you can carry a phone that works as a computer, and leave at home any other technological devices that you might need. You can scan, amend your calendar, send and receive emails, faxes and texts, present, play games, calculate, shop, keep up-to-date about traffic and weather, watch TV, comment on your friends' photos on Facebook, take photographs, record videos and share them on YouTube or MySpace, tweet the latest news and act as a journalist in the street, find your way via Google Maps and other GPS navigation software, take notes during meetings, prepare a feature story

or your diary as a Word document, listen to music while you travel, or watch a movie on the train. It is this multifunctionality that has caused users to become wholly attached to and dependent upon their smartphones, despite the fact that smartphones may be unsuitable for certain tasks, such as typing long emails or documents – not only because of the lack of functionality, but also because of its design and usability. However, as Kopomaa (2000) argues, the "portable magical charm" in the mutual relationship with mobile phones, as the virtual embodiment of a "miniature world", may have increased dependency on them.

In particular, it is the ability to access the Internet with a smartphone that adds another dimension to this so-called charm, and it is no longer possible to think of these technological devices as separate from the Internet. Smartphones changed the nature and use of the Internet and the distinction between virtual and real space. Kopomaa (2000, p.20) argues that:

> 3G mobile phones with an always-on Internet connection; location-based systems; the capacity to record and send video, still pictures, and text messages; and the ability to download all types of content allow users to import almost any type of information and inject it into any situation. Therefore, mobile phones also expand what the Internet can be.

Also, as argued by Oksman (2010, p.17):

> Recent technical developments have enriched mobile phones with text messaging options, larger colour screens, digital camera, mms messaging, video phoning – all of which offer mobile phone users the tools for digital storytelling. Besides this, there are various other multimedia functions on the mobile phone, such as the possibility to browse the Internet, produce content for social media sites, read text news, download music and videos and watch TV broadcasts on the phone, which have extended the dimensions of the mobile phone as a social and mass medium.

As discussed earlier, smartphones allow their users to do many daily activities, although users require an Internet connection if they wish to configure and update their phones (Goggin, 2006, p.9). The content that is made available

through mobile Internet and mobile phones has started to be seen as more important than the hardware, design and different functional features that are used to reach a specific media audience, in that most of the information used by communication technologies has almost the same physical features. As soon as mobile phones started to become diffused into everyday life, more users wanted to use them as a means of getting online; and these days, it is difficult to differentiate between mobile phone users who use this technology for placing a call or sending text messages, and those who use it for Internet access (and at some points, even using the Internet to place phone calls). As a result, a change occurred in media and communication practices related to the increased usage of mobile Internet, as well as a shift towards mobile media of such common practices as TV and radio broadcasting, advertising and journalism.

2.3.1. Changes in the perception of public and private space

Phenomenally speaking, mobile communication technologies (along with many other technologies that are used in everyday life) can be defined as objects that we inhabit, and which become part of us, pervading our relationship with other objects around us. As Dreyfus (1991, p.64) argues, 'our most basic way of understanding equipment is to use it […] Heidegger calls this mode of understanding "manipulating"'. In attempting to understand contemporary mobile communication practices in relation to Heidegger's notion of space and spatiality, one can talk about the manipulation and transparency of the equipment (mobile and locative media) and the transparency of Dasein (the urbanite). Hence, when a person uses a smartphone, either in a specific place or while on the move, one can define how that person perceives and understands both the mobile device (physically) and the surrounding spatial environment. However, as Dreyfus (1991, p.64) argues, 'when we are using equipment, it has a tendency to "disappear". We are not aware of it as having any characteristic at all'.

This tendency of equipment to 'disappear', as argued by Dreyfus, can also be interpreted as an immersion into the context of new media studies. The immersive and interactive relationship between the user and their mobile devices can change both the perception of a specific space and the sense of a place. As Fortunati (2002) argues, the mobile phone has been seen as having a crucial role in the technological transformation of time and space, with wide implications for the

frameworks of society, given the suggestion that our principal perceptions of time and space are changing due to mobile communications. This change can occur either as a result of *communicating about a place*, *communicating through a place* or *communicating about and through a place,* as argued by Humphreys and Liao (2011, pp. 407–423).

As also discussed by Ling and Campbell (2009, p.1), 'the proliferation of wireless and mobile communication technologies gives rise to important changes in how people experience space and time', and they argue that these changes can be observed in many realms of everyday life. Based on their arguments, it is possible to categorise these changes as transformations of the public into private space, and vice versa; the blurring of lines demarcating one's working and personal life; and the new patterns of coordination and social networks (Ling and Campbell, 2009). These three changes, which can be traced in everyday life, are important in developing an understanding of how users perceive space and time during their daily interactions both with each other and with their mobile devices. It is also common to argue that mobile communication technologies, in general, have changed how we perceive public and private space, especially since the launch of mobile phones.

Within the mobile information society, as defined by Kopomaa (2000), the social aspects of the use of mobile technologies have started to impact upon the conventional methods of communication. Mobile communication technologies alter our experience of a place, not only because they are portable, but also because they provide a connected form of presence that can help their users establish new relationships and maintain old ones (which is sometimes hard to do in today's highly mobile world, in which many people within our social environment are seen either as transient or away). On the other hand, due to the increased pace of life of the modern age, mobile communication technologies can serve as interfaces that allow people to explore new ways of experiencing a place (social space), while also acting as tools that assist us in avoiding the people around us (such as listening to music on a train while commuting, playing a game while waiting for someone, checking emails on the way to work). As such, it is important to analyse with a critical eye the changes that mobile communications technologies have introduced into our everyday life, especially in urban spaces, keeping in mind how they have altered our sense of place and our engagement in social interactions while celebrating the ways they have made our lives easier.

During a private mobile phone call in a public space, we somehow isolate ourselves from the social and spatial environment that surrounds us, by either moving into a less crowded area or just ignoring the physical presence of others. In this way we create a "micro place" (Dreyfus, 1991) that is special for that specific phone call during a specific period of time. Humphreys (2008, p.116) analyses these micro places and the transformation of public space into private space by employing Georg Simmel's "inner" and "outer" space concepts:

> Inner space refers to the degree of social intimacy or social distance between people. In other words, inner space concerns proximity in social and emotional terms. Inner space is described on a continuum from intimate (very close socially and emotionally) to unknown (socially and emotionally disconnected). Outer space refers to the physical distance between people in public space. Simmel describes outer space as a continuum from disparate (physically distant) to co-located (in the same physical location).

Humphreys' discussion of Dodgeball, employing Simmel's concepts as a means of understanding mobile social software applications, has shown clearly how users interact with each other and how they perceive and transform their current place, both physically and virtually, which can also give clues related to the transformation of public into private space. In another interpretation of this transformation, Gumpert and Drucker (2007, p.13) argue that 'public interaction is being transformed into "disembodied private space" by mobile technologies. Human beings have always constructed their own sense of space as they enter a public place'. Therefore, even if it is usually the mobile communication technologies that are thought of as changing and transforming their users' perception of space and how they arrange their interactions accordingly, this is also a natural characteristic of social interactions.

Many studies into the use of mobile communication technologies argue that they alter the natural characteristics of social interaction by creating an intertwined sense of place. As an example, in a study conducted in Tokyo, London and Los Angeles by Ito *et al.* (2009), it was found that 'almost all of the research participants carried around devices and media that were meant to create a cocoon that sheltered them from engagement with the physical location and co-present others – a private

territory within the confines of urban space' (p.74). Based on the findings of their studies, Ito *et al.* (2009) argue also that mobile communication technologies and mobile media provide an environment that is personalized and attached to that specific person, rather than to the physical place. In this sense, how users of mobile media (such as books, MP3 players, phones) and mobile communication technologies (such as PDAs, laptops, phones) transform the constructed space and how they can control their presence in a place can be referred to as "cocooning". As discussed by Dreyfus (1991, p.133), this can also be described and analysed by way of a phenomenological approach to nearness and distance:

> Another determining characteristic of nearness is interest. One feels the touch of the street at every step as one walks; it is seemingly the nearest and realest of all that is available, and it slides itself, as it were, along certain portions of one's body – the soles of one's feet. And yet it is farther remote than the acquaintance whom one encounters 'on the street' at a 'remoteness' of twenty paces when one is taking such a walk.

In this regard, mobile communication technologies can cause the immediate surroundings to seem distant, while bringing the physical distant nearer. One can be physically present in one place, but by engaging in different activities or interacting with a mobile device, one can also be mentally present at another place, even if that place is virtual. As Gumpert and Drucker (2007, p.19) argue 'the mobile telephone, for example, increases the number of people who psychologically can inhabit a space, but also decreases the number of people who can effectively communicate in that same space without creating noise'. If cocoons are described as "micro places", it is possible to imagine every individual having their own personal private space within a shared public space. Hence, these micro places are mobile, in that their individual carriers cannot make a solid prediction or have any idea where one can actually be or what one is doing while interacting with the (physically) distant others through mobile communication technologies. A person talking on a mobile phone or interacting with a social network via his/her smartphone while on the move usually neglects what is actually going around them, as a result of their immersion into the other context, the context of the distant other.

Dreyfus (1991, p.134) argues that 'for something to be near it must be both something I am coping with and something absorbing my attention'. Consequently, cocoons created through mobile communication technologies, it can be said, shape perceptions of what is distant or near, and thus, public and private space in everyday life. In a similar vein, Arnold (2003, p.243) argues that 'if the phone user hybrid is to be geographically mobile and still perform communication functions, it must also be fixed in place – in particular, fixed in what Castells (1996) calls "the space of flows".' When making a phone call, especially on a mobile phone, one knows who is likely to answer the phone; but in the case of mobile phones, the users do not know "where" they are calling. They are phoning a specific individual, but at the same time, the phone numbers that actually represent them. Furthermore, one does not need to memorize those phone numbers, as they are retained in our smartphones. As a result, what is left for the users is to picture the other on the phone and to ask where s/he is, which allows them to be 'co-present' in their space and share that space with them simultaneously.

Arminen (2009) analyses mobile technologies and the cultural patterns of their usage, leading subsequently to cocooning or micro-places. He argues that 'mobile technologies and the cultural patterns of their usage have evolved at a tremendous speed, but the elementary characteristics of usage of mobile communication technologies have remained stable' (Arminen, 2009, p.89), classifying these elementary characteristics of usage as: 'Communication, time-saving, and time-killing' (Arminen, 2009, p.89). His particular focus is on these characteristics of mobile and smartphones; yet it is possible to broaden this classification. Owing to the availability various multimedia features, smartphones are used in different ways, and are used as basic tools of communication both online and offline (here, basic phone functions such as placing a phone call and texting are emphasized), as "time-saving" technologies (for both work and leisure time) and as "time-killing" devices, such as for listening to music, playing games, reading books, or as a way of cocooning and avoiding undesired interactions with others, as discussed by Ito *et al.* (2009).

It is now possible to add the location-based features of mobile communication technologies as a fourth category/classification: "locating". Locating, as a fourth category, can be discussed either as a new means of interaction and communication with new/available networks, or as a means of following,

pinning down or tracking. Although Arminen (2009) does not talk about these characteristics as they are used in this study, he underlines the fact that mobile and smartphones have altered existing communication patterns and practices: 'Despite partially failed hopes on mobile broadband, mobile communication has become ubiquitous. It alters existing communication patterns, enables new kinds of contact between people, and yet remains embedded in the prevailing social relations and practices' (Arminen, 2009, p.89). Hence, in this thesis, I point out that mobile and locative media also cause these new kinds of contacts and interactions.

2.3.2. Coordination of everyday life and dependency on mobiles

The changes that mobile and wireless communication technologies have brought to our experience of everyday life are not only analysed in terms of the blurring boundaries of the public and private. As Ling and Campbell (2009) argue, having mobile communication technologies with us most of the time can convey the message that we are reachable, and thus available for communication at any time and at any place. This affects how one coordinates everyday life in both work and leisure activities. These days, people can phone, text, send multimedia or instant messages, and tweet each other about the venue and time of a specific activity, leading to flexibility in the coordination of spontaneous relations, making use of the flexibility that can be attributed our mobilities.

Since carrying mobile communication technologies conveys the message that one is available for communication at any time, users of these technologies inevitably carry their workplaces into their personal lives. Although this thesis does not focus primarily focus on this boundary between work and personal life, it is important for us in our understanding of space as a part of everyday life. By saying that there is a boundary between our workspace and our personal life/space, issues of telepresence and co-location come into mind. Thus, the second important change brought about by mobile communication technologies, as discussed by Ling and Campbell (2009), is discussed in this thesis not to show how mobile and locative media blur these boundaries, but to show how those boundaries among different types of spaces can change with the usage of these technologies.

As Katz (2006) argues, the modern individual, as being a part of this mobile information society, experiences the ability to control daily complexities with the help of mobile communication technologies, but at the same time realizes the real

potential of being able to do that. In other words, carrying a mobile with them all the time makes the user sometimes feel empowered. This can also explain why users of mobile communication technologies may feel "unsecure" when they are lost. In a study investigating the motives associated with the adoption of mobile phones, Ling and Haddon (2003, p.246) argue that safety and security is one function brought by mobile phone use, listed alongside accessibility, display and coordination. Cumiskey (2008, p.25) also discusses the importance of coordination, accessibility and display, suggesting that 'the psychological sense of always having someone with you (via the mobile phone in the pocket) is very powerful. The fact that any user can immediately call someone, fire off an email or text message, means they have constant access to a witness who can share an experience.'

The importance of mobile communication technologies in coordinating our everyday lives is not based only on their generative nature, which allow users (to some extent) to customise software and content, but also on their becoming *extensions* of their users. 'Hence, as elements of daily routine, wireless technologies, especially the mobile phone, are perceived as essential instruments of contemporary life. When they fail, users tend to feel lost because of the dependency relationship that has developed with the technology' (Castells, 2007, p.77).

> When a medium becomes part of everyday life, it is in certain ways – in its 'everydayness' – 'de-problematized'. After initial eruptions, which most media technologies experience before they are incorporated into everyday life, people do not only get used to the medium, but they suddenly cannot imagine living without this medium any longer. This applies especially to the mobile phone (Höflich and Hartmann, 2006, pp.11-12).

This dependency relationship shows just how synchronized daily activities with mobile technologies can be, and how they have become important, and for some people, even indispensable. In a study conducted by Turkle (2008), a BlackBerry user said; 'I glance at my watch to sense the time; I glance at my BlackBerry to get a sense of my life' (p.129). The body acts as an integral part of the technology and vice versa (Campbell, 2008, p.153); and so for some people, to some extent, the body becomes dependent on the mobile technology and forms a symbiotic relationship with mobility. Kopomaa (2000) discusses this pervasive

nature of mobile technologies and the dependency on them as part of a society, which he conceptualizes as the "mobile information society". That said, it would be an exaggerated assumption to consider everyone as a mobile technology user, because a more important component in the diffusion of a particular technology is its *availability* and that of the associated *infrastructure*. As stated by Sarker and Wells, '[...] individual characteristics, technological characteristics, communication task characteristics, context, and modalities of mobility all contributed to different patterns of adoption and use' (Sarker and Wells cited in Castells *et al.*, 2007, p.72). Also 'what the data so far tells us is that ethnicity and/or culture do not act as barriers to the acquisition of mobile communication devices, but may limit the range of applications and services that users have access to, and/or are interested in using' (Castells *et al.*, 2007, p.67).

Hence, it is necessary to consider also *non*-users of a particular technology such as mobile phones when talking about a mobile information society. Non-users can be defined as people who either have no access to such technologies, or who choose not to use them, whether for individual, cultural or economic reasons. In this regard, non-users should also be seen as part of Kopomaa's mobile information society, which can be considered as 'a new kind of society that both makes possible and necessitates mobile phone-oriented sociability as the non-user of a mobile phone may soon find her/himself "a member of a disappearing tribe",' (Strassoldo, 2005, p.43) and non-users sometimes 'find it difficult to manage common, everyday life things in the mobile phone-saturated society' (Oksman, 2010, p.25). On the other hand, there still exist users of conventional mobile phones who want to use their phones only for the placing of calls, and have no desire to transform their mobile companions into mobile computers:

> Call me old-fashioned. The other week I wanted to buy a cell phone – you know, to make phone calls. I did not want a video game, a still camera, a web access device, an MP3 player, or a game system. I also was not interested in something that could show me movie previews, would have customizable ring tones, or would allow me to read novels. I did not want the electronic equivalent of a Swiss army knife […] The sales clerks sneered at me; they laughed at me behind my back. I was told by company after mobile company that they do not make single-function phones anymore.

Nobody wants them. This was a powerful demonstration of how central mobiles have become to the process of media convergence (Jenkins, 2006, pp.4–5).

Although both non-users and users make up this mobile information society, there is a certain pattern of dependency on mobile phones, despite the limitations on what can be accomplished with them (Katz, 2006). Due to the amount of information stored on such mobile devices, when they are lost or stolen, people often feel as if they lost an important part of their lives.

The mobile phone is quite important to many users, and in my interviews I frequently hear people say, with hyperbole, that if they lost their mobile phone they would die. After all, it contains so much of their lives, as well as serving as their phone book, calendar, and clock. In fact, losing one's mobile is in some ways like losing one's mind (Katz, 2006, p.5).

However, it also worth noting that with Cloud technology, users can now upload and store all their data on servers, and in this regard, dependency on a particular device is in some ways diminishing, so long as you can reach all the information (whether it be your contacts, calendar or even documents) you need remotely from another device. That said, you still need a similar technology to replace the one that you used to have. In the case of smartphones, this dependency relationship is formed largely around the various applications and content offered to the user, as well as increasing number of services provided by way of mobile applications. Both computers and the Internet have many functions in everyday life: information, communication, business transactions, work, education and entertainment, and its only competitors in fulfilling all these functions may be the telephone (van Dijk, 2005, p.101) and smartphone, which combines all these functions with mobility, and has replaced the conventional telephone and even "normal" mobile phones.

2.3.3. Space and place redefined: Hybrid spaces

Although there are many arguments suggesting that ICTs have changed the perception of space and time[23] and traditional communication practices, these changes are not necessarily always negative. Accordingly, it is necessary to look at different theories (in relation to the sociological, philosophical and anthropological theories discussed in the previous sections) of space and place, and how they can be related to electronic and mobile communication technologies, with the intention being to come up with a different conceptualisation of space – cyberspace.

The introduction of the Internet into our everyday lives saw the arrival of the term "cyberspace" into common usage in Gibson's (1984) cyberpunk novel *Neuromancer.* Gibsonian cyberspace is often defined using a quote from the novel:

> A consensual hallucination experienced daily by billions of legitimate operators, in every nation, by children being taught mathematical concepts. […] A graphic representation of data abstracted from the bank of every computer in the human system. Unthinkable complexity. Line of light ranged in the nonspace of the mind, clusters and constellations of data. Like city lights receding (Gibson, 1984 cited in Featherstone and Burrows, 1995, p.6).

Some theorists have conceptualised the term cyberspace as 'a means of realizing the disembodied (Cartesian) self' (Young and Whitty, 2010, p. 217), and as such has been further defined 'simply as the space produced by human communication when it is mediated by technology in such a way that the body is absent' (Stratton, 1997, cited in Young and Whitty, 2010, p. 217). Since cyberspace has been argued to be a meeting platform for bodiless minds (Young and Whitty, 2010*,* pp.217–220), it has found a place among many critiques of postmodern life, especially in the field of urban sociology; and has been further discussed as a new type of space that has become more important than physical space and has been framed as a space 'on top of, within and between the fabric of traditional geographical space' (Batty, 1993 cited in Graham, 2004, p.6). On the other hand, it

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[23] ICTs are usually regarded as tools for minimizing time, and in achieving this, also annihilating space constraints (Graham, 2004).

has been celebrated in some ways as a means of transforming available information in computers and networks into a space that can be inhabited by its users (Bolter and Grusin, 2000, cited in Graham, 2004, p.6).

The notion that ICTs convert physical space into digital space, and vice versa, has been analysed by many scholars (Manovich, 1995; de Souza e Silva and Sutko, 2011; Gordon, 2010) and in terms of human-computer interaction (Harrison and Dourish, 1996). In the field of mobility and mobile communication technologies, the works of de Souza e Silva have been used widely to define, understand and analyse this phenomenon, and throughout this thesis, her conceptualisation of mobile space in physical space, i.e. the "hybrid space", is employed and incorporated to the main discussions on mobile and locative media. The conceptualisation of mobile space as a "hybrid space" is described by de Souza e Silva (2006, p.261) as follows:

> Hybrid spaces arise when virtual communities (chats, multiuser domains, and massively multi- player online role-playing games), previously enacted in what was conceptualized as cyberspace, migrate to physical spaces because of the use of mobile technologies as interfaces. Mobile interfaces such as cell phones allow users to be constantly connected to the Internet while walking through urban spaces.

Hybrid space, as a notion, is frequently discussed in relation to mobile communication technologies and sense of place, being the general definition of how the boundaries between the physical and digital space have become blurred and merged with the help of mobile technologies (de Souza e Silva, 2006). Accordingly, the theoretical ground on which existing studies of mobile and physical space are based may be best described by employing the notion of hybrid space as a framework.

Taking the notion of hybrid space one step further, de Souza e Silva and Sutko (2011, p.26) describe contemporary urban spaces as hybrid spaces:

> Nowadays, the digital space on the mobile screen often augments the physical city in which the user is located. Likewise, the physical space itself is a source for digital information (as with GIS and more popularly through

GPS, restaurant recommendations, and friend-location tools). So, physical and digital spaces can no longer be analysed as independent from each other.

A similar argument on the changing nature of the urban spaces when experienced through mobile technologies is made by Gordon (2010), who explains these changes (p.1) by depicting random scenes from the everyday life in Manhattan as an example:

> On the corner of the Thirty-fourth Street and Fifth Avenue in Manhattan, there are dozens of people looking at little screens, typing on little keyboards, with plugs extending from their ears. Each of these people is having a different experience, customised through their personal media. The college student with his iPod selects his music to correspond with the weather and time of day; the businessman types an address into his GPS-enabled phone to find his next meeting; and the tourist stares through her mobile phone camera to capture the Empire State Building in the distance. Mediated by little devices, these people are shaping their experiences to the city.

Every single individual experiences and perceives the urban space differently, which in turn, helps them to assign meanings to places and build their own sense of place. As discussed earlier (de Certeau's perspective of the transformation of a physically constructed place into a space by pedestrians), it is the users of these mobile technologies who transform the physical space into one that is digital and mobile, and vice versa, thus creating a *hybrid* space, containing both physical and virtual entities. It is both offline and online, and dependent on such symbolic associations as avatars or different characters in MUD gaming (de Souza e Silva, 2006). Hybrid space is also a metaphorical space in which the humans dwell and inhabit themselves in their social interactions, and as such is defined in this thesis as a centre point between the mind and body, as Heidegger's approach to place. By placing the hybrid space between the body and mind, we automatically perceive it as something both real and virtual, which constructs the foundations of our perception of space and sense of place.

On the other hand, it is also important to note that the hybrid space differs from other conceptualizations of digital space, such as the "augmented space", as discussed by Manovich (2006), whose conceptualisation of space (1995) assigns a different meaning to digital media, in that he argues that with the new information and communication technologies, space has for the first time become the media (p. 251). Manovich (pp. 251–252) also argues that:

> Just as other media types – audio, video, stills, and text – it can now be instantly transmitted, stored, and retrieved; compressed, reformed, streamed, filtered, computed, programmed, and interacted with. In other words, all operations that are possible with media as a result of its conversion to computer data can also apply to representations of 3-D space.

Manovich thus conceptualises digital media in general as a "navigable space" (p. 252) in which the inhabitants of the virtual world can move freely. Although in this navigable cyberspace users are free to move from one site to another, they are *not* necessarily physically mobile. In a similar vein, Featherstone and Burrows (1995, pp.10–11) also associate cyberspace as a simulation of an urban environment, in which the digital domain intersects with the "technology of the street". Although not referring to any mobile technologies in their discussions, they talk about an intersection that can also be understood as a form of hybridity.

While the 'hybrid spaces are mobile spaces, created by the constant movement of users who carry portable devices continuously connected to the Internet and therefore to other users' (de Souza e Silva, 2006, p.262), the augmented space is the physical space (Manovich, 2006), and is discussed as the combination of the physical and the data-space. It is 'the physical space which is "data dense", as every point now potentially contains various information which is being delivered to it from elsewhere' (Manovich, 2006, p.223). In this regard, Manovich's augmented space, it can be said, presupposes a division between the physical and digital spaces (de Lange, 2009, p.59); although when talking about hybrid spaces, this distinction between the physical and the digital begins to diminish due to the mobile nature of this defined space. Either the physical spaces move into mobile spaces, or the mobile spaces occur in the physical contexts in the form of hybrid spaces.

On the other hand, as argued by Kabisch (2008), the physical world, it can be argued, is already embedded in hybrid spaces . Kabisch (p.223) argues that 'pervasive computing technologies not only produce new forms of hybrid space but also can be used to illuminate and shape the existing hybrid qualities of our world – including its substrate of geo-located digital information'. Similarly, in Crabtree and Rodden's (2008) work, another conceptualisation of hybrid spaces is presented that they give the name "hybrid ecology". As Crabtree and Rodden (2008, p.481) argue, 'the emergence and growing shift towards ubiquitous computing has seen digital technologies become increasingly embedded in the physical world that we inhabit'. They go on to argue that those resulting environments are geographically distributed and that they merge interaction across physical and digital environments, which form the *hybrid ecologies* (Crabtree and Rodden, 2008, p.481). Their conception of hybrid ecologies is also quite close to the understanding of augmented space. Although it is important to understand all of these different conceptualisations and depictions of the relationships between the physical, virtual and mobile environments, they all point to the same phenomenon, which is the incorporation of (mobile) communication technologies into our everyday lives.

2.4. Locative media

The introduction of mobile communication technologies into everyday life may mean that distance and locational information have slowly started to lose their importance as *obstacles* to communication, however higher physical mobility rates results in uncertainty about people's whereabouts. It is possible that this has resulted an increase in our habit of asking for the location of the person we are talking to on the phone, or sharing our own location, such as 'I am on the bus, on my way back home ...' As Gumpert and Drucker (2007, p.11) argue, the increase in our ability to communicate with anyone in any place from anywhere at any time has made us dependent on the location of others or ourselves, and somehow we 'require global positioning to locate the mobile "us" in physical space'. That said, this may also be attributable to the fact that human beings do not like uncertainty (which means that we do not have control over other's mobilities), and thus mobility is somehow associated with the uncertainty of a location. Furthermore, although these places are temporary and limited (because they are mobile), why are their inhabitants compelled to leave virtual traces of themselves in the online space?

And this raises another question: going beyond sharing our locations with the significant others while speaking over the phone, in our social networking, why do we want to make our locations known even to strangers?

For instance we can see comments made or statuses updated in Facebook via smartphones that sometimes indicate the users' geographical location in the world, their planned locations, or sometimes, through a check-in using Facebook's "Places" feature, their precise whereabouts, as shared with their network of friends. Through Google Earth and Google Maps, users can locate different places and pin them and make comments, while in Flickr, users can add a location to their photos after they upload and share them. These tendencies in the voluntary sharing of locational information imply that users want to be present both physically and virtually and want to identify themselves with certain places. As Lefebvre (1991, p.17) argues, 'an already produced space can be decoded, can be read', and claims that any space is constructed of codes that are inherited through history and experience. Since the codes of a space can be decoded and read, users engaging in online mobile practices or interacting with location data actually try to read, and in a sense experience, a certain place. Here, decoding is an analogy for making one's own location known to others, and for waiting to be read and found.

According to Arminen (2009, p.96), the motivations for sharing one's location can be both practical and symbolic:

> The ubiquitous communication has both a practical side – smoothing the arrangements – as well as a socio-emotional, symbolic value. When people communicate about their whereabouts and availability for mutual actions, they do not just state precursors for practical arrangements, but also establish and maintain their social relationships.

In this regard, it can be said that users of these networks and technologies use locational information for three reasons: practical, socio-emotional and symbolic. The practical reasons for sharing one's location may be related to work activities and for control and monitoring (Green, 2001), but also leisure time activities (such as sharing this information over Internet and social networking platforms), which in turn can lead to a "flexible and mobile coordination" of our social lives (Arminen, 2009, p.96). On the other hand, anxiety, care, distrust and

opportunism can be strong incentives for keeping tabs on people, or locating them at specific times (Lyon, 2011).

Mobile and locative technologies transform our experience of space (de Souza e Silva, 2004, p.15), because 'digital communication and encounters increasingly lessen the need to be at a certain time in a certain place' (Kopomaa, 2000, p.104). Mobile media, especially mobile telephony, do not eliminate space, and so virtual space and real space has started to overlap, resulting in "hybrid space" (de Souza e Silva), or the "space of flows" (Castells). Here, referring to Hayles (2002), as cited in de Souza e Silva (2006, p.262), 'space is becoming enfolded, "so that there is no longer a homogenous context for a given spatial area, but rather pockets of different contexts in it".'

> Hybrid spaces arise when virtual communities (chats, MUDs and MMORPGs) previously enacted in what was conceptualized as cyberspace, migrate to physical spaces due to the use of mobile technologies as interfaces. Mobile interfaces, such as cell phones, allow users to be constantly connected to the Internet while walking through urban spaces' (de Souza e Silva, 2006, p.261).

As also discussed by Jensen (2010, p.123), '[…] in reality, virtual and real worlds are not clearly separated. In daily social practices, online and offline experiences are interrelated'. Also, Castells *et al.* (2007, p.171) argue that 'mobile communication devices link social practices in multiple places', and thus, blur the boundaries between the private and public, as well as the individual and the societal. In terms of space and presence, one should not underestimate the effect of the interface on the creation of the user experience, since it is also related to the perception of space. 'Interfaces define our perceptions of the space we inhabit, as well as the type of interaction with other people with whom we might connect' (de Souza e Silva, 2006, p.261). For instance, applications that were not originally related to geographical location have also started to be used for locating users, such as Twitter, where one can add locational information to tweets. On the other hand, some applications, such as Facebook, which was originally rooted in the location of its users (as it was open only to Harvard University students), although it has changed over time, has never lost its roots in its *networks* of places. As a result, users

change the functionality and content of these applications to suit their usage experiences and habits.

These services are used not only for safety (as one of primary uses) and with commercial concerns, but also for social networking. With the advent of tracking and tracing technologies, which were called for initially by the Federal Communications Commission in the United States and then in the European Union for the GSM operators with public safety in mind and for cases of emergency (Fraunholz *et al.*, 2005, pp.132-133), corporations have started to see the benefit of location-sharing as a means of reaching their target markets in a cost-effective and efficient way. Goggin (2006) argues that the commercial perspective of these kinds of location-based services stems from the possibility of locating the customers in space, and also of understanding what they are doing in a specific place at a specific time so that they can be targeted with context-specific products and services (p.197).[24] As Lyon (2011, p.222) argues:

> Such applications of "location technologies" are fairly well known in the world of work but perhaps the largest changes in this field have been in commercial domains, especially using combinations of internet and mobile phone technologies. Here, the question of why where you are matters – to whom? – becomes more significant.

The primary purpose of locative media, which are most commonly defined as location-based services (LBS), can be described as 'the ability to find the geographical location of the mobile device and provide services based on this location information' (Prasad, 2003). Locative media, focusing especially on location-based social networks, can also be defined as 'mobile interfaces that allow users to retrieve place-specific digital information and connect to nearby people depending on their location' (de Souza e Silva and Frith, 2010, p.503). As Goggin (2006, p.196) argues, 'location-based services are of intense interest to the cell phone, wireless, and mobile industries. They already began to develop in earnest before the arrival of 3G networks'.

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[24] See Lyon (2011, p.226) for a detailed discussion on locational information and how it is used for commercial purposes.

As technological innovations started to influence market conditions and conventional communication practices, media producers, governments and users tried to adept and at the same time catch up with these improvements. With the sudden increase in the number of new media technologies and content providers, even governments started to launch initiatives to compete in the global markets, and both public and private operations shifted towards online production. However, not only have these services shifted to web-based interactions, but they have also come to be supported by mobile technologies, and by mobile and smartphones in particular. For instance, the Transport for London website offers the public a service by which they can find licensed minicab office numbers and other private hire operators in their area (Transport for London, 2011).

Today, especially in industrialized societies, mobile phone subscribers may be unintentionally using location determination technologies (Steinfield, 2003 cited in Fraunholz *et al.*, 2005, pp.132–133), not only because of the requirements of regulatory bodies from mobile operators, but also because users have no other choice than to buy a phone with location-aware features, as discussed by de Souza e Silva and Sutko (2011, pp.23-24):

> Our mobile phones are increasingly equipped with location awareness (via WiFi, global positioning system [GPS], or cellular triangulation), which detects the device's location in physical space. More often than not, one has no choice but to buy a phone that has location-awareness built in.

Before the use of such location data became commonplace, companies had adopted this technology to keep tabs on their fleet (D'Roza and Bilchev, 2003), after which, the need to access the same data when away from a workstation carried this service to the mobile platforms. Nowadays, it is widely used by many enterprises both for the control of their business operations and for locating and tracking their target customers. Besides the commercial and safety/regulatory applications that make mobile users disclose unintentionally location-based data, there exist also Internet-based platforms on which users willingly and intentionally share their locations. People choose to convey their location information on social networking sites, mobile blogs or GIS/GPS-based Internet content in order to communicate

information about their identities or as an efficient means of meeting friends, which in turn creates a social value for these kinds of social networking services.

As a more recent global example, after the launch of Foursquare, Facebook added a "place" function for its mobile users that was launched in late August 2010 in the United States and in late September 2010 in Europe. These software interfaces, when coupled with location-aware technologies, transform locational information into locative interactions, and led to the development of what is now known as locative mobile social networks (de Souza e Silva and Frith, 2010, de Souza e Silva and Sutko, 2011). Hence, according to the former definition, the smartphone applications of existing online social network sites that feature location-awareness functions (such as 'Facebook places') and other social networking software developed for this purpose (such as Foursquare) for smartphones and tablets are referred to as locative mobile social networks or location-based social networks.

In a small-scale study conducted on mobile Facebook usage, the posts, status updates and comments of 20 users of mobile applications for Facebook (Facebook for iPhone, BlackBerry or Facebook for Mobile) were analysed, revealing that the users either stated their location or their physical statuses in around half (49 percent) of all messages (Ozkul, 2009),[25] indicating a tendency and/or another usage of those services for place-specific updates and posts. This brings into mind the associations made with the mobile phones in terms of physical, geographical locations and mobility, as the more mobile a person becomes; the more s/he engages with mobile technologies, especially when using them for social networking.

In another example, Twitter did the same as Facebook and added a location-aware function that allows its users to add locations or to check-in at certain places, thus sharing their whereabouts with their followers. Also, other location-based applications such as Glympse and Marco Friend Locator have become popular among smartphone users since the advent of 3G, which brought easy Internet access and location awareness.

> Other mobile apps are doing their part to help people manage social interactions within discrete time frames. Glympse (free on iPhone, Android and pre-Windows 7 phones) is perhaps the best known of these, but it is

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[25] This study was conducted in 2009, before starting the research on mobile and locative media.

still overlooked by many. The idea is to share your location with friends (even if they do not have the app), but only for a time length of your choosing. Type in their e-mail address or phone number, and Glympse will send them a link to a Web page that tracks your location on a map. You can also share the information with a group, including Facebook and Twitter followers (Tedechi, 2010).

Aside from the more widespread and well-known location-based social networking applications, other location-based applications include GPS trackers or route-creators, such as Runner Map and Serendipitor. Rather than working on the logic of social networking, these applications allow users to connect and communicate with various online and mobile communities and networks that they can create. For instance, in Runner Map, users can upload their routes and traces to their computers and share them with other users, or send them directly to their friends or networks. With Serendipitor, the user is asked to follow a random path that is created by the application, take photos of the final destination and send them to the server, thus supporting and encouraging the sharing of locational information.

Locational information is also used for practising art in urban life and as a component of many mobile games, sometimes referred to as "locative arts": 'An area of activity in the construction of place in media that overlaps with these commercial imaginings, and also provides a counterpoint to them, goes under the tag of "locative arts" and "locative media"' (Goggin, 2006, p.198). There are a number of mobile media artists who work substantially with location-based information, such as with locative arts and mobile games that rely on the users' location like the UK-based "Blast Theory", "Can You See Me Now?" or "Uncle Roy All Around You". While discussing the work of Blast Theory as mobile art, de Souza e Silva (2004) claims that mobility has brought a new artistic meaning to the conventional telephone interface, and argues that by 'bringing phones into the city space, releasing them from a fixed place, transforming them into collective/social mediums and ludic devices', mobility and locative media has made the user become aware of the physical space in which they live. In this regard, mobility, when augmented with location-based services, enables a different perception of the urban space and everyday life.

2.4.1. Locational information use and interaction in urban spaces

Harvey (1993, p.3) argues that 'cities are places of work, consumption, circulation, play, creativity, excitement, boredom. They gather, mix, separate, conceal, display. They support unimaginably diverse social practices. They juxtapose nature, people, things, and the built environment in any number of ways'. How have cities and urban lives been changing in relation to the different modes of mobility, and how do the inhabitants of these urban spaces explore and find new ways to adjust to these changes? Cities do not end with the visibly observable, in that they contain information from various networks of both people and devices; and what we now see goes actually well *beyond what is in front* of us (Gordon and de Souza e Silva, 2011). It should be highlighted that this transformation is not only a property of contemporary cities. Urban landscapes were originally designed *not to be noticed*: 'In spite of the familiarity and virtual omnipresence of modern urban landscapes, they must be generally seen as unremarkable or unpleasant because nobody pays much serious attention to them' (Relph, 1987, p.1). In this day and age, with even less attention paid to urban spaces (as things go unnoticed while we engage or interact with our mobile devices), locative media have become more important in paying attention to, seeing and experiencing of everyday urban life. Something which may have gone unnoticed may become *visible,* in the sense that we can realise the existence of a place that we pass every day when we see a friend's check-in or write a review about it with the help of locative media. Attaching information to places virtually can contribute to the transformation of urban spaces 'by altering the capabilities that information has over the city' (Farman, 2012, p.6).

Cities are spatially open and cross-cut by different mobilities, being 'extraordinary agglomerations of flow' (Amin and Thrift, 2002, p.42), and today, experiencing a city is premised on these different mobilities (Amin and Thrift, 2002, p.43). Mobility in everyday life leads to an abstract space, in that it entails and somehow demands uncertainty in the definite location; and for this reason, it is sometimes referred to as *placelessness* or is associated with having *no* sense of place.[26] However, as I argue in this thesis, location-awareness can lead to a *lived-in* and

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[26] It is not only mobile communication technologies that are believed/discussed to cause "no sense of place". For instance, Joshua Meyrowitz' famous work *No Sense of Place* reveals how electronic media have affected the sense of place. Also, Edward Relph's work *Place and Placelessness* depicts how mass media might have affected the sense of place.

experienced/constructed space, even if such places are perceived as mobile and sometimes hybrid. Thus, in contrast to the view that media in general has led to an *inauthentic* experience of space, with the use of locative media, people can actually create their own unique experiences of different places.

Whether we refer to contemporary urban spaces as networks (Castells, 1996), cities of bits (Mitchell, 1995), sentient cities (Crang and Graham, 2007), augmented urban spaces (Auguri and De Cindio, 2008), hybrid spaces (de Souza e Silva, 2006), or code/space (Kitchin and Dodge, 2011),[27] existing literature on communications, computing, geography, urban planning and sociology points to similar transformations in the perceptions of space and time, daily planning and organising, public and private spaces as well as social coordination. With the rise of the Internet in line with the advances in mobility and mobile communication technologies, such transformations in the urban space became more visible and observable; but due to the very nature of these transformations, we usually take them for granted in our daily lives and even overlook significant changes. This is one of the challenges faced when analysing such a phenomenon, while the fast pace of change in technology can be counted as another (Gordon and de Souza e Silva, 2011).

Within this fast transformation, space is sometimes displayed as a mere location, direction or destination on a smartphone screen, or used as points of reference for a significant experience that we want to share with others. In addition, space is sometimes built into meaningful places. As the sharing of locational information started to acquire dynamic meanings with the use of mobile and locative media (de Souza e Silva and Frith, 2012), statements or markers of location began to contribute to the sense of a place, which can acquire different meanings, not only for those who share locational information, but also for those who receive it. For this reason, locational information can be considered as an important attribute of a place, playing a part in place-making and so constituting our understanding of a place.

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[27] It is important to note that these concepts are *not* the same, although they discuss the same/similar transformations in urban spaces and everyday life.

2.4.2. Mobility, mediation and "no sense of place"

Mobility and media, especially mass and electronic media, have been conceptualised as causes of an inauthentic sense of place in their homogenising of different spatialities, 'leading to a dissociation between physical place and social place' (Meyrowitz, 2005, p. 25). Within this vein, inauthentic attitudes towards places are transmitted through media, which in turn, creates visually and experientially similar landscapes, resulting in the destruction of authentic experiences of places (Relph, 1976, p.90). Among these criticisms directed at mobility and media, Relph's *Place and Placelessness* is of particular significance, in that it not only conceptualises mobility as the cause of placelessness, but also criticises mass media and communication technologies, as well as technological developments in transportation, as causes of less face-to-face communication and of more uniformly constructed landscapes (Relph, 1976, p.92). Nevertheless, Relph refers to the uniformity, lessened diversity and generalisations of places as causes of placelessness.

Meyrowitz (1985), focusing further on electronic media, especially television, argues that 'the media have homogenised places and experiences and have become common denominators that link all of us regardless of status and "position"' (p.viii). He even refers to some situations in which he used the term "placelessness" using the same argument as Relph (1976), '[…] electronic media create new placeless situations that have no traditional patterns of behaviour' (Meyrowitz, 1985, p.146), highlighting the "uniformly constructed landscapes" as conceptualised by Relph (1976). It is argued that this uniformity and non-traditional pattern of behaviour causes *placeless* places that have long lost their genius loci or their spirit in contemporary life. Meyrowitz (1985) argues further that 'the evolution of media has decreased the significance of physical presence in the experience of people and events. One can now be an audience to a social performance without being physically present; one can communicate "directly" with others without meeting in the same place' (p.308). On a similar line of argument, Casey (1997, p.xii) asserts that 'the world is nothing but a scene of endless displacement; the massive spread of electronic technology, which makes it irrelevant *where you are* so long as you can link up with other users of the same technology'.

Interestingly, although it is argued that the act of mediation itself and electronic media enable people to overcome distances (which may be counted as

physical barriers against co-presence, as in both Meyrowitz' and Casey's arguments, they are seen as causes of displacement), mobile media and mobile communication technologies are usually associated more with opening up and founding new spaces in which people can *connect* to each other. Just as the corporate motto of Nokia "Connecting People" indicates, it has always been the promise of mobile communication technologies and mobile media to *connect* people, things and places to each other that are deemed to be mobile. Meyrowitz (2005) agreed with the idea that mobile communication technologies (and electronic media) allow their users to connect wherever they may roam in his later works.

As a result, so long as people have access to such compatible technologies, this argument holds true for most information and communication technologies, not only those for mobile communication. Furthermore, it is not only mobile communication technologies and mobile media that decreased the significance of physical presence, as the evolution of conventional media has had the same effect. On the other hand, it is understood that while mobile communication technologies accelerated such a change, they cannot be held fully responsible for creating "no sense of place", in that they do offer their users new ways of interacting and experiencing urban and social spaces. Employing Meyrowitz' theories in her analysis of mobile social networking applications, Humphreys (2008) argues that Meyrowitz's belief that the use of electronic media leads to no sense of place is not supported by mobile media, especially by mobile social networking. Humphreys (2008) also emphasizes the fact that mobile social networking applications, 'rather than de-emphasizing the physically-defined setting', encourage a sense of place in its users (p.125). Moving towards the mobile era, today it might be considered cliché to say that mobile technologies provide their users with the freedom to stay connected to their daily routines, such as work, leisure time, family and friend relationships, whenever and wherever they want, but getting rid of the cables, workstations, PCs, and feeling free and present (whether real or virtual) in certain places simultaneously is likely to have changed, to some extent, the everyday lives of those people who use them, as well as how they interact with each other. Accordingly, mobile communication technologies have started to be analysed not only as technologies of communication, but also as a mobile *media* through which users can interact.

Mobile interfaces and applications help users feel embodied within a particular context (Gay, 2009, p.7), no matter where they are and what they are

doing. Kopomaa (2000, p.110) argues that this is because of the sense of co-existing places and the placelessness of the mobile phone, although the origin of the placelessness of the mobile phone is in its function as a *doubler of place* (de Souza e Silva and Sutko, 2011). De Souza e Silva and Sutko explain the logic of placelessness simply as the mobile phone 'allowing people to inhabit two places at the same time: their own physical space and the remote place of the other speaking person' (p.25).

Also, as Gumpert and Drucker (2007, p.8) argue, 'mobility, in regard to communication [...] is taken for granted [in] that we are able to communicate from one site to another, but "the moving site" represents the convergence and transformation of communication technology into a non-place event'. Hence, when we refer to mobility in everyday life, we are also referring to placelessness, as it may be hard to guess where a person might be. This is partly a result of the convergence of communication technologies, and partly the transformation that these technologies undergo. Actually, the act of mediation and communication has the component of mobility in itself. When a message is sent from a source to one/many others, we can say that there is an actual movement in space (as once communication was seen as equivalent to transportation[28]). When the technology that enables this mobility also changes place in time, then how can one talk about a particular spatial context? Consequently, it is discussed that placelessness is actually a feeling that can be created through the process of mobility. As well as placelessness, displacing the place is also linked to mobility, 'mobile communication is intimately linked to the disconnection of person from place' (Gumpert and Drucker, 2007, pp.10–11). A similar argument is made also by Burd (2007, p.41), referencing Augé (1995), 'Mobile communication is relocating place to "non-places" unrelated to the messages and messengers who are involved, and content is being determined by participants and not by the setting'.

However, in sharing our location with networks of people, these fluidities can somehow be said to become stabilized in the digital world, especially with mobile communication technologies, locative media and mobile maps such as Google Maps or GPS trackers. Still, a physical movement from one point to another exists, but when a person's location is shown or pinned down on a map, it may become easier to imagine and visualise the context of the person at the time of

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[28] Communication's once being seen equivalent to transportation is discussed in detail in Meyrowitz, 1985 and Urry, 2007.

speaking. Simmel (1997, p.171) explains this as the "will to connection", 'only in visibly impressing the path into the surface of the earth that the places were objectively connected'. Hence, it can be argued that these technologies offer a *virtual stabilization* of the mobile and dynamic user in contemporary everyday life.

This phenomenon introduces a contradiction to the mobility of users and locating their whereabouts. As Gumpert and Drucker (2007) point out, 'as we increase our ability to communicate to any place from anywhere at any time, we are subject to pinpoint location by ourselves or others as we move' (p. 11). Either celebrated or welcomed, in spite of worries and complaints the increasing interest in learning a person's location has also led to an interest in what that person is doing at that specific place.

CHAPTER 3: A METHODOLOGICAL INQUIRY ON MOBILE AND LOCATIVE MEDIA

In this chapter, I discuss the design of the research, which adopted different methodologies from other disciplines to understand how users of mobile and locative media use and refer to locational information in their everyday lives. Existing researches into mobile communication technologies have, on the whole, focused on changes in the social and spatial practices of everyday life (Castells *et al.*, 2007; Goggin and Hjorth, 2009; Katz, 2008; Ling and Campbell, 2009); but, as explained in the previous chapters, with advent of location-awareness applications, the focus of mobile media research has witnessed a significant shift towards studies of their daily use (de Souza e Silva and Sutko, 2009; Humphreys, 2007; Humphreys and Liao, 2011; Licoppe and Inada, 2009). As a result, a lot of empirical data and examples of the extent to which people use mobile technologies in their daily lives have been amassed, however these works are not original empirical studies, but rather are based on secondary sources. Although recent scholarly works explain locative media use in relation to theories of space (Gordon and de Souza e Silva, 2011; Wilken and Goggin, 2012), further empirical study is needed to explore how people use locational information in everyday life.

Mobile communication technologies were only introduced to the general public two decades ago, making all research in this field rather recent (Green and Haddon, 2009; Goggin, 2006; Katz, 2006; Ling and Donner, 2009). Although academic interest in mobile communications and media has a history of at least 15 years, its recognition as a division of media studies is somewhat new. Mobile communications research has only recently begun to consider mobiles as a form of media (Goggin and Hjorth, 2009); and the first and only journal focusing solely on mobile communications and media, Mobile Media and Communication, published its first volume only in January 2013. Accordingly, although the history of mobiles and researches into mobile communications have attracted scholarly attention for at least 15 years, the field itself is still relatively new within broader media studies. As such, in addition to the necessity for further empirical studies, there is also a need to develop methodologies that best suit this new and rapidly changing field. There has been a tendency for social phenomena that are ontologically mobile to be dealt with

poorly within social sciences (Law and Urry, 2004), and mobility studies in particular has felt the need for different methodologies as a result of this negligence. As Law and Urry (2004, pp.403-404) argue:

> [Existing methods of research in and around the social sciences] deal poorly with the fleeting – that which is here today and gone tomorrow, only to reappear again the day after tomorrow. They deal poorly with the distributed – that is to be found here and there but not between – or that which slips and slides between one place and another. They deal poorly with the multiple – that which takes different shapes in different places. They deal poorly with the non-causal, the chaotic, the complex. And such methods have difficulty in dealing with the sensory – that which is subject to vision, sound, taste, smell; with the emotional – time-space compressed outbursts or anger, pain, rage, pleasure, desire, or the spiritual; and the kinaesthetic – the pleasures and pain which follow the movement and displacement of people, of objects, information and ideas.

Hence, before designing the main phase of my research, I decided to conduct a pilot study in London in order to understand the different uses of smartphones, and accordingly, to develop a research method. Taking into account the above-mentioned empirical and methodological gaps in mobile and locative media literature, I conducted 27 in-depth interviews with smartphone users in London in 2011. After transcribing and analysing this pilot study, I decided to adopt a methodology that is used in geography and urban planning known as "sketch mapping". In 2012, 38 participants in seven separate groups were first asked to draw individual sketch maps of London and then to discuss their mobile and locative media use based on their own maps with fellow participants. This chapter discusses the two different methodologies that were used to gather data: the informal, in-depth interviews; and the sketch-mapping in the form of focus groups, as part of creative research methodologies.

3.1. Pilot study

The pilot study sought primarily to understand the various forms that a "sense of place" might take for different individuals, and second, to explore how the sharing

of locational information using mobile devices contributed to the construction of different senses of places, especially in large metropolises such as London, and whether the use of locational information is also affected by feelings of belonging and attachment. 'As in any small pilot study, the purpose was to develop ideas and methods, rather than to prove facts in a final and determinate way' (Lynch, 1960, p.14), and for this purpose, semi-structured in-depth interviews were conducted with 27 smartphone users in London, of whom 40 percent were male and 60 percent were female. Participants were found through Twitter and snowballing, and the volunteers were given a brief description of the study, during which they were informed that its focus was smartphone use in everyday life rather than on location-awareness or locational information use/sharing.

All interviews were recorded (in total, 19 hours of recording) and transcribed before being subjected to a content analysis to find emerging themes and keywords. I also took notes right after the interviews, recording my observations on the methodology and experiences. Before being interviewed, each participant gave consent for the interview and its potential use for future research and publications. The aim was not to have a statically representative number of London smartphone users, but to garner ideas on smartphone use for use in the design of the main study, and so the random sample of 27 volunteers, who were aged between 19 and 54, were not recruited according to any particular base, demographic or history of mobile technology use. This approach gave me an idea of many new and different functions of smartphones, as well as different applications that a Londoner could use for navigating the city. The interviewees included university students, PhD students, unemployed people, working professionals from the fields of publishing, design, advertising, brand management, consulting, finance and law, as well as volunteer workers for charities, retired people and academicians. Among the volunteers of the pilot study were two openly gay men and one person with a walking disability. This allowed the broader aspects of smartphone use to be understood and gave me the opportunity to learn about some of the applications used by those groups of people for more specific purposes. These included finding and meeting other gay people in the city through location-based lesbian/gay applications, thus establishing a lesbian/gay network, or checking wheelchair accessible routes and stations based on the current location of the user via the GPS functions of their smartphones.

For the above-stated reasons, participants were not selected based on their familiarity with London, as the sample included people who were born and bred in London, as well as those who had recently moved to the city, those visiting London for a week to 10 days as a tourist, as well as people who had moved to London at a later stage of their lives and have been living in London for a period of 7 months to 7 years. There is likely to be a clear difference in the spatial experiences of a person who has been living in a city for 30 years, and one that has only recently moved there. The applications they use, their reliance on their mobile phones to navigate in the city, and the photos they took with their smartphones and uploaded onto various social networking sites varied according to their duration of stay in London, as well as for how long they had been using their phones.

London was not only selected as the site of the research for practical reasons (as my PhD is based in London), but also (and most importantly) for being the most populous and most cosmopolitan city in the EU (London Councils, 2013). In addition, London can sometimes be an overwhelming and hectic city, which makes micro-coordination (Ling and Haddon, 2003), hyper-coordination (Ling and Yttri, 2002), and mobile phone use important elements in everyday routines. In terms of transportation, each year, the total number of passengers carried by the London Underground alone is 1,229 million (London Councils, 2013) (this is reflected in the analysis of the study, as all of the participants stated their use of one or more applications to aid transportation links, especially for the London Underground). As such, the importance of locational information in navigating such a crowded and complex city cannot be underestimated. The cosmopolitan nature of London's inhabitants is related to the complex social ties that are also maintained through the use of mobiles.

Given the research focus of location-awareness in everyday life, smartphone users were selected for study, since so-called feature phones do not generally require much use of locational data. Additionally, today, especially in industrialised societies, mobile phone subscribers use location determining technology unintentionally (Steinfield cited in Fraunholz *et al.*, 2005, pp.132–3), in that consumers have no choice but to buy phones with location-aware features (Sutko and de Souza e Silva, 2011).

The interviews began with warm-up questions before moving on to questions about smartphones, such as the reasons for use and the types of

applications used. I avoided directing questions about location-awareness, and instead waited for the respondents to bring the subject up themselves. My plan was to limit the understanding of locational information only to location-based applications; however, during the interviews, the respondents also referred to Facebook status updates, tweets, talking on the phone, or sending photos in the form of text messages while talking about locational information. As such, locational information in this study does not refer solely of location-based services, but also to textual and visual locational representation. After transcribing the interviews, I used content-analysis in order to find repetitive themes, from which it could be understood that several factors were influential in the relationship between the use of locational information and the sense of place.

During the interviews, I did not ask direct questions about locational information, nor did I introduce the concept of location-awareness. While talking about the specific applications they downloaded and used, which gave me more chance to understand their general usage habit of the technology, the participants themselves introduced the topic of locational information use and sharing. Unlike some studies in this field that focus on only one mobile application or one group of applications, and find users of those applications to study a particular phenomenon (de Souza e Silva and Frith, 2010; Humphreys, 2007; Shklovski and de Souza e Silva, 2013), I allowed the participants to talk freely about any application or function of their phone. This approach is in parallel with my understanding and definition of locational information and location-awareness (as discussed in Chapter 1–2), in that I understand and use locational information not solely consisting of location-based services, but also as textual and visual representations.

After gaining some familiarity with the interviewees and their use of smartphones, I raised questions about the specific places they mentioned when referring to their phones and the sense of place. Although all interviewees had at used the location-based features of their smartphones at least once and were quite familiar with mobile maps, many had a certain level of difficulty in expressing their experiences. Some respondents tried using visual metaphors while explaining Google Maps on their smartphones:

[Jeanette, 28] *You know the blue bubble* (showing the blue bubble on the map app)… *it is clear, it moves with you* (moving her phone around as if she is moving around with her phone).

While some used gestures to explain how they follow the map on their phones:

[Sean, 38] *I've been living in London for a long time and I know it is there without thinking* (talking about a specific place), *but sometimes I follow the map* (takes his phone out of his pocket, runs the maps application, and mimes his navigating in the city) *to make sure that I am not going to be late.*

From this it can be understood that people feel the need to use an object, gesture, visualisation, model or artefact when going into the details of their experiences. I have experienced a similar difficulty when raising questions about sense of place and spatial perception, which can have many different meanings and connotations, and this is made harder, given the fact that the meanings associated with a place obviously vary from one person to another. It was interesting to note that when the respondents spoke about the mobile applications and the places in which they use their smartphones, they introduced other mobile technologies into their discussions (Kindle, iPad, laptop, SatNav and MP3 players, to name a few), and so it could be understood that by focusing only on smartphones and location-based applications, I was actually *limiting* the scope of the study. This led to the decision to include users of any mobile communication technologies, not only smartphones, in the main study.

Several factors were found to be influential in the relationship between locational information use and sense of place, however the analysis of the interview data was not devoted only to identifying those emerging themes. While trying to understand the spatial perceptions and experiences of the respondents, an analytical issue became apparent in the use of semi-structured in-depth interviews to garner information from the respondents. Silverman (2005) argues that this analytic issue usually arises when employing interviews as a methodology to understand human perception and experiences, and explains it by asking the question, 'How far is it appropriate to think that people attach a single meaning to their experiences?'

(p.45). Hence, it can be said that there are many different meanings attached to an experience, and it is not always possible to express those different meanings in an interview lasting only 45 minutes.

As a field of research, mobile and locative media is very dynamic due to the rapid rate of technological development, and employing only one research method in such a dynamic field may result in limitations. Keeping in mind that 'in qualitative research, what happens in the field as you attempt to gather your data is itself a source of data rather than just a technical problem in need of a solution' (Silverman, 2005, p.48), in this research, I treated the pilot study as a means of grasping an understanding and acquiring up-to-date knowledge of the field and this particular technology. The main motivation behind this was to test whether the current methodology would be sufficient for my proposed research questions, or whether amendments would be needed. As such, the in-depth interviews helped me not only to understand how smartphone users interact with their physical environment, how they refer or evoke to certain places, or disclose and use locational information, but also to see the limitations in using verbal elicitation techniques (especially in understanding complex and fairly visual concepts, such as space, place, sense of place and mobility).

3.2. Visual Elicitation and Creative Methodologies: Potential Uses in Explaining Spatial Practice and Experiences

After using a verbal elicitation technique and observing the interview process, I validated my idea that I needed to supplement my methodology with a creative, and more likely visual, method for the collection of in-depth data and to overcome the difficulties of both raising questions as a researcher and expressing ideas and providing answers to those questions as a respondent. This led me to a search for alternative methodologies that could be used for the main study, and whether/how they could be applied to my own research.

Adopting visual methodologies when researching the use of mobile communication technologies can overcome the difficulty faced in expressing different understandings and feelings of sense of place and mobility. As a limitation of verbal elicitation, we cannot know about people's images of their observable non-verbal behaviours, and so our analysis depends wholly on their verbal behaviours, i.e. what they say, rather than what they do. Accordingly, visual

elicitation and visual creation techniques in social sciences could be used to supplement verbal elicitation, giving the analysis a base not only on what people say but also on what they *do,* and how *they* interpret what they do.

3.2.1. Visual Elicitation and Creative Methodologies as Supplementary Research Methods

Visual elicitation stimuli are described as 'artefacts employed during interviews where the subject matter defies the use of a strictly verbal approach' (Crilly *et al.*, 2006, p.341). As detailed and discussed by Banks (2001), such stimuli include drawings, maps, photos and videos, with photos in particular used in visual anthropology, either as a way of collecting ethnographic data or as a visual artefact to stimulate conversations in the field work (Collier and Collier, 1986). 'Of the academic disciplines in which ethnographic investigation has flourished, anthropology has been more open to the employment of photography than sociology' (Ball and Smith, 1992, p.5). Videos are also being used in various fields of social research (Gauntlett, 2007) as well as maps – such as John Snow's map of London depicting the cholera outbreak of 1854. The term "map" emphasises spatial relationships and different representations of space (Kitchin and Blades, 2002), and has been used commonly as a visual methodology in geography and urban studies. All of these types of visual elicitation and visual representation help researchers introduce, speculate and broaden their research. The use of visual material or artefacts can help research participants express their experiences, meanings, feelings and ideas, which may be difficult to explain in words alone (Pink, 2006). As Gauntlett (2007, p.3) argues, in social sciences it is usual that 'researchers expect people to explain immediately, in words, things which are difficult to explain immediately in words'. It should also be noted that the use of visual artefacts in interviews could act as *complementary* to words (Pedersen, 2008), and so should be used together with other methods, such as interviews and focus groups. Furthermore, the participants should be encouraged to describe, comment on and reflect upon their own and each other's artefacts, which would stimulate new discussions and bring unsaid emotional meanings to the surface.

However, visual elicitation using *existing* objects such as photos is different to making *new* artefacts (followed by elicitation with *those* artefacts), which can be described as creative methodologies. As summarised by Gauntlett (2007), such

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creative methodologies should involve three basic research elements, 'the process and thoughtful experience of taking time to make an artefact, the artefact itself, and the person's own interpretation of the artefact' (p.127). As discussed in three roundtable discussions at academic conferences on mobility and locative media (Local and Mobile 2012 and ICA Mobile Communications Pre-conferences 2012 and 2013), when participants are asked about how they define or explain sense of place and mobility, they have trouble putting their experiences into words and in making it clear what they mean when talking about certain associations with places. We all have our own experiences, narratives and depictions of space and mobility, and it has always been hard to articulate and verbalise them, and for this reason, I decided to adopt a visual and creative methodology for the main study. One approach might have been to show the participants a geographical map of London and ask them to think of key memories or activities and plot them on the map; but after further contemplation, and building on the model of creative research methods outlined in Gauntlett (2007), I wondered what it would be like if the participants were asked to create their *own* maps of the city *from scratch*, and share their experiences of places accordingly.

3.2.2. The Study[29]

I conducted seven focus groups in London in 2012, adopting a sampling method that was inspired by Trost's (1986) and Gustafson's (2001) studies using "non-representative sampling". This helped me to achieve a 'variation in the respondents' experiences of place, place attachment, and mobility' (Gustafson, 2001, p.671). The research was conducted in small groups of 4–8 people, with a total 38 participants (all of whom were users of mobile communication technologies), from different parts of London. Each participant was asked to draw a map of London showing 'frequently visited places', which they then presented to the group, and were then asked to add any other places that had particular importance for them (in whatever sense they liked). They were told that the maps did not need to be geographically accurate, but rather should show London as they experienced it in their everyday lives. I was therefore expecting them to create a selective representation, or a version, of their "cognitive map" of London. After the initial stages of the study,

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[29] In order to recruit participants and publicise the study, I created a blog and a personal website. They can be visited at www.mobilenodes.co.uk and www.didemozkul.com.

during which the participants created their sketch maps and discussed their maps and memories of London, they would typically open the subject of their use of locative media in relation to different memories, associations and meanings of places in London.[30] At the end of each focus group, I asked the participants if they had any photos on their mobile phones that they would like to add to their maps as little stickers. Without exception, all responded positively and started scrolling through their cameras, showing each other their photos and deciding on which to print and attach to their maps as stickers. For this purpose I brought to the sessions a Polaroid Pogo photo/sticker printer, which works with Bluetooth technology. Although all of the participants made an attempt to send their photos to the printer via Bluetooth, only a small percentage were successful in printing their photos. Phones using the Android system were able to connect to the printer, however those operating with iOS could not. Accordingly, as can be seen from the participant sketch maps (Appendix A), only some maps feature sticker photos to represent important and interesting places in London for them. Due to this technical problem, I did not include an analysis of the supplied photos in this thesis.

3.2.2.1. Cognitive map and cognitive mapping

> Everything I see is in principle within my reach, at least within reach of my sight, marked on the map of the 'I can' (Merleau-Ponty, 1964, p.162).

> Our objective is to explore *inner* space, a little-known region of that dark continent *inside* man's head (Downs and Stea, 1977, p.4).

In previous literature, the term 'cognitive map' has been used to refer to a kind of 'mental picture' of a place, including both the broad and specific sense of its geographical features, as well as memories, emotions and other associations. Downs and Stea (1977), in a pioneering research, distinguish between 'cognitive mapping', which they describe as the mental process of thinking about a place or a route; and 'cognitive map', which they say is 'a person's organised representation of some part of the spatial environment' (p.6). In other words, are relatively cautious about

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[30] For a detailed discussion on methodology and use of sketch mapping in different research, see: Gould and White, 1986; Lynch, 1960; Downs and Stea, 1977; Kitchin and Blades, 2002; Özkul and Gauntlett, 2013.

separating out the concepts 'in' the brain from things in the world. However, there is some slippage, for example, their examples of cognitive maps – or *representations* of mental models – include a drawn map and a child's painting of their neighbourhood, but also 'the picture that comes to mind every time you try to cross town on the subway system' (Downs and Stea, 1977, p.6), which really should be treated as part of cognitive mapping, the process, rather than as a cognitive map, a representation.

Creating a 'representation' of a "picture in the head" is a separate act of creation, since a cognitive map does not exist as a 'thing' that you could then hope to draw or reproduce (Özkul and Gauntlett, 2014). However, as Gauntlett argues in Özkul and Gauntlett (2014), 'the collection of memories, feelings and associations about a place, which are somewhere, somehow, in a person's brain, are not something that could be straightforwardly transferred to paper'.

Accordingly, Kitchin and Blades (2002, p.1) accept the term cognitive map as referring to the mental processes, with other representations described for what they are. In this regard, a cognitive map is 'an individual's knowledge of spatial and environmental relations, and the cognitive process associated with the encoding and retrieval of the information from which it is composed' (Kitchin and Blades, 2002, p.1), which is a somewhat more sophisticated formulation, although it leaves out related emotions and memories. I will follow this terminology, and to ease confusion, I will use the term 'sketch map' (Lynch, 1960) when referring to the hand drawn maps of London. In *The Image of the City*, Lynch 'indicated the utility of such sketch maps for obtaining insights into how people mentally structure the city and which elements are perceived as important. Such information is not readily obtainable by other means, which perhaps accounts for the wide application of this essentially projective technique' (Saarinen, cited in Downs and Stea, 1973, p.148).

Although their use of terminology can today seem a little simplistic, Downs and Stea (1977, p.27) made a valuable early contribution to our understanding of 'inner space':

> In some very fundamental but inexpressible way, our own self-identity is inextricably bound up with knowledge of the spatial environment. We can organize personal experience along the twin dimensions of space and time. But the dimensions are inseparable – there can be no personal biography of

'what' things happened 'when' *without* a sense of the place in which they happened. Cognitive maps serve as coat hangers for assorted memories. They provide a vehicle for recall – an image of 'where' brings back a recollection of 'who' and 'what'. This sense of place is essential to any ordering of our lives.

Spatial behaviour is central to everyday life. Human beings are able to learn how to navigate in their environment, but we are not normally conscious of this work, or its origins. Our spatial ability to navigate in a city is usually taken for granted, and as such, goes unnoticed. 'In order to traverse space, we make hundreds of complex spatial choices and decisions, in most cases without any reference to sources such as maps, instead relying on our knowledge of where places are' (Kitchin and Blades, 2002, p.1). We usually only realise that we have actually acquired a sense of place and have a mental image of a city once we get lost; however, getting completely lost in contemporary urban environments is a rather rare experience.

Today, equipped with mobile and location-aware technologies, some people may even feel that they no longer need maps or street signs. With a few taps, we can locate ourselves, know where to get things and to find people, as well as how to get there via computer generated routes (Of course, this depends on having a suitable device, the skill to use it effectively and a decent mobile Internet connection). Therefore, how we define maps and locational information has also changed, as well as how we define urban spaces and cities.

Users of mobile technologies can add layers of virtual information to places, which has increased the level of integration of maps into our everyday lives. Maps are used not only to navigate in contemporary urban life, but also to spatialise information (Gordon and de Souza e Silva, 2011). The act of checking-in at a place on an application such as Foursquare creates personal traces on the network, and those traces start to define what kinds of places we check-in at, and why. This has created – for some users at least – platforms for individual storytelling, as these technologies and applications allow users to map their everyday activities and write reviews, insert photos or memory notes onto those places visited. With the help of such maps, our '*knowing* is translated into *telling*' (White, 1980, p.5), and we are given the ability to narrate both our experiences and memories of places. Within this

process of representation and the creation of a self-narrative of one's everyday life through locational information, a tool commonly used for identifying routes, the map, emerges as an interface in which users can create their own geo-tagged stories of their own lives.

3.2.2.2. Cognitive maps and sketch maps

A strong relationship exists between a person's self-identity and their surrounding spatial environments. Experiencing an environment helps us to build spatial knowledge about that environment, so that on our next visit to the same environment we may somehow retrieve that information and refer to it in order to remember how to navigate. That said, the experience associated with a certain place is not only spatial, as there are many other factors that construct a sense of a place, such as our memories associated with a place, our social circles, family and friends with whom we have been to a place or the place that we call home. As Lefebvre (1991) notes, space is a social product and 'social practice presupposes the use of the body' (p.40). Accordingly, being or becoming social should not be understood as being inserted into an already-existing place, in that we, as human beings, produce and reproduce various spaces, and as such, perceive what is produced or reproduced (Lefebvre, 1991, p.40). These elements all feed the formation of a cognitive map that occurs through the *process* of traversing space, reflecting on it and making connections. Sketch maps have been used as research tools in such social sciences as psychology and sociology, looking at 'the overall course of a person's life' (Downs and Stea, 1977, p.7), and in geography, investigating how people establish a sense of place through their spatial interactions with their environments. However, as noted by Downs and Stea (1977), social science disciplines such as psychology and sociology are interested primarily in aspects of the environment other than spatial ones.

As a mental process, the creation of a cognitive map involves the collecting, organising, storing, recalling and manipulating of spatial information (Downs and Stea, 1977), and this spatial information also is connected strongly with how we feel about and experience a certain navigational experience or place emotionally. Accordingly, sketch maps can be used to explore how a person's self-narration of a

place and their representation of that place relate to each other, and in what ways locative technologies have the potential to affect this relationship.

Here, it is also possible to define sketch maps as a storytelling platform. Used in this way, the process of making sketch maps, as a method, offers a fresh extension of creative visual methods, in which people are invited to spend time applying their playful or creative attention to the act of making something, and then reflecting upon it (Gauntlett, 2007). The process of asking participants to draw maps of the city in which they live, and reflect upon their own drawings, permits insights into the lived experience of mediated life in a city, which would otherwise be difficult to access.

3.2.2.3. Sketch Maps and Narration

Researchers in the fields of human geography and urban planning, whose object of study is understanding space and how people establish spatial relationships with their environments, have been dealing with this difficulty for some time. Beginning with Kevin Lynch's pioneering work *The Image of the City* in 1960, the 1960s and 1970s witnessed a growing interest in the development of research designs to better understand how people develop spatial knowledge and how it is used in everyday life. 'The need to familiarize and map our surroundings is crucial and has long such roots in the past that this environmental image has practical and emotional importance to the individual' (Banerjee and Southworth, 1990, cited in Amoroso, 2010, p.47). Lynch (1960) explained what he meant by "environmental image" by giving an example, 'Washington Street set in a farmer's field might look like a shopping street in the heart of Boston, and yet it would seem utterly different' (p.1). Hence, every individual develops his or her own image of the spatial environment, which is soaked in personal memories and meanings (Lynch, 1960). For instance, Sophie, who was one of the research participants, stated that even though she does not live in Central London, her sketch map of London mainly consists of Central London,

> [Sophie, 42] *My mind of London is quite Central because that represents for me the real London.*

As an attempt to understand the importance of environmental image to the individual, Lynch's work introduces the concepts of "legibility" and "imageability" of a city, with *legibility* referring to 'the ease with which [a city's] parts can be recognized and can be organized into a coherent pattern', by which he demonstrates how this concept could be used in urban planning for the rebuilding of cities (Lynch, 1960, pp.2–3). Imageability, investigating the relationships between the identity, structure and meaning of a "mental image", and as a quality of a physical object 'which gives it a high probability of evoking a strong image', can also be understood as "legibility" or "visibility" (p.9). 'In other words, if a city was "imageable", it was also likely to be "legible"' (Gold, 2011, p.294). After asking residents of Boston, Jersey City and Los Angeles to draw sketch maps, Lynch found that the city image is composed of "paths", "edges", "districts", "nodes" and "landmarks". Although his work focussed on urban planning, his theorisation of the city image helped researchers in many other disciplines who had been struggling with the methodological problem of understanding not only how people navigate in a city, but also how they form associations, attach meanings and establish connections based on the history of a city, or on their own experiences (Lynch, 1960, pp.92–102). Lynch 'provided insight into citizens' differential knowledge of the urban environment and supplied an accessible methodology by which it might be studied' (Gold and Revill, 2004, p.294).

Cognitive maps, and the freehand sketch maps that are meant to partially represent them, are unlikely to be geographically accurate or correct, in that the shapes and sizes are usually distorted, and spatial relationships are altered (Downs and Stea, 1977). In his study of environmental images, Lynch (1960) found that 'none of the respondents had anything like a comprehensive view of the city in which they had lived for many years' (p.29). The differences in spatial representation and mental images, combined with the individual differences between sketch maps, can actually help us see and understand how the memories and meanings that are attached to certain places have a relationship with how we remember those places and how we establish a sense of those places. Hence, the question of geographical accuracy becomes insignificant as an unmeaningful aspect of research in cognitive mapping.

The medium of translating from an internal or cognitive to an external or physical representation has a major effect on the form of the representation. People vary in their ability to make this translation. Hence, we cannot phrase our accuracy question in terms of correspondence between two *external* representations, in this case a sketch map and a cartographic map (Downs and Stea, 1977, p.101).

Downs and Stea (1977) categorised the roles of cognitive mapping in our everyday lives according to their role in serving our utilitarian needs and our personal worlds. Cognitive maps help us to find where things are located, and how to get to those places quickly, easily and safely. With increasing rates of social and spatial mobility, cognitive maps, when used together with locative media, tell us also where to *locate* our basic everyday activities, as locational information use has become more wide-spread, and to some extent, even more observable in everyday life (especially with the increased organisation of online information in geographical terms, and with mobile social media check-ins). The differences in the cognitive maps of each individual help us to synthesise different types of information and acquire different perspectives of the world.

Besides helping us navigate in spatial environments (by providing us with sensory cues, as well as meanings, memories and associations), cognitive maps also contain a "personal" element in which our self-identity and narration play a crucial role. Cognitive maps also help us to resolve abstract problems with the help of spatial representations, and to recall sequences of important ideas. In this way they help us to establish our memories, to recall them, to place them in time and to experience the world in different ways. When explaining things verbally, we use also spatial imagery and metaphors (Downs and Stea, 1977, pp.12–27), and so cognitive maps can also be used to create the context and content for social interactions, in that maps in general today 'have changed from something that can spatialise social information to something that can socialise spatial information' (Gordon and de Souza e Silva, 2011, p.28). By drawing, the participants can focus on a given topic, allowing their focus to gain extra meaning that could not be covered verbally as part of the interview (Varga-Atkins and O'Brien, 2009). Drawing can act as an interview stimulus materials (Crilly *et al.*, 2006), and encourages research participants to contribute and reflect upon the unarticulated, the hidden or the unsaid. As Kearney

and Hyle (2004, p.361), in their paper on use of drawings to understand emotions, underline the significance of using graphic elicitation, argue:

> Create a path toward feelings and emotions, lead to a more succinct presentation of participant experience, require additional verbal interpretation by the participant for accuracy, are unpredictable as a tool for encouraging participation in the research, combat researcher biases when left unstructured, are affected by the amount of researcher-imposed structure in the scope of how they could be interpreted, and help to create triangulation of study data.

In an era in which mobile technologies allow users not only to read maps, but also to create their own (Gordon and de Souza e Silva, 2011), employing sketch mapping within the research method is an effective way of encouraging the research participants to reflect upon their own representations of the spaces they inhabit, helping them to express spatial and personal experiences, meanings and feelings that may actually be difficult to explain only verbally. Today, 'most information is located or locatable' (Gordon and de Souza e Silva, 2011, p.19), and with the development of new technologies, maps, which were originally designed as way-finding tools, have become transformed into search interfaces in which information can be visualised and spatialised. As Gordon and de Souza e Silva argue, 'technological developments, particularly in the last century, have pushed mapping closer to the centre of the everyday life' (p.21). Particularly with the opening of the mapping process to non-experts (via mapping mash-ups), in combination with the evolving epistemologies, an interest from both inside and outside academia has started to emerge. As argued by McKinnon (2011), 'we live in the age of mapping. More maps exist today than any other time in history, and this mapping explosion just continues to expand as digital technologies allow new maps to proliferate' (p. 452). This has caused many people to reconsider the power of maps in the process of developing new ways and means of their use (McKinnon, 2011, p.452); and these developments in the area of mapping and in their widespread use in everyday life make them perfect research tools in analyses of spatial cognition and behaviour in contemporary urban environments.

CHAPTER 4: LOCATION AS A SENSE OF PLACE: EVERYDAY LIFE, MOBILE AND SPATIAL PRACTICES IN URBAN SPACES

This chapter contains the analysis of the pilot study, revealing interesting aspects of place-making and place attachment in London. The intention here is to explore the connections between locational information use on smartphones and reconfigurations of place. By grounding the empirical research in recent frameworks and classical theories of place and location, this chapter also furthers the understanding of location and the use of locational information in mobile communication practices.

Among the main motivations in retrieving or disclosing locational information in everyday life are: to deal with the anxiety of getting lost, to organize daily activities and ensure punctuality, to retain a feeling of security, to discover new places, to establish social relations and to maintain close ties. These kinds of activities formed the basis of the pilot study in answering the questions: How do people identify their physical locations within their daily activities in everyday life? In what ways do they refer to, or evoke, place while using smartphones? The findings discuss and demonstrate how the use of locational information can renew senses of places in London, while also reconfiguring spatial practices and perception.

All types of places exist within human discourse, and they are always socially mediated and represented (Spencer, 2011). Using mobile media and establishing a *locational awareness* with such an engagement is another way of representing places; and this immersive and interactive relationship that exists between the user and their mobile media can change both the perception of a specific space and the sense of a place. This change can occur either as a result of *communicating about a place*, *communicating through a place*, and *communicating about and through a place,* as argued by Humphreys and Liao (2011, pp. 407-423). Based on how the participants used locational information on their smartphones in London, four main themes emerged, each of which is discussed below.

4.1. Navigation: Creating a sense of new places

One of the major uses of locational information was to locate oneself on a map and navigate in London, which may be categorised under the broader concept of *instrumental* use. Using the locational features of their smartphones, the participants dealt with fears of getting lost and felt empowered. Eyles (1985) conceptualises instrumental sense of place as a tool in which place is seen as a means to an end. An instrumental sense of place is defined in terms of a place's significance and ability to provide goods, services and formal opportunities to its inhabitants (Eyles, 1985), indicating the services and production of a place rather than its social aspects. Borrowing Eyles' conception of instrumentality and formal opportunity, locative media use in London is firstly analysed in terms of their being a means to an end. The answers of the respondents were divided into three main categories under instrumentality of location-awareness: *anxiety of getting lost*, *punctuality and planning*, and *personal security*.

4.1.1. Overcoming the anxiety of getting lost

Being able to locate oneself in a foreign place can contribute to a feeling of local knowledge of a place. The basic applications on smartphones that have replaced the familiar 'A-Z' in London are Google Maps and BlackBerry Maps. Even participants who had lived in London for 20 years felt the need to navigate in the city using the map features of their smartphones, as in doing so, the participants stated that they felt *secure, empowered* and *local*, since they knew that they would never get lost as long as they had their smartphones with them.

Smartphones have become more important for navigation within the city, especially due to the commuting culture, and the cultural and geographical diversity all around London. As one of the respondents, Tina, explained during her interview, when commuting in London, asking anything of your fellow commuters can be quite uncomfortable.

> [Tina, 33] *People commuting in London do learn quickly that you do not ask questions… If you're asking somebody a direction while commuting, that culturally almost causes somebody a tension.*

Another respondent, Mark, also stated that asking people directions in London was not the best solution when trying to find a place.

[Mark, 33] *I do not like asking people all the time. People in London do not know where to send you anyway, because nobody is from this place. So whenever you ask somebody from London "Where is this street?" they have no idea.*

This type of locational information use creates a feeling of belonging and local know-how as the anxiety of getting lost diminishes in time. When Mary first got lost in London, she had no smartphone, and had to call her husband on her mobile phone.

[Mary, 35] *When I first came to London, I got lost and I called Tim. He said "Look for the BT Tower!" I was crying and I felt so disempowered. And now I do not. I want to navigate through the space myself, because then I get empowered.*

Once participants can navigate in the city using the locational information provided by their smartphones, the city begins to look familiar, leading new-comers to feel like locals. This feeling, generated by having the technology ready-at-hand, brings feelings of comfort and familiarity to the place. On the other hand, not even locals know every part of London, and as Tina explained, London can sometimes be hard to navigate.

[Tina, 33] *London is a large place. You may not know the differences between North and South London. My friends from North London never come to South London, so they would not know how to get around South London. When I moved to South London it was very new.*

Tina described the last time she and her husband had used Google Maps on her smartphone in East London, which she described as being *scattered* and *not clear*.

[Tina, 33] *I wanted to use it (Google Maps) because he kind of knew the way and me, too; but it is very comforting to know "OK, we won't get lost definitely!" Because if you take a wrong route you may end up in a dead end or something.*

Maps, as mirrors of geographical reality (Lee, 2009), remain the main solution for the uncertainty and anxiety related to getting lost. On the other hand, relying solely on maps on smartphones can sometimes lead to anxiety itself due to the potential inaccuracy. Another participant, John, while on a bus going to a friend's party, used his smartphone to check the location.

[John, 27] *It does not update very quickly, so I missed the bus stop. I thought "Oh, I am still here, it is not time to get off yet," but then the bus moved and the blue dot suddenly jumped there… I thought that it was my stop, but the map said something else… I trusted the application instead of the bus!*

Although maps on smartphones can have problems with accuracy, people with a bad sense of direction find them very helpful in making sense of new places. For example, Amy explained how she used maps on her phone.

[Amy, 28] *You know the blue bubble, it is clear, it moves with you. So I think it is helpful. It also gives me a sense of the place and how I am moving because I am not really good at reading maps otherwise.*

It is sometimes more important to know one's whereabouts than being directed to turn right or left. Since maps on smartphones can provide the users with some familiarity (and it is a cognitive component of place attachment [Scannell and Gifford, 2010]) they can contribute to place attachment and can help establish a sense of a new place. This type of locational information can thus attach its users to different places by providing them with *familiarity* and *comfort*.

4.1.2. Punctuality and planning

The fast pace of life in metropolitan areas affects how people organise and plan their activities, as well as how they navigate in any given city. These days, people can phone, text, send multimedia or instant messages, and tweet each other about the venue and time of a specific activity. This leads to flexibility in the coordination of spontaneous relations (Ling and Campbell, 2009), which can be attributed to our mobilities. As also argued by Sheller and Urry (2006a, p.207):

Mobile telephony based on many societies jumping direct to such a new technology seems especially to involve new ways of interacting and communicating on the move, of being in a sense of present while apparently absent. The growth of such ICTs is allowing new forms of coordination of people, meetings and events to emerge.

Therefore, it can be argued that, as with many wireless technologies, smartphones first entered everyday life as a result of their *time*-saving characteristics. It is interesting to see how people use locative media and navigation on smartphones to coordinate their daily activities and meetings, as today, for some Londoners, Google Maps has become like a *watch*.

> [Ben, 32] *Google Maps is my watch for space! To see where I am, where I am going to… I think I check it even more than I check time!*

The participants of the study, even those who have been living in London since they were born and who know the city very well, use their smartphone maps often when planning their daily activities. Sean, who has lived in London for 38 years, when describing his everyday use of locative media and Google Maps on his smartphone, realised that it is more related to *time* than *space*:

> [Sean, 38] *It tells me how long it can take and I trust it because it is generally right! If I leave 25 minutes before the meeting starts from my office, I walk, I follow the map … I've been living in London for a long time and I know it is there without thinking, but sometimes I follow the map to make sure that I am not going to be late. So it is more time related.*

That said, navigation in a city is not always related to work and scheduled meetings, however, all kinds of activities are planned using the maps and GPS functions of smartphones. For instance, people who use cycle maps, run-keepers, walking applications and many other sports-related functions on their smartphones use them not only to find a short/pleasant route to enjoy, but to calculate *how long it*

will take them to run or cycle a particular route. Andy described his use of a run-keeper on his smartphone:

> [Andy, 35] *If you run you can make a map and it calculates for you how far you've run and the time … You can track your route or you can create a new route. Whatever you want, you can look at the routes that other people have done and then try to do that, so it is pretty cool!*

So apart from planning a route to run, participants can also share their routes and experiences of different places with others; and furthermore, they can also use their applications to *explore new places* or *new routes* in the city that fit within their time constraints.

4.1.3. Personal security: A "secure" sense of place

Another subcategory related to navigation comprises *concerns for personal security*, as another instrumental use of location information on smartphones. This is a precautionary function that is especially employed by female respondents when they will be late returning home after a night out. For example, the user downloads a Transport for London map on their smartphone, and after locating themselves on the map, they can search for the nearest stations, night bus times or the shortest walking routes. Yvette described how she uses her smartphone after spending time with friends to navigate her way home at night:

> [Yvette, 25] *I love using my BlackBerry on the night out, on how to get back on the bus. Massively … Massively … I just go to the TFL* (Transport for London) *journey planner and put my location and where I need to go.*

Yvette uses this feature of her smartphone almost every time she goes out. When relating the last time she had used her smartphone for this reason, she revealed her *concern for safety and security*.

> [Yvette, 25] *Last time I was near King's Cross and I missed the last tube. I was like "Oh, gosh! Which bus to get into!?" … I do it all the time actually, because I feel safer … that I can do it on any location!*

As another safety precaution, many participants use GPS on their smartphones in case they are lost or stolen. Tina told about her fear of losing her smartphone, as she keeps all her personal information stored on it.

> [Tina, 33] *BlackBerry Protect … There was a tick box that I checked that enabled GPS information to be sent to the website. So if I ever lost the phone, I could log in to the website and it will tell me where the phone was, which could also be used if it was ever stolen.*

For many people, locational information is private, and the privacy concerns arising from use of locative media are related to the fear of losing control and power over that information (Gordon and de Souza e Silva, 2011). People find the automatic sharing of locational information *creepy,* as they usually do not understand how it works.

> [Tina, 33] *I would not want that data to be sent, because it is a little creepy … I think it is an instinctive reaction against it, because I do not understand it.*

In contrast, many others believe that the benefits of sharing locational information outweigh the risks of surveillance.

> [Sean, 38] *It does not worry me very much … The location stuff, that like the CCTV I just see it like the benefits outweigh the problems.*

Issues of personal safety, security, privacy and surveillance are often associated with the sharing of locational information due to the double nature of maps. Maps, and thus GPS and locational information, 'deploy the visual sense as a means of control and surveillance' (Macnaghten and Urry, 1998, p.121).

4.2. Sharing of "Who am I?" via "Where?"

Individuals can draw similarities between their self and places, and can connect to places that come to represent who they are (Scannell and Gifford, 2010). As such, the sharing of locational information, especially as a part of social networking

application or a location-based game, can show the kinds of places a user associates with. A *platform/stage sense of place* refers to those who see where they live as a stage/platform on which to act out their lives, and so it can refer to some *ideal picture of place*. People who consider places to be platforms/stages search for people like themselves with whom they create stable, patterned social relationships. For them, places may symbolise 'their attachment to particular people and activities, although it is important to note that it is the interaction in a particular place rather than the place itself that remains dominant' (Eyles, 1985, p. 125).

Locational information use in this category includes Foursquare check-ins. Paul told me that to become the "mayor" of a place, he sometimes checked-in at places that were mundane, although he could not explain why he engaged in such an interaction, describing it as obsessive-compulsive behaviour. He explained how he became the mayor of the book shop where he used to work.

> [Paul, 22] *I worked there a day and a half every week. When I first found it on Foursquare, I sort of noticed that there was someone else, some customer, as the mayor… "I work here, so this is mine. This is my territory! I've been here for 3 years. So I have this." So I made that a part of my empire.*

The user who checks-in most at any given place on Foursquare can become the "mayor" of that place, which can, symbolically, contribute to place attachment. When one is ousted from the mayorship by someone else on Foursquare, the user may experience the need to go back to that place and check-in again to "win" the place back.

> [Paul, 22] *Every now and then you get a little message saying you get ousted by someone. Then I say: "Oh bugger! That's my place, I want that back!" And I do not know why I want it back!*

Not all respondent checked-in at places with the sole intention of becoming the "mayor". One of the participants, Katy, giving her reasons for checking-in at a boutique in Covent Garden, said that it was manly a display and, in some sense, to show-off.

> [Katy, 27] *I went shopping the other weekend to Covent Garden, to Lily Allen's boutique. It was just a funny thing to tag in there because it was just "I am at the boutique, oh this is the famous …" and some of my friends from Wales, because I used to live in Wales, said "Oh my God! That is amazing!" So it is a kind of keeping in touch with my friends and letting them know what I am doing. Something like notable, important.*

In this regard, Katy claimed that she was using information about a particular place to keep in touch with her friends, knowing who would be likely to comment on such a check-in. That said, it also reveals that Lily Allen's boutique was an ideal place for her to be, and so she used it to show how she had been enjoying London, and in a way say: "Look where I am, and you are *not!*"

Another respondent, Paul, used check-ins for a similar reason:

> [Paul, 22] *Tell them particularly impressive things. Like say, "the British Library" and then I am going to say a message "Look at me, I am smart!"*

Under these circumstances, the meanings of places are shared in relation to personal identification. They do not show one's affections or behaviour towards a place, but signify one's own traits and desired personal attributes.

4.3. Memory: Creating a renewed sense of places

Creating a renewed sense of place involves the recalling and recollecting memories in relation to a place. By remembering, we can sometimes renew the sense and meaning of a specific place for us, as feelings about certain places are shaped by past events, and are sometimes kept as a record, biography or a diary. The notion of rapid change and the need to hang onto a moment is closely related to the modern urban lifestyle and struggles with mobility. Conceived in this way, among other senses of places, such as social and instrumental, a nostalgic sense of place has special importance for us (Özkul and Gauntlett, 2014).

As the respondents indicated, they usually navigate back to their photos, mobile Facebook status updates and Foursquare check-ins to remember those places and to bring back memories (Özkul and Gauntlett, 2014). One of the

respondents, Jim, told me that when he went to Spain, he wanted to check-in at a castle.

> [Jim, 22] *These are the places that I do not want to forget and I tag them on Facebook as well.*

If the places visited are of high significance, users also share them on Facebook (mobile), add photos and geotag them.

> [Jim, 22] *If it* (the place where he checked-in) *is very valuable … if it is a very memorable place, then I go back there again as well.*

Also, as another respondent, Jason, mentioned, users can sometimes add locational information to their blogs via their smartphones to share their memories with their followers. Interestingly, Jason returns to his own blog posts or tweets when he wants to remember those places.

> [Jason, 54] *It is augmented memory. I search my own blog for things like that … I like to blog and I like to share useful things around with people, but I also search my own blog to search for information on places that I have been before.*

Nostalgic feelings can be both positive and negative (Eyles, 1985), hence the places that people check-in or share do not necessarily have to remind them of happy times, although recalling them can evoke positive feelings about certain places. One of the respondents, Liz , suffers from a rare disease that took her ability to walk two years ago. At the time of the interview she was using a wheelchair, and had to go to medical centres almost every week. She regularly checked-in at medical centres, even though the memories associated with them were not positive.

> [Liz, 22] *What amused me a lot was … It* (Foursquare) *said to me that my most checked in places were medical centres and pubs! That made me laugh a lot. Because obviously I am always ill and I am always in the pub when I am not.*

When looking at her check-in history she was amused, not because the places that she had checked-in were amusing, but at how well Foursquare knew her. Accordingly, nostalgia can be transformed into an amusing narrative, assigning a positive attribute to a place regardless of its function. Used this way, one's location can renew an existing sense of place. In addition to being used as a means of recalling memories and places, locational information can also be used to create a sense of being together, again renewing the current sense of place where one is located. One of the respondents, Becky, explained how she used her smartphone and locational information explicitly (via photographs, rather than simply saying "I am here!") to feel close to her family.

> [Becky, 32] *My father is in India, my brother is in Ottawa, I am in London, my sister is in Washington … and sometimes you do not have the energy to talk on the phone, so it makes you feel a lot more connected!*

For Becky, feeling present and connected was very important, as it was the major motivation for sharing her location through photos. Becky explained how she and her brother used their smartphones to create and maintain that feeling.

> [Becky, 32] *Yesterday, he did send me a photo of a very nice coffee, and I said "where is that?" because I did not recognize it from the cup, or the setting, "I am in Montreal!" I said "Wow!" Like when my father told me that "your brother is in Montreal," it is different. You feel like … I am kind of there, you are more part of it. Like this is happening right now so you kind of feel like a bit more connected.*

Virtual travel is 'often in real time and thus transcending geographical and social distance' (Elliott and Urry 2010, p.16), while communicative travel is 'through person-to-person messages via messages, texts, letters, telegraph, telephone, fax and mobile' (Elliott and Urry 2010, p.16). As such, by sharing locational information and photos, users can feel as if they are travelling to those places, and so are more connected.

On the other hand, some respondents found sharing location quite pointless, although they still checked-in at places. For instance, Andy usually

checked in at significant places, but considered the regular sharing of usual locations, as was Becky's habit, to be mundane.

> [Andy, 35] *I hardly do that. I did it when I went to Stockholm, because I had a nice view of the waterfront. And it had ice still on it. So that was kind of cool, so I put a picture of that. But I am not going to say "Hey I am at the Café Nero, drinking cappuccino." Or, you know something mundane like that.*

The participants often used locational information to keep in touch with friends in London, where it can be hard for people to meet and connect. For such situations, the respondents tended to use Foursquare and Facebook Places, with the former being intended for such a purpose, while the latter could be considered as more of a diary. One of the respondents, Jim, explained how check-ins affected his connections with his family and friends.

> [Jim, 22] *You cannot shout in a way … "I am at Paddington!" Well you cannot do that. But virtually, you can tell your friends, you can tell your family, you can say "I am at this place!" Anyone might not see you physically at that place, but by saying you're virtually there they might come and say "Hi"* (meeting in person)*, that's the good use of it!*

These kinds of locational information use on smartphones, either with or without location-based applications, explain how people care for their loved ones, and how they stay connected with each other, whether or not they live in the same city. In this regard, it becomes a way of sharing places both in one's own past, and with one's friends and family. As Riley (1979) suggests, the remembering of a place may have less to do with the place *per se*, and more to do with yearning for the emotion or mood it once evoked (Riley cited in Marcus 1992, p. 111).

4.4. Explore: Creating a new sense of places

> Not to find one's way in a city may well be uninteresting and banal. It requires ignorance – nothing more. But to lose oneself in a city – as one loses oneself in a forest – that calls for a quite different schooling. Then, signboard and street names, passers-by, roofs, kiosks, or bars must speak to

the wanderer like a cracking twig under his feet in the forest (Benjamin, 1979, p.298).

Converse to the idea of using locational data in smartphones to find one's whereabouts and to navigate in a city, it can also be used to get lost willingly and explore new aspects of the urban space, thus generating a *new* sense of places (or in other words, a new way of place-ing oneself). One of the motivations behind the use of locational information in such a way is to explore new places and escape the monotony of everyday life. Many participants stated that they used applications such as Serendipitor and WikiMe, as well as sometimes running Google Maps, to generate a random route (hoping to see new places and experience new things), and sometimes used their own locations as a means of getting lost and detaching oneself from the ordinary routines of everyday life. In this way they can also create a (re)attachment with (old) places by discovering new things in that environment.

Accordingly, even if there is little interest in the current location, shifting locations may in itself be enjoyable, so long as the final destination or the journey offers feelings of excitement. One of the participants, Ben, indicated that he used his locational information to explore new things, and added: 'Will I find something interesting?' When talking about Serendipitor, Ben described it as 'an artistic project which adds aesthetic dimensions to the city'. When I asked him if there was a difference between experiencing the city using those applications or just by wandering in a city without a smartphone, he said:

[Ben, 32] *There is a difference because the agency as such is in the actual gadget (pointing his smartphone). Of course it is different. […] Because something is driving me […] I am not driven by my wills, it is just an algorithm guiding me through the city.*

The participants who declared an interest in applications such as Serendipitor believed that the boundaries of real and virtual started to disappear, meaning that they could discover and experience new things in the city. Another respondent, Mary, talked about how she experienced London by using an application called Hidden London, which is like a treasure hunt game for places.

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[Mary, 35] *It is blurring the boundaries. As I said, you are not any more only in the street, or in the spaces as a being among other beings and buildings, etc. You are like in an application, in a program world, and you develop a different persona… It is like "Oh, we are bored, Didem where should we go? Oh, Let's look!"*

On the other hand, using such applications to explore new things and places was not always desirable. For Andy, wandering in a city on his own resulted in a better experience than following a pre-determined route, and he described such applications as diminishing our 'sense of the city as a living space' because he thought they *turn places into locations*:

[Andy, 35] *Basically that's what it becomes. It becomes coordinates. It could be anywhere, it could be virtual and it could be real. It does not have any contact.*

Respondents who did not like using such location-based applications voiced one common point:

[Jason, 54] *It can never replace what is happening in the real world.*

Similarly, another respondent, Mark thought that it was not the same thing as seeing his friends face-to-face, although he used the location feature of Facebook on his smartphone to keep in touch with them, especially when he was traveling

[Mark, 33] *It is like sweetener, your body actually craves for sugar, but you just give it sweetener. It still continues craving for the sugar, for the real thing, and sometimes I think Facebook can be a little bit like that. It is not the same thing as coming together with real people and sitting together, meeting friends and seeing their faces and expressions.*

That said, location-awareness is *not* built to *replace* the real world, but only reconfigures our perception of place, adds another dimension to the experience of the city and sometimes contributes to a new sense of place. Andy agreed with this later in his interview when talking about an application that keeps track of his running routes and shares them with other users.

[Andy, 35] *Well, sometimes you want to try new things. This helps you to plot new routes. Or if I go to Stockholm I wanted to try something different.*

Exploring new things in a city is not only specific for the users of those applications and those who share their locations, as non-users who are somehow connected to those users via social networking can experience a new sense of a place based on their friends' locations.

We usually think of notions of place and mobility as opposites, as physical mobility and ICTs, especially mobile communications, were seen as responsible for the erosion of place. However, as many scholars from different disciplines agree, places can also be mobile (Cresswell, 2004; Sheller and Urry, 2006a), and rather than place and mobility being opposites (Gustafson, 2002), they should be thought of in relation to each other. In addition, although mobile communication technologies have provided their users with a detachment from place in the form of physical mobility, allowing their users to carry their connections with them, they simultaneously afford a form of attachment to places. No matter how mobile our everyday lives have become, we continue to value places, remember what they mean to us, identify ourselves with them and communicate our identities through them.

CHAPTER 5: PRESENTING AND NARRATING PLACES: THE "WHO AM I?" IN THE "WHERE"

In his work *The Presentation of Self in Everyday Life*, Goffman (1990, first published in 1958) analyses face-to-face social interactions on an everyday basis, and 'describes social life as a kind of multi-staged drama' (Meyrowitz, 1985, p.2). He uses the term "performance" to 'refer to all the activity of an individual which occurs during a period marked by his continuous presence before a particular set of observers and which has some influence on the observers' (Goffman, 1990, p.32). During the performance, 'information about the individual helps to define the situation, enabling others to know in advance what he will expect of them and what they may expect of him' (Goffman, 1990, p.13). Hence, through performing a specific role, the individual communicates different aspects of the self, while also defining a situation 'for those who observe the performance' (Goffman, 1990, p.32).

Performance depends on the nature of the situation, the role of the individual in it and the makeup of the audience (Meyrowitz, 1985, p.2). Examining the effects of new patterns of social communication through a "situational approach", Meyrowitz (1985) asserts that behaviours can change according to specific situations, which can also be mediated electronically. He argues that many sociologists think of situations as stable (Meyrowitz, 1985, p.viii), and accordingly, developed a theory that 'extends the study of static situations to the study of changing situations, and extends the analysis of physically defined settings to the analysis of the social environments created by media and communication' (Meyrowitz, 1985, p.ix). His (dynamic) situational analysis describes how electronic media affect social behaviour by reorganising the social settings (Meyrowitz, 1985), and also argues that 'as we lose our old "sense of place", we gain new notions of appropriate behaviour and identity' (Meyrowitz, 1985, p.ix). Therefore, although his analysis reflects on the negative aspects of the relationship between sense of place and mediation, his approach is significant in understanding the social and spatial practices of everyday life, and could be applied to the situational analysis of mobile and locative media.

Expanding Goffman's (1990) theory of sociability while contradicting Meyrowitz (1985), Sutko and de Souza e Silva (2011, p.809) argue that 'indirect

forms of communication do not rupture co-present, but may rather connect us to surrounding spaces and places'. They apply Goffman's (1990) "presentation of self in everyday life" to their analysis of locative media (locative mobile social networking) and introduce the concept of "presentation of place". After analysing various locative mobile social networks, such as Foursquare and Loopt, they argue that the continuous change in the identity and meaning of places following the experience of using such applications is not only a way of presenting the self, but also presenting the place. In their conception of "presentation of place", there is a 'multiplicity of agents giving and giving off impressions – impressions that collectively become impressions of a place' (Sutko and de Souza e Silva, 2011, p.811). Accordingly, mobile and locative media become interfaces for the "social navigation of space" and the "spatial navigation of sociability" (Sutko and de Souza e Silva, 2011, p.812).

The meaning of the information shared is interpreted and re-interpreted based on the stage and dynamic situation (as defined by Meyrowitz, 1985) created through such a *performance*. In locative media, the performance space created by simply checking-in at a place creates a common social space in which others can perform. On the other hand, performance space is not only lived space (as in Lefebvre's "representational space", space of inhabitants/users), as it also contains perceived and conceived spaces (as in Lefebvre's "spatial practice" and "representation of space). According to Lefebvre (1991, p.38), spatial practice contains both the urban reality and daily routines, and it is revealed through the physical and experiential deciphering of space. It is the space that we perceive 'as we observe ourselves and others within it' (Humphreys and Liao, 2011, p.409), and how we do that is through narratives of the self and places through "mobile annotations", as described by Gordon and de Souza e Silva (2011) in their pioneering work, *Net Locality*.

Accordingly, in this chapter I argue that mobile and locative media offer a new way – or at least, a *different* way – of presenting places that could challenge the perception of a specific place. Using locational information as a narrative of everyday life (*mobile narratives*), one can share the individual or collective meanings assigned to places. 'The places in a person's world are more than entities which provide the physical stage for life's drama. Some are profound centres of meanings and symbols of experience' (Godkin, 1980, p.73). As such, these mobile narratives

become also a different means of self-presentation, in that they not only present places, but also communicate different aspects of the self that constructs and shares those mobile narratives. These narratives may be in the form of check-ins, geotagged photos or locational status updates on mobile social networks. In this regard, I will discuss all forms of locational information sharing, which can be used to tell stories of the self and places as ways of self-presentation and presentation of places. Consequently, it is important to note that self-presentation and the presentation of places are understood as concepts that are interrelated and co-constructed through mobile narratives. I ground my analysis of locational information sharing as self-presentation and the presentation of places in line with Goffman's (1990) "presentation of the self in everyday life", and Sutko and de Souza e Silva's (2011) "presentation of place".

Unfolding the concept of "presentation of place" more fully, de Souza e Silva and Frith (2012) introduce the term "presentation of *location"*, which explains how users of mobile and locative media present themselves through their location. Furthermore, expanding their analysis of the presentation of self and place in locative mobile social networking and location-based games, and in line with my previous argument that research into location-awareness should not be subordinated to location-based services/features, in my analysis I also introduce the use of locational information for "self-reference and self-reflection", which I treat as a part of the personal narratives of the self. As 'narrative is meaningful to the extent that it portrays the features of temporal experience' (Ricoeur, 1984, p.3), one's own locational information history could be used for the construction of a narrative of the self, not only in the form of an autobiography (consisting of facts about one's life), but also imaginary (revealing the self and its fantasies). Based on the analysis of the sketch-mapping focus group data, I argue that users of mobile and locative media not only present the spatial or social, but also individual stories. Thus, once shared, one's location not only represents any given place, as in the form of a map, but also marks individual life stories in topographical order.

5.1. Narrating self, narrating places

The spatial and the social are mutually co-constructed (Lefebvre, 1991; de Certeau, 1964), and the self is also a social construct that arises out of the process of spatial experience and activity. As Mead (1934, p.135) argues,

The self is something which has a development; it is not initially there, at birth, but arises in the process of social experience and activity, that is, develops in the given individual as a result of his relations to that process as a whole, and to other individuals within that process.

Self-identification and associations with a place can be simultaneously narrated along with the sense of place on mobile platforms, which contributes to the performance of the self. Hence, through the sharing of locational information, one not only presents different aspects of the self, but also contributes to the process of spatial and the social experience, and this in turn affects the development of the self.

Location, when understood as 'a sense of place', can tell a lot of things not only about a place, but also about the inhabitants of that place, their personalities, preferences, likes and dislikes, and even ideals. One could easily gain an impression of a person by following the traces of the places and events that they share with others. As Buttimer (1980, p.167) argues, 'people's sense of both personal and cultural identity is intimately bound up with place identity'. Hence, through communicating different aspects of a place, the self is not narrated, but becomes "narratable" (Cavarero, 2000). As Cavarero (2000) argues, 'every human being, without even wanting to know it, is aware of being a *narratable self* – immersed in the spontaneous auto-narration of memory' (p.33). In this regard, what is shared as part of one's performance is not only the "where" and "when" of things, but also the "who" and "what" – the narratable self – which includes also one's own "narratives of places" (Crang, 1997) and of the self.

Use of mobile and locative media can take part in place-making and the identity of places through narratives of places:

> Through the location-aware filter, locations are presented differently to different people … However, the use of location-aware technologies also contributes to the construction of the very meaning of public spaces … This constitutes what we call the presentation of location: *The potential to develop and access dynamic aspects of a location via location-aware technologies* (de Souza e Silva and Frith, 2012, p.163).

Additionally, in the current literature on the use of location awareness, it is a well accepted fact that 'location has become an important piece of personal and spatial identity construction' (de Souza e Silva and Frith, 2012, p.163). In this regard, to understand oneself, the exploration of self-identity through place (topoanalysis) was deemed to be more fruitful by Bachelard than psychoanalysis (Buttimer, 1980, p.167). By controlling what to share and what not to share about a specific place, one not only communicates a different aspect of place-making (i.e. choosing to check-in at *this* place, but not *that* place), but also presents a past,[31] present and imaginable self. Accordingly, used as platforms for the communication of different aspects of places, mobile and locative media contribute to the performance of their users by revealing the narratable self.

During the sketch-mapping focus groups, there was a common tendency among the research participants to explain the different mobile platforms used to narrate the self, places and events, as well as to define the audience of such narratives. Different narratives are shared on different platforms, just as each platform has its own audience. One of the research participants revealed this aspect of sharing locational information on different platforms,

> [Larry, 35] *For Foursquare, I have friends, a different set of friends, and Facebook is different, and it is just a pain!*

By sharing locational information on Foursquare, Larry communicates different aspects and uses of places, and while checking-in on Facebook, he reveals a different aspect. For instance, he told me that if he ever returns to the same place in the future, he checks-in on Foursquare; however, for places that have special meaning for him, he checks-in on both platforms and also uploads a photo on Facebook. As such, in the presentation of the self and places, in addition to choosing what to share and what not to share, the platforms chosen for each narrative are also important, as each platform is a different performance space.

In a variety of disciplines, many scholars argue that identity is *performed* (Buckingham, 2008; Goffman, 1990; Turkle, 1996), and in this sense, using Foursquare or Facebook, attaching a photo or a comment becomes important both

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[31] Discussed in Chapter 6.

for the person who is sharing and for their "audience" (from now on I'll use the term "audience" when referring to Goffman's "observers"). The place not only reveals information about the person who shares it, but also based on the geotagged photos, comments and reviews of places, evidence about that individual is documented. In such situations, the audience 'can rely on what the individual says about himself or on documentary evidence he provides as to who and what he is' (Goffman, 1990, p.13). However, Goffman's analysis of the presentation of self in everyday life is based on face-to-face interactions, and so what happens to the individual performances and meanings of those places once they are shared on a mobile platform brings another dimension to his analysis. For instance, if I check-in at places in East London, would it mean that I am a hipster (as in the sketch map of London drawn by Charlie, 25; Figure 1)?
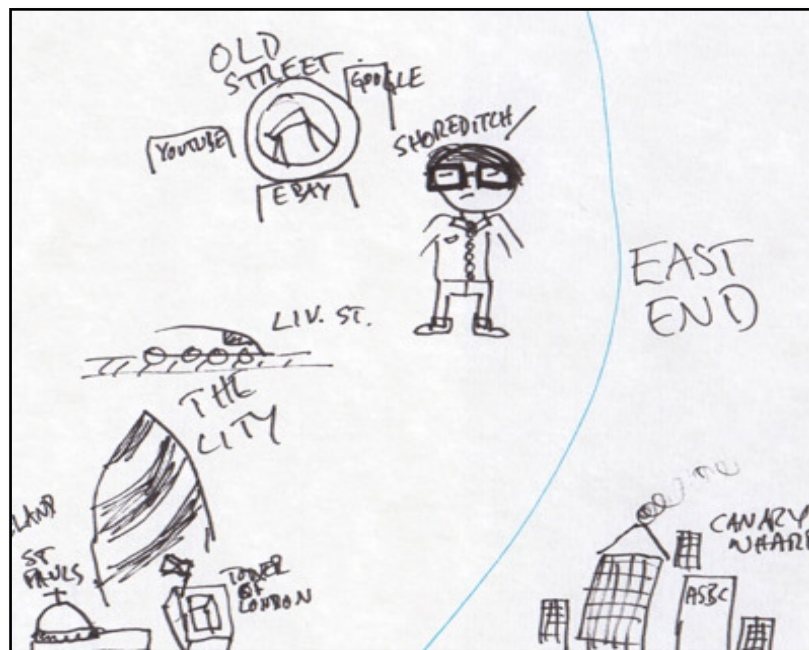
Figure 1: A section of Charlie's map of London, depicting hipsters in East London, wearing skinny jeans and glasses.

What if I check-in mainly at places in East London and write reviews of places on Google Maps that are not actually positive? What type of information does my moving from West London to North London convey about my identity

and about each neighbourhood for the ones who are acquainted with me? The answers to these questions depend on the platform and *interpretation* of the performance.

Based on a situational analysis (Goffman, 1990; Meyrowitz, 1985), how one acts in different places and how one presents them differently depend on the motivations of the performer, platform and situation. As such, analysing only place-specific mobile updates is not enough to understand how and why users of mobile and locative media share their locations. In some situations, one may share the location of a place revealing a story about that place, or an event that happened there, regardless of whether the thing shared evokes positive or negative feelings. The act of sharing could convey messages such as "Look at me, how cool I am!", "Look, where I am, and you are *not!*" or even "I feel lonely, and unfortunately this is my life!" However, it is also important to note that the negative aspects of one's life and places are not usually shared with a wider audience. Among the research participants, only five out of 38 said that they had checked-in on Foursquare or Facebook to communicate their negative experiences of a place, such as the Overseas Visitor Registration Office in Borough, or East London before the Olympics (Figures 2 and 3):
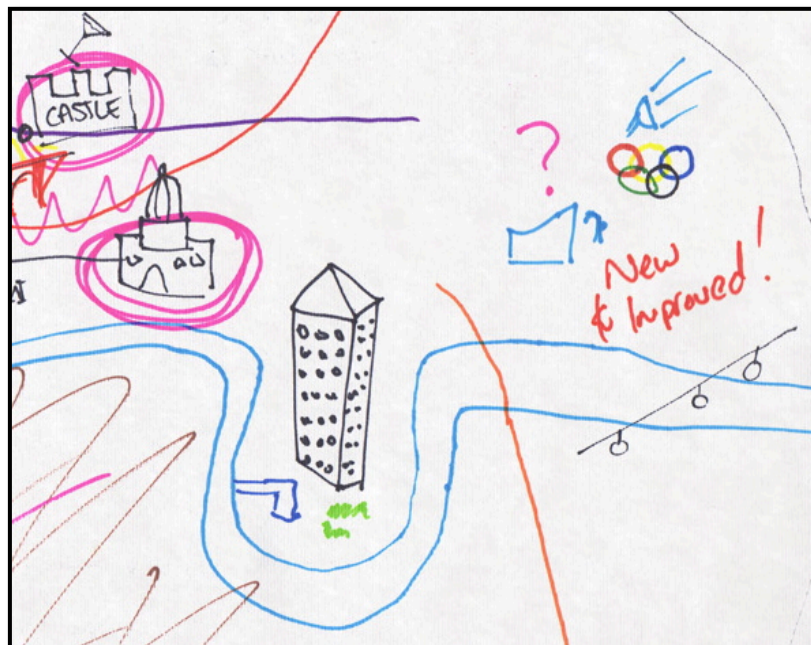
Figure 2: A section of Mark's map of London, where East London is depicted as "new & improved" because of the Olympic Park.

[Mark, 22] *It says new and improved because it was a shit hole! But the East End is not a nice place to live.*
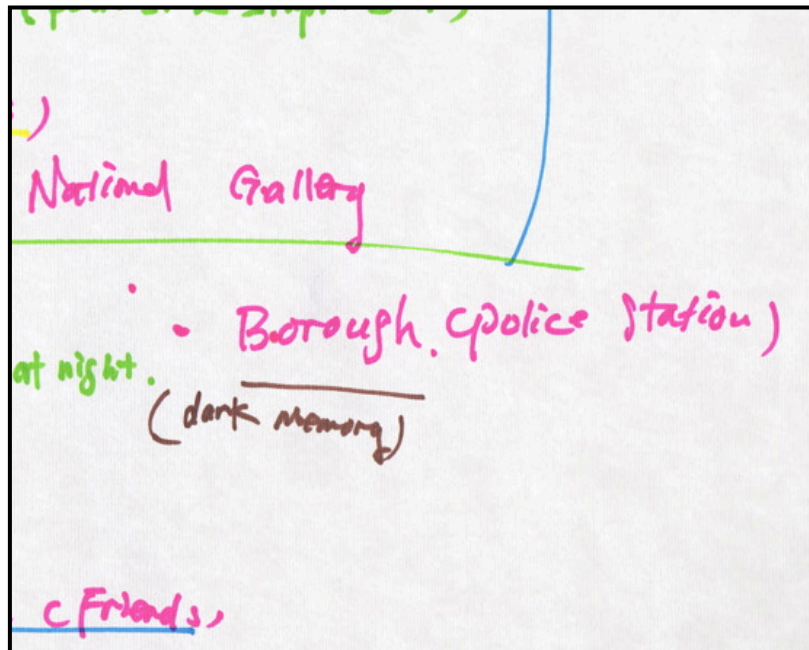
Figure 3: A section of Emily's map of London, showing Borough and her "dark memory" of Borough Police Station.

[Emily, 43] *And this is Borough. Borough is the place that I will remember for my whole life. I went there to sign a paper to get registered, because I am a foreigner, I hate to be there … I was there at 8 o'clock and left there at half past 4 in the afternoon. I was like a refugee. Because in Central London, all the students in September go there within seven days after arrival in the UK.*

Somebody who does not know Mark or Emily well and sees their check-ins in East London and Borough could easily *misinterpret* what was being conveyed. As Goffman (1990, p.14) demonstrates, there are two radically different kinds of sign activity: the expressions that one *gives*, and the expression that one *gives off*. Based on the analysis of the above comments, some aspects of place-making can be hidden within the comments, photos or in-between the lines of the place-based stories

shared on mobile social networks. If Emily checks-in at Borough (or any other place) and does not provide the audience with details about the event/happening there, then the impression given off could be a different to the one she intended to give. As such, in addition to employing Goffman's theory on different kinds of sign activity, how users of mobile and locative media use locational information to present the self and different aspects of places should be analysed, in consideration of the situation, context and interpretation.

Sharing locational information about Borough would not communicate any aspects of Emily's self; however, seeing her check-in, one could easily understand that she is not a UK/EU citizen and that she is a student, revealing an aspect of her identity. If she also shares her feelings about being in Borough or a geotagged photo from the queue in front of the student registration office, then Emily has the potential to affect others' perception of Borough. In this respect, images of places and the events/happenings in those places also contribute to the presentation of places and the self.

5.1.1. Communicating something special

Sharing the locational information of many tourist sites or famous landmarks in London was a common practice among the research participants; however, in such check-ins, what was special about any particular place was not always personal (although collective meanings assigned to places could also be special, as in the case of national identity). The fact that the location of a place has not been shared extensively through mobile and locative media could actually be one of the reasons why it is important/special for someone. For Rodney, sharing locational information meant sharing the assigned meaning and revealing the significance of a particular place for him. He explained why a *random* Spanish Bar in London was important for him and why he wanted to share its *significance*:

> [Rodney, 25] *I do not know, maybe not in a "promote" this place kind of thing. But maybe I subconsciously want my friends to know that this place is special for me and that's why I am checking in constantly.*

When I asked him what was special about the Spanish Bar, he told an interesting story that was *actually* only special for him and his best friend, and may not make sense to a complete stranger who sees his check-in on Foursquare:

[Rodney, 25] *Its significance for me is before I moved to London. Whenever I came here, I always went to this place with the same person, my best friend. And it was like a tradition, we always did that. There we grabbed a couple of beers, there's this suffering painter, like, this artist guy. He was there the first time we went there, which may be 6 years ago. Like he had this sad, entire story* [sic]. *'I do not have any money to go to the art school, so let me draw a sketch of you for a couple of pounds!' The next year we went there, and again he was sitting at the same place, selling the same story to different people, to us even, because I mean he would not remember; it was a year ago. The guy, he still hangs out at this place, like for 6 years. And the story has not changed.*

What is intended through the sharing of locational information in this case is *not* sharing the location itself, but the story *behind* the check-in. However, Rodney's social network may not know the story about the Spanish Bar, since what he shares through checking-in is only the mere *location* of the bar, not the story of why it is important to him. In this regard, the impression given off is totally different from the intended expression (as is always the case).

Among the research participants, some places were deemed to be special only if significant others are present with them at those places, and so they not only present the place and themselves, but also their significant *others* by way of tagging. For Rodney, that particular bar is only important when he goes there with his best friend, and so he also tags his friend on Foursquare and Facebook when he checks-in there. Similarly, as Jonathan argued, regardless whether or not you have a Foursquare or Facebook account, others can share your location, presenting aspects of your self indirectly. Jonathan related that he and his girlfriend used to walk to Leicester Square to go to a cinema every week. Talking about the last time he had checked-in, he revealed that he was not used to check-ins, and that it was his girlfriend that usually checked him in every week at the cinema:

[Jonathan, 23] *I think my girlfriend checked me in somewhere when we were out. Cinema or something like that.*

Although for Jonathan going to see a movie with his girlfriend every week was not unusual, he considered the walk with her to Leicester Square as special. For this reason, the check-in at the cinema would not reveal an aspect of Jonathan's self, apart from the fact that he likes going to the movies every week.

For some, checking-in itself was important to some extent, in that it helped them claim the right to a place. When I talked more with Rodney about the Spanish Bar and his repeated checks-in at that bar, he mentioned the points and mayorship system on Foursquare:

[Rodney, 25] *Because no one does and I believe that I can be the mayor of the Spanish Bar on Foursquare.*

[Researcher] Is it important when you become a mayor of a place?

[Rodney, 25] *Yes! It means that I go there more often than any other people. But most of these places are basically underground and I do not have the reception, so my mobile device usage is basically limited to maybe taking photos and that's it.*

[Researcher] Do you post your photos afterwards?

[Rodney, 25] *Well, it depends on the photo. Sometimes when I feel that people need to see it* [sic].

[Researcher] You said that people do not usually check-in at that Spanish Bar …

[Rodney, 25] *Yes, I do not know why. I never understood the concept of checking-in on Foursquare in a way, because from my perspective it should be to know what people are doing and where they are. But it is being transformed into something more of a 'I am hanging out at a really cool place!' that sort of thing. And the Spanish Bar is completely random, nothing special, it is just a regular local pub. So I think people do not need that. The people do not check in there because maybe they do not need their friends to know they are at a random bar* [sic].

Although that bar might be deemed *random* for many people, for Rodney it was *special* in some ways, which was why he felt the need to check-in and share photos of that bar. He wanted others to know that that specific place is important for him, and that is how he wants to present that bar. On the other hand, conversely, another respondent told me that although he did not often use Foursquare, he checks-in at random places just to become the mayor and earn discounts or other offers from those places. As such, his use of check-ins was not as *meaningful* as Rodney's:

[Mark, 22] *I do not do Foursquare anymore.*

[Henry, 23] *Come on tell her about your becoming mayor of pubs!*

[Mark, 22] *Yes, I was the mayor of one pub and I got 20% discount in there …*

[Henry, 23] *Really?*

[Mark, 22] *Yes, I went there and I said that I am the mayor and he looked at me as if I am an idiot.*

[Henry, 23] *'Cos you WERE!*

[All laugh]

[Mark, 22] *But I got 20% discount!*

Both in Rodney's and Mark's check-ins, the places they visit are somehow promoted, although that was not the intention. Becoming the mayor of the Spanish Bar would not only mean that Rodney goes there more often, but also he would seal the importance of that bar for him. For Mark, becoming the mayor of a random pub meant a discount, and so the act of checking-in and becoming the mayor of a place to receive a discount could affect his decision to go to a one pub rather than another. On the other hand, as he said, there was nothing special about that pub

apart from the fact he could get a discount. This self-presentation through Foursquare made Mark's friends laugh at him, because he was simply going there and checking-in just to get a discount. In comparison, the impression that Rodney gave through his check-ins was more positive, since the Spanish Bar had a significance and a story for him.

However, all of this self-presentation and presentation of places happens on Foursquare, and only people who are active users of the service would be able to see it. For this reason, Rodney chose to post his check-ins on Facebook as well in order to extend his reach. Although he did not believe that he was in any way *promoting* the place, he actually *was* promoting it by communicating the special elements of that bar (only through check-in) to his fellow Foursquare and Facebook followers. According to Goffman (1990, p.14), the expressions one *gives* involve 'verbal symbols and their substitutes', which he defines as 'communication in the traditional and narrow sense'. One uses verbal symbols and their substitutes 'admittedly and solely to convey information' that is known to be attached to those symbols (1990, p.14.). Expressions *given off* involve 'a wide range of action that others can treat as symptomatic of the actor, the expectation being that the action was performed for reasons other than the information conveyed in this way' (1990, p.14). Among the research participants giving an impression through the conveying of locational information was a common use of mobile and locative media, although that was not always the original intention.

On the other hand, the Spanish Bar was the only place that Rodney checks-into, and so one might think that it is the only bar he frequents; but upon looking at his sketch map, I saw that he actually drew a lot of bars and pubs all around London (Figure 4).
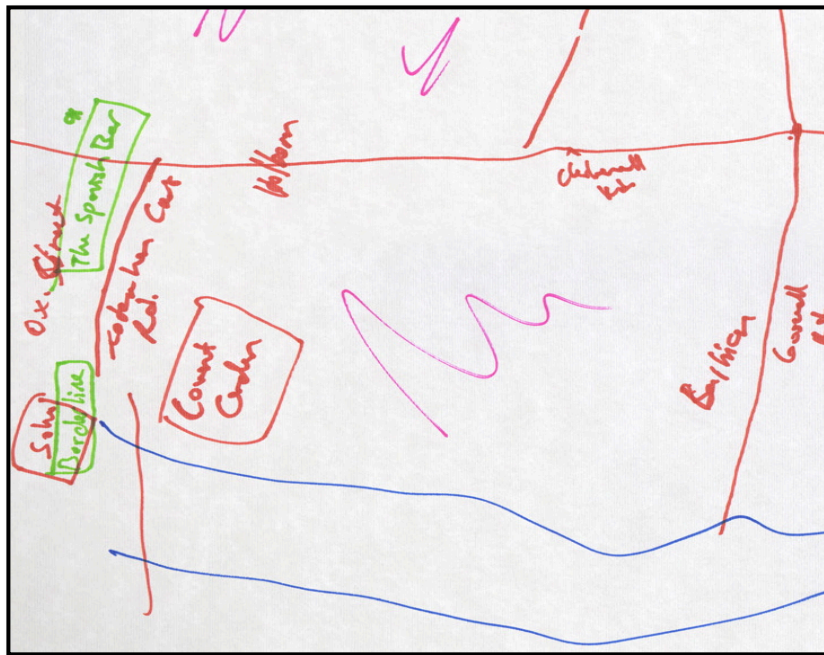
**Figure 4: A section from Rodney's map of London.
On the left, in green, is the Spanish Bar and another
pub, Borderline.**

By sharing the locational information and story behind his check-in, he
reveals the importance of the bar for him, given his habit of checking-in only at
places that have specific importance for him. On the other hand, this may not be
the case for people who have no idea about the other places he has visited; and that
is why I argue that sharing locational information can sometimes *limit* the
presentation of self and places, in that we tend to share what is significant and
special to us and disregard the places at which we usually end up. As Tuan (1974,
p.174) argues, 'in most cases we can acquire some understanding of a people's life
style, including their attitude to the world, only through the cumulative evidence of
daily acts and through the character of the physical circumstances in which they
occur'. Accordingly, sharing locational information does not always provide
cumulative evidence of people's daily acts. Although not contextualising this aspect of
check-ins as *limiting*, de Souza e Silva and Frith (2012) argue that 'by choosing to
check in to some places and not others, location-based social network participants
show their social network some aspects of their lives and not others. Those
locations, then, become part of how others infer qualities about them' (p.163). As

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what is shared can actually limit one's self-presentation and the presentation of places, I argue that such check-ins *only* mean something for people who are already acquainted with those sharing such information.

On the other hand, by intentionally/unintentionally *promoting* a place, others may develop a sense of those places and have an idea about the lives of other through check-ins. Some of them also follow reviews of places on Google Maps and write reviews themselves:

> [Helen, 25] *On Twitter, or on Facebook for instance, if I see someone going somewhere then I look at it, and if I think that it is nice I'll add it on my Facebook* [sic]. *It is basically the places where I want to… then I say 'Oh, I should go there' and I would go one day, definitely go there. That's how it works for me at least.*

> [Sally, 21] *For a lot of places that I really liked, it is a bit nerdy but I checked-in on Facebook. And then I recommended the place to other people immediately[32].*

Sharing locational information has the potential to affect others' perception of a place and their decision to go to that place, creating a new sense of a place. As argued by de Souza e Silva and Frith (2012, p.163), 'interfaced through location-aware mobile interfaces, individuals can access other people's interpretations of those locations, through reviews or tips left in those locations'. On the other hand, it is not only places at which participants check-in or share, but also particular *events*. As such, sharing locational information has the potential to communicate more about one's lifestyle and identity on a cumulative basis, especially if it signifies a particular (social) event or a hobby:

> [Charlie, 25] *I use Facebook but I do not really check in very often. Very, very rarely . I checked in last night, I went to a gig in the Crystal Palace, but that is it, yes. I normally check in when I am at the airport or somewhere really special I suppose, to update the status.*

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[32] Helen and Sally were not in the same focus group, hence the quotes are not from a dialogue between the two.

Charlie deems it more important to share locational information *only if* there is *something special going on*, by which one's presentation of place loses its significance to self-presentation:

> [Charlie, 25] *Not very often, I suppose if I did it all the time then it would be a bit pointless really. The people who are most important are the people who I am meeting, so I do not really think that sticking it on Facebook does any good apart from when you are going to a gig. I suppose there is a bit of posting there that you've been to this gig or seeing this band or whatever. If I have something to say about it, otherwise I do not really see the point.*

The events that participants shared included not only gigs or shows, but also social gatherings such as birthdays, from which it can be understood that the situation as well as the story plays a crucial role in self-presentation and the presentation of places (Meyrowitz, 1985). Similar to sharing a concert and its location, another participant told me a story about how she and her friends used Facebook to present a different aspect of one particular friend:

> [Amy, 30] *I was out with a whole bunch of friends, and it was a friend's birthday party. It was really funny because he got really drunk. Then he passed out. We took him to another friend's house nearby. One of my friends took his photo and started posting pictures of him from his account on Facebook, it was really funny. So we started putting pictures of him saying "Oh, my best birthday party ever!", he was completely passed out, he was not doing it, one of the other friends was taking the pictures, from his phone, from his account. After that, we started commenting on them while we were all together, because it was funny when he'd see it the next day. One of our friends, who was in New York at the time, was not at the party, saw one of those pictures, and he was "What is he doing in my bed!? He'd better not throw up!" because that was his bed, we put him in his bed, instantaneously he saw the picture and said "why is he in my bed!?" so we started replying! So it was a joke, it was quite funny. So, sometimes we do that together* [sic].

Although Amy and her friends did not check-in or geotag the photos of their drunk friend explicitly, they did share the locational information of the photos explicitly. Among their followers on Facebook, only their friend who was in New

York understood where it was happening, and their motivation in sharing the photos was not because they were in a certain place, but because they thought it would be funny and enjoyable to do so. However, in posting the photos, they were presenting an aspect of their friend through photos that he would be unlikely to post or geotag himself. This implies that the situation, as defined by Goffman (1990), is a very important factor in decisions of what to share and what not to share in terms of self-presentation. Amy and her friends were not using their own Facebook accounts to post photos of their drunk friend, but his own account. This reveals an interesting aspect of their group dynamics, and individually their selves, as they demonstrated little regard for their friend's personal life and privacy. It was for this very same reason that Amy told me that she never checks-in anywhere (unless she is travelling), and instead prefers to upload photos later (she never upload photos of a place while she was still there, but would upload them a couple of days later, in that she did not want people to know what she was doing in real time):

> [Amy, 30] *I think it is quite a personal thing, so I never do it. Although I take pictures and share them. I do not check-in because I do not want people to know where I am. So it is a privacy thing. I am not criticising that other people are doing it, I think it is absolutely fine. It is not anyone's business. Because if you post pictures, no one knows where you are at the time.*

Following a similar line of argument, most of the participants said that they did not like checking-in or sharing locational information on mobile social networks in real time because they were concerned about their privacy and security. They saw location as very personal information, and hence they either do not want to share it, or only share it depending on the situation:

> [Jacquie, 21] *I do not want to be stalked.*

> [Sally, 21] *I do check-in* (at home) *especially when I do not live alone [sic]… So no one can rob me*[33].

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[33] Jacquie and Sally were from different focus groups, and so the quotes do not come from a dialogue between the two.

There is a trade-off between self-presentation/presentation of places and personal security and privacy,[34] and this could be considered as a limitation of mobile and locative media in the presentation of self and places. As discussed above, some of the participants either choose not to share location at all, or did it only rarely, depending on the situation.

5.1.2. 'If you share frequently, it does not look cool!'

It could be argued that the *frequency* of sharing locational information also plays a role in building a sense of place and presenting the self. As Tuan (1974) argues, places are formed through repetitive practices that give rise to 'emotional or affective attachments to environments' (Moores, 2012, p.x). Since the understanding and definition of location can be established as a sense of place, sharing it repeatedly can add something to one's self-presentation, and emotional or affectionate attachments to places (as in the check-in examples of Rodney, 25 and Mark, 22). On the other hand, the frequency of such behaviour affects also how one establishes a sense of place, hence the presentation of places. One of the respondents, Susie (22), told me that she considered the repeated sharing of locational information to be *spam*, and so tried to ignore her friends' locational updates.

As argued earlier, what is important in place-making through mobile and locative media is not only what one chooses to share or not to share, but also *how often* one shares such information. In Susie's case, she considers it *spam* if she sees information about a place too often, and her initial impression of the place shared (and hence, the person who shares it) may not be positive (given that places and their inhabitants co-construct each other's identity). In a similar line of argument, another participant, Billy, told me how he *rejects* random check-ins (Figure 5):

> [Billy, 19] *Whenever an application asks me to share my location, and I say 'no'. Would you like to share your location? No. This application wants to use your current location … No.*

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[34] Although there is a considerable amount of literature on the sharing of locational information, surveillance and privacy, this was not a concern of the participants of this study (except for Amy, Jacquie and Sally, whose concerns were expressed in the above quotes and did not stipulate any group discussion. Rather surprisingly, their concerns for privacy did not stop them from using locative media – which brings to mind the effects of media discourses on locative media on the individual perceptions of privacy and surveillance [de Souza e Silva and Frith, 2010]). As a result, this did not emerge as a main theme within the data analysis.
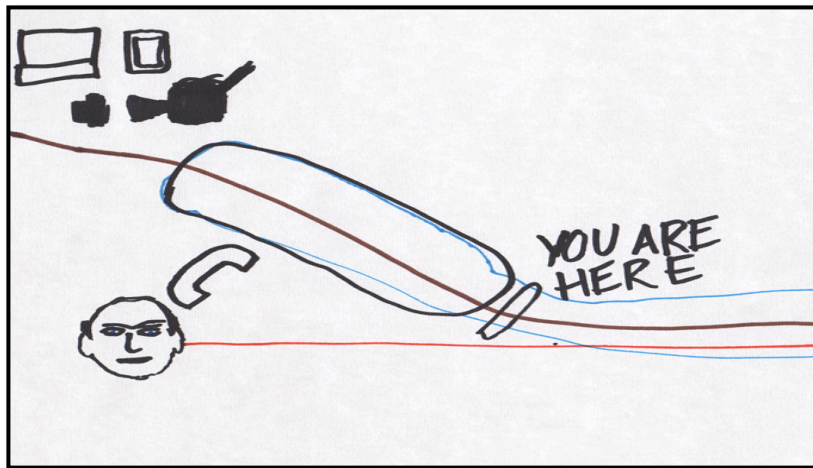
Figure 5: A section from Billy's map of London depicting his understanding of location awareness as "you are here".

Participants like Billy, who do not like sharing such information frequently, usually make sure that the location-awareness setting on their smartphones is turned off. However, sometimes we are not as aware of the settings as Billy, and could give an unintended impression to people who follow us accidentally:

[Josh, 24] *Sometimes it is just by accident. They just pop-up. You know that it I forget to turn off the location[sic].*

Two other participants, who considered too much sharing of locational information to be a bit pointless, discussed the motivation behind such activities on mobile social networks:

[Helena, 23] *I do not know, I do not see the point in it myself to be honest, you're doing it for the joke. But I guess everybody kind of treats it as a joke. They do not take it too seriously.*

[Mary, 17] *No, maybe if they just see something exciting.*

[Helena, 23] *Oh, yes, like that time when we saw Gary Barlow in M&S.*

Interestingly, such behaviour was perceived in a negative way even if the reason for sharing locational information was exciting (as in the case of seeing a celebrity in a random place), and this jeopardizes one's existing impression among others:

[Gillian, 29] *I do not understand most of the time. For people that I think of as cool, I do not like them doing that. People like, I am sort of not sure, people are like annoying, 'you're showing off or something!?'*

The reason why Gillian feels annoyed when someone she thinks of as being cool shares locational information is what Goffman (1990, p.35) refers to as 'consistency between appearance and manner' (p.35). As the person that Gillian thought of as being cool is not expected to share such information (because sharing locational information for Gillian is uncool), doing so creates an inconsistency between the impression that person has made on Gillian and the uncoolness of sharing locational information. On the other hand, as Gillian later explained, because the person she knew to be cool does that, she might also start to think that checking-in is actually a cool thing to do:

[Gillian, 29] *Maybe it'll start to be cool to check-in wherever you are. I do not know.*

Controversially, Gillian shares locational information when she wants to give a specific impression of herself to her significant others. Talking about the time she engaged in such self-presentation through the sharing of locational information, she said:

[Gillian, 29] *Sometimes I might put a status, like 'I am here and I really like it!' But it is usually when I am arguing with somebody* (she later mentioned that it is usually when she falls out with her boyfriend and wants to give the message that she is happy and enjoying her life to him) *or when I want to tell somebody that I am at some place, I do it on Facebook.*

In another group, two of the participants checked-in at the University of Westminster's Marylebone Campus, where the focus groups took place. One of

them wanted to meet up with a friend whom she thought could be nearby, while the other considered attending a research workshop as an activity of interest and worth sharing:

> [Larry, 35] *I do not check in regularly, only if it has a meaning. I do not check into like when I went to Tesco and stuff.*

> [Researcher] Did you check-in at the University of Westminster today?

> [Victoria, 26] *I did* (laughs).

> [Larry, 35] *I did as well.*

> [Researcher] So, what was the motivation to check-in here?

> [Victoria, 26] *I have a friend who studies here, just in case, if he is around!* (laughs) *Because I know he uses it a lot.*

> [Larry, 35] *It is quite interesting to tell your friends where you are and how your life is. It is as if you're present and you're moving around.*

Another respondent, Josh, found such check-ins useful for meeting with people, although he sometimes checked-in at places accidentally:

> [Josh, 24] *It is useful if I am going somewhere and like when I am filming. I geotag where I am, so people, rest of the crew would know where I am at that moment. If I am meeting somebody, it is handy to share location, using messages or whatever, to people. You know it is literally convenience.*

Participants like Charlie, Billy or Sally would see that kind of behaviour as *pointless*:

[Billy, 19] *I used to use Google Maps to save places on my phone, like put a little star for important places. It is different from checking in on Facebook or Foursquare because it is more private. Rather than advertising the fact that "I am here, or here".*

[Sally, 21] *If I say "I am in Tesco", it is not interesting to anyone[35].*

So, the frequent and random sharing of locational information not only communicates information about places, but also presents an aspect of the person sharing them. For some, to some extent, sharing locational information in coffee shops or stores would not communicate any information about those places, but could jeopardize an earlier impression. That said, checking-in at any given location randomly and frequently might point to an unrevealed or hidden aspect of the self, as an expression *given off*, but could also be perceived as something cool and interesting, just because a specific person (of whom one thinks of being cool, as in the case of Gillian's friend) had established an impression that s/he is cool.

5.1.3. 'Let's meet up!': Presenting the 'social self'

Another level of locational information sharing among the research participants, as in the case of Charlie and Victoria, was to let others know about your whereabouts in order to *meet* up. In this regard, check-ins can also be used for the coordination of daily activities, especially social events. Another respondent, Jacquie, said that she checked-in at places to inform her network to meet up; and used this way, checking-in adds a social dimension to the act of sharing locational information, although it may not reveal any information about the identity. That said, the intention to meet up and socialise presents the self as social or friendly:

[Jacquie, 19] *I tend to tag myself at King's Cross a lot. I say 'at King's Cross, will be home soon'. So everyone at home who has Facebook will know that I'll be home and we can have some plans with them.*

[Researcher] So you are using it as texting?

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[35] Billy and Sally were not in the same focus group, and so the quotes are not from a dialogue between the two.

[Jacquie, 19] *It is just that I update Facebook. It is kind of letting people know in advance that I am going to be free to go out … and vice versa, when I come back over that way from home. Either on the phone when I am on the train, or through my laptop, I just post to say 'I am at King's Cross'. And I say, 'just arriving', or 'leaving'. And then people are going to see it, and say 'ok, when are you going to be free?'*

In addition to the social aspect, Jacquie's location-related status updates raise another point related to the sharing of locational information. Rather than checking-in when she is at a certain place, she, in a way, announces her *future* location (Figure 6). She does not share locational information at King's Cross because it is special for her, or to show off, but in order to announce her ability to meet with her friends later.
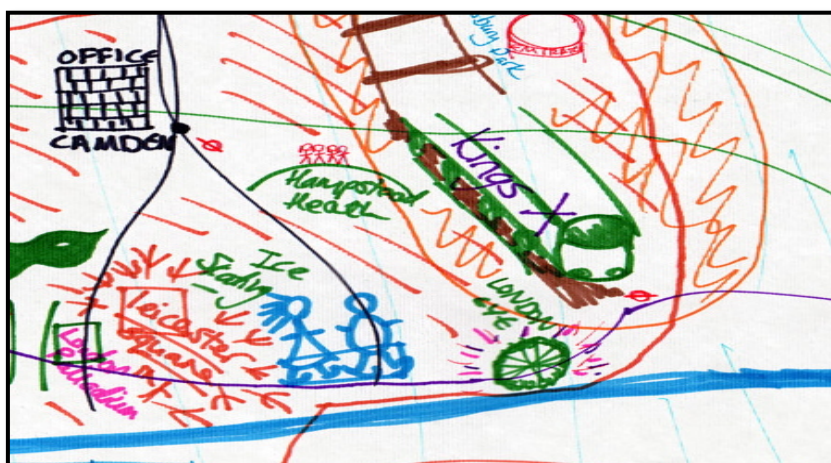
Figure 6: A section from Jacquie's map of London showing the social elements of her everyday life, such as ice-skating with friends.

Goffman (1990) conceptualises the presentation of self as a social act rather than an individual activity, meaning the locational information *sharing* has a social aspect, creating a social sense of place. For Sally, sharing locational information serves as a tool for meeting up with her friends as well as total strangers, revealing the social element of checking-in and sharing locational information (Figure 7):
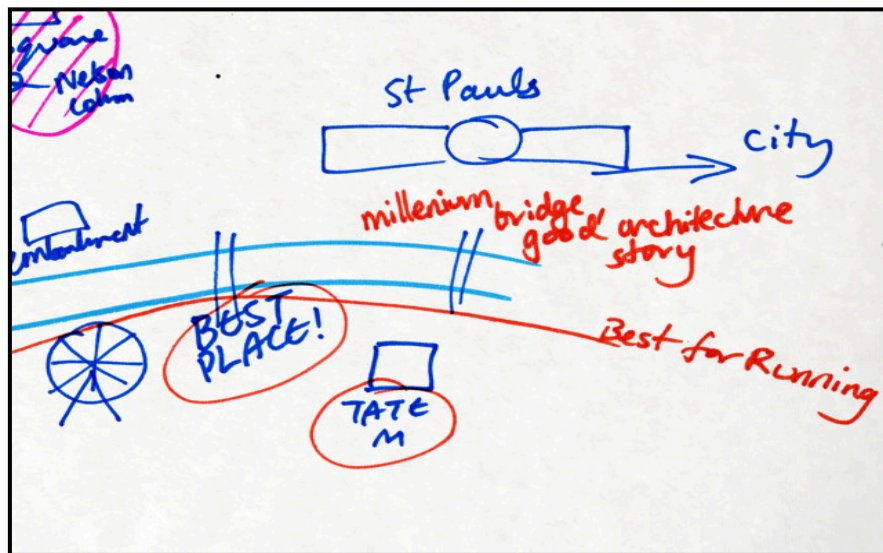
**Figure 7: A section from Sally's map of London
showing her running route along the River Thames.**

[Researcher] Some people share their running routes, some share …

[Sally, 21] *Running, yes.*

[Jonathan, 23] *I've got an app that did that, I used it once and I never used it again like 'who cares?' I would not look at anyone else's …I do not see why you'd care about my route. I felt like I was doing it to show off.*

[Sally, 21] *But maybe some of your friends, or people on your network can join in!*

With this type of locational information sharing, places lose their importance, as the act of *sharing* itself becomes the main reason. In addition to the social dimension, sharing one's running route can also reveal information about one's hobbies, presenting one's self to a wider public. 'People have always tried to control how they present themselves to others' (de Souza e Silva and Frith, 2012, p.164). By choosing to share a running route with random people who have access to it, one presents a specific side of everyday life. According to Ling (2004), we 'provide others with cues and symbols that help them place us in some context' (p.105). As de Souza e Silva and Frith (2012) argue, depending on the context, one may present a different aspect of the self. Rather than checking in at a place and

sharing the locational information with a network of people, respondents stated that they preferred to send photos to each other, making the place special *only* to those who are emotionally close to them. This type of use creates a representational space that is 'directly lived through its associated images and symbols' (Lefebvre, 1991, p.39).

Therefore by sharing locational information and supporting the feeling of presence, participants feel more connected, or *co-present*, and this feeling of co-presence can be attributed also to the fact that sharing locational information through a photo, the shared symbolic and imaginary meanings associated with that place, as well as a common history, are revealed in a "representational space" (Lefebvre, 1991). For example, in addition to sharing her running route, Sally also shares other locational information, either directly or indirectly, through photos to keep her friends up to date about what is happening in London:

> [Sally, 21] *Sharing can keep you away from really bad traffic somewhere. I used to do that sometimes. … I was living with my friends and we all went to LSE, and if there's lots of traffic I'd take a photo of the traffic and send it to them so they would wake up earlier. So if I see something interesting, I'll take a photo of it and send it.*

In this instance, it is not Sally's self that is directly communicated, but instead, a particular part of London, *re*presented as having a bad traffic or as hosting an exciting event, such as the Royal Wedding, London Olympics or a special concert. On the other hand, as a result of the expression given off, her friend's would think of her as busy, helpful or active in London.

5.2. 'I know London!': Checking-in to present a "non-local" identity

Users of mobile and locative media can add layers of virtual information to places, which has increased the integration of maps into our everyday lives. Today, maps are used not only to navigate in contemporary urban life, but also to spatialise information (Gordon and de Souza e Silva, 2011). The act of checking-in at a place on a service such as Foursquare, for example, creates personal traces on the network – and those traces start to define what kind of a place we check-in at, and why. This has created – for some users at least – a platform for individual storytelling, as these technologies and applications allow users to map their everyday

activities and write reviews, or insert photos or memory notes onto those places visited. With the help of those maps, our '*knowing* is translated into *telling*' – as Hayden White (1980, p.5) put its – where experiences of places, as well as memories, are narrated.

Within this process of representation and creating a self-narrative of one's everyday life through location information, a tool commonly used for identifying routes, the map, comes to be used as an interface by which users can create compile geo-tagged stories of their own lives. Users of mobile and locative media not only communicate to others their places and everyday life activities, but also engage in such activities for their own selves. Going back and looking at what has been shared creates a sense of local knowledge of a place, which in turn could affect one's identity as being a local or non-local. As the sketch mapping research reveals, sharing locational information is also about reflecting on how much one knows London and what it implies for the self. In this regard, the audience under this category is not necessarily other people, as it may also sometimes be one's own self. Although reflecting retrospectively on previously visited places could also connote memories associated with places, the sense of place created is not about nostalgia, but more about locality and whether or not one feels local.

There was a common tendency among the research participants to create a list of places that should be visited before or during their visit London. During social and spatial interactions, the list could be modified and extended, based on one's own personal experiences of London or the recommendations/reviews of places by others. One of the participants, an exchange student from Russia, had moved to London only for a year, told me that she checked-in at places just to fill her "list of places in London" that she had been to, which would leave a note for her *future* self about London and her life during her experience in London as an exchange student. After returning to her home country, she may reflect on her history of check-ins and acknowledge that she had developed a local knowledge of London (Figure 8):

> [Jane, 21] *It is like a list. Places visited, tick. Like I have been here, here, and here! Because I am going to leave soon. So when I go back home, it is a good way for me to say "I know London!" Because I have been to too many places, I've seen most of it!*

Figure 8: A section from Jane's map of London showing her "list of places" in Central London.

Checking-in at as many places as possible would in the end *mean* something to Jane, but not necessarily to *others*. Accordingly, Jane also mentioned that she would only check-in at places once, meaning that her motivation in sharing locational information is not to present the different aspects of places in London, but to communicate an aspect of her life as an exchange student in London for one year:

> [Jane, 21] *I do not check-in at the same place (twice), actually there is no place that I have checked-in twice. Once I've done it, it is done.*

That said, although her check-ins were for her future self, by *sharing* them on a mobile social network she is actually making an expression about herself to others. What did Jane's list of places in London consist of? When I asked her, she mainly counted monuments, historical sites or famous landmarks, which brings into mind the presentation of places in media such as brochures showing "places to visit" in London. Under this category, the places checked-in can be considered as "ordinary" and "mundane", such as shops on Oxford Street; however, they do acquire a special meaning for her once they are *all* visited, and the check list has been completed.

Upon the completion of her list, her narrative of her life in London would also be completed, and so her narrative of places plays a small role as compared to Jane's life story in London as an exchange student.

Similar to Jane's experience of London and sharing locational information from a list of places, there was a common tendency among the participants who came to London only to study at a later stage of their lives from other countries. They told me that they saw London as a point of "transition", since they did not know whether they would settle in the city or return to their home countries. When asked about the themes of their sketch maps of London, many answered in a similar way:

[Kristie, 20] *Holiday London!*

[Charlotte, 20] *Touristy London.*

[Jane, 21] *My London, my map.*

[Sally, 21] *Well I do not know how long I am going live in London. So every week I try to do something touristy, like the museums and stuff. So I think I marked down places … I discovered and I really liked, and I recommend to other people. Places I like in London that make me happy. For a lot of places that I really liked, it is a bit nerdy but I checked-in on Facebook. And then I recommended the place to other people immediately.*

[Sophie, 42] *Places that make me feel at home in London, although so far I have not fully felt at home. But one day if I have to leave London, I'll miss London.*

All of the participants quoted above had come to London to study, and it was interesting to see that they thought of London as a touristy place for holidays, which may be one of the reasons why they checked-in at as many places as possible. The places that they usually checked-in at were famous London landmarks, monuments, parks and museums – the "touristy" places, implying that at the back of their mind, the implicit meaning behind sharing these locations could be to remind themselves that they are not local, and that one day they would leave London.

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Among the participants, while talking on how one perceives and presents London through locational information, being local or being a tourist played an important role. Some of the participants argued that how or why a person shares locational information depends upon where one comes from, the reason for visiting London and the duration of stay. Accordingly, locality, or having a local knowledge of the city was another aspect of place-making in London through mobile and locative media.

According to theories of place in human geography, being a native (local) or a visitor (tourist) impacts upon how one evaluates and perceives the spatial environment. As Tuan (1974, p.63) argues:

> Visitor and native focus on very different aspects of the environment. In a stable and traditional society, visitors and transients form a small part of the total population; their views of the environment are perhaps of no great significance. In our mobile society the fleeting impressions of people passing through cannot be neglected. Generally speaking, we may say that only the visitor (and particularly the tourist) has a viewpoint; his perception is often a matter of using his eyes to compose pictures. The native, by contrast, has a complex attitude derived form his immersion in the totality of his environment. The visitor's viewpoint, being simple, is easily stated. Confrontation with novelty may also prompt him to express himself. The complex attitude of the native, on the other hand, can be expressed by him only with difficulty and indirectly through behaviour, local tradition, lore, and myth.

Some of the respondents distinguished between who is local and who is not, talking about how they see London or what it represents based on being a Londoner or living in a particular area in London. While being a local had positive connotations, for some of the participants to some extent, the image of being a tourist in London revealed a negative aspect of place-making. For Helen, it is interesting to note that the impression that others might have of her as a tourist limited her use of maps:

[Helen, 25] *I do feel a little embarrassed when I look at the maps on the streets. Then I say 'Oh, I am a tourist in the city where I live! So I cannot look at a map'. So if I am going somewhere I'll look at the map before I leave, then I am just like walking. If I ever get lost, then I never try to again look at a map.*

Helen had been living in London for four years at the time of the study. While talking about her use of mobile and locative media, she revealed that she used locational information to find *local* places in London, and avoided the touristy bits. In a similar vein, she considered mobile media as *personal*, and could easily check the route to a place, avoiding anybody seeing her looking at a map. In such situations, Helen gives the impression of a local, however, in trying to avoid mobile or street maps, the impression given off is as a non-local. That is one of the reasons why she did not like using street maps, as they are public, and looking at them in order to find places is perceived as being non-local. In this way, Helen presents herself as a local through not using public street maps, but by using Google Maps on her laptop or on her friends' smartphones. Although not sharing any locational information, her use of that information on mobiles was intended to *show* that she was *local*, and *not a tourist.*[36]

In contrast, some of the participants who had been living in London for a similar length of time as Helen said that they enjoyed living in London as a tourist and *sharing* locational information and geotagged photos of different (and usually touristy) places in the city with their friends and families. Among those was Charlotte, who she said that she usually checked-in at touristy places and shared photos of those places with her network of Facebook. This gives the impression to her audience that she enjoys living in London and would like to share it with others, worrying little about the expression given off, which in this case is her status as a non-local. Accordingly, the theme of her map was "touristy London".

Among the participants who had been living in London for many years (more than six years) or were originally from London, there was also a tendency to differentiate themselves in terms of living in the North or South of the river Thames, as well as East or West. Most of the participants began drawing their maps with a predefined *centre*, which was not necessarily Central London. In line with their

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[36] A detailed discussion on locality and having local knowledge of a place is presented in Chapter 7, where focus is on the perception of oneself in relation to locational information use and sharing, and the presentation of self.

sketch maps, their use of mobile and locative media also reveals which part of London they were from. In this regard, within the distinction between the native and the tourist, they were also distinguishing themselves based on their neighbourhood of residence in different parts of London, implying a subcategory of being local denoting *centre* or *periphery*. A discussion arose among one set of participants about South London. On his map of London, Mark had written "We do not go South of the river. There's nothing there!!!" (Figure 9).

> [Mark, 22]*This is my London here. First thing I've done is that I've pretty much shaded south of the river. There's nothing there, we do not go south of the river because there is nothing there! … along the river… like Croydon, Brixton … I have no interest … There's nothing there!*

> [Researcher] What do you mean by "nothing there!"?

> [Mark, 22] *I mean the tube does not go down there … I think I'll stick to this shading here because you cannot get good reception south of the river either. I am on T-mobile, and I go there, I go there and I go to Clapham and the reception is shit as well. So T-mobile does not work south of the river either!*
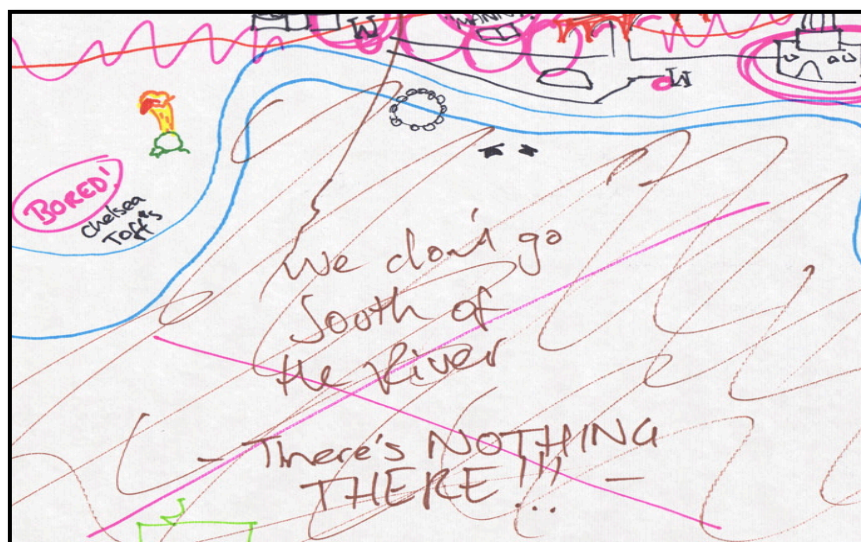

Figure 9: A section from Mark's map of London, saying of south of the Thames "There's nothing there!!!"

It is perhaps not surprising that people associate places of interest with transportation links and mobile technology. Despite the fact that there are many overground lines and trains going to and from South London, the major links within the city are provided by the underground. Additionally, the place of residence/neighbourhood has a significant importance on such an outcome. For instance, the maps drawn by the participants residing in the northern parts of London were, more or less similar, with more detail provided for north of the Thames than for the south. The places for which they shared locational information were usually outside of their neighbourhood of residence, as some of them saw themselves as being a local tourist in other parts of London, where they would visit the touristy places.

Another commonality in those maps was the depiction of certain south London landmarks, such as the London Eye, the Tate Modern and the Royal Festival Hall, which were sketched to the south of the river, on its banks. The most southern landmark was Waterloo station among the participants who declared they never ventured south of the river. When I reminded Mark that there are actually trains going to South London, he replied: "but it takes ages to get there!" Time and space have always been thought of as together, however space has always, somehow, dominated the associations with time. In terms of mobility and the exploring of an urban landscape, time reappears and reveals its importance in metropolitan life.

Similar to Mark's depiction of South London, Henry drew a huge question mark next to a label of a friend's house in south of the river (Figure 10), and like in Mark's map, he showed BFI, as a landmark or as a place of interest that he visited frequently, just by the river. When we talked about the question mark, Henry stated that the only time he goes to South London is either to visit his friend, who lives there, or to visit BFI Southbank. As a resident of North London, he complained about how long commuting takes in London, even via Tube from Northwest London to Central London.
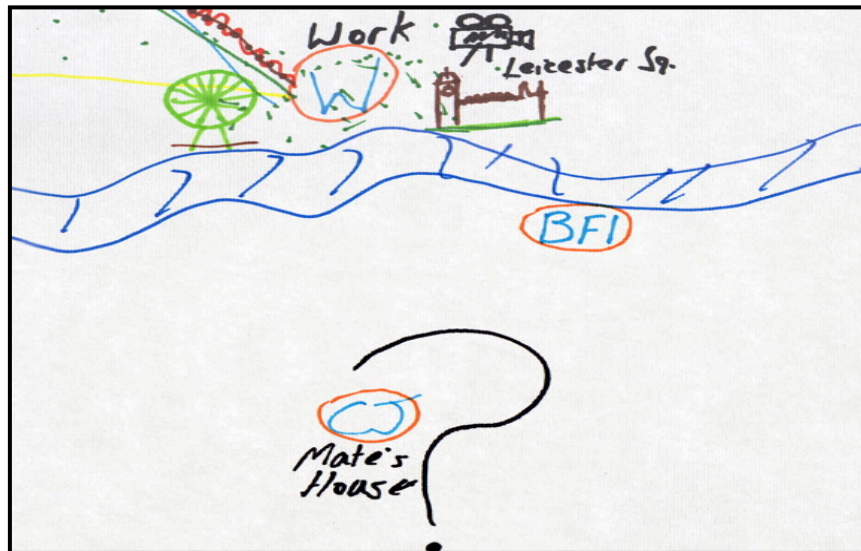
**Figure 10: A section from Henry's map of London
with a big question mark south of the Thames.**

The map drawn by Jonathan (Figure 11) again depicts no landmarks, roads or comments related to South London, but more notably, he also did not show the River Thames. He depicted "The South" with a downward-pointing arrow and added: 'Boring and weird'. As a resident of North London, all of Jonathan's existing social networks, family, job and school are located there, and thus he never felt the need to go and explore different parts of the city.
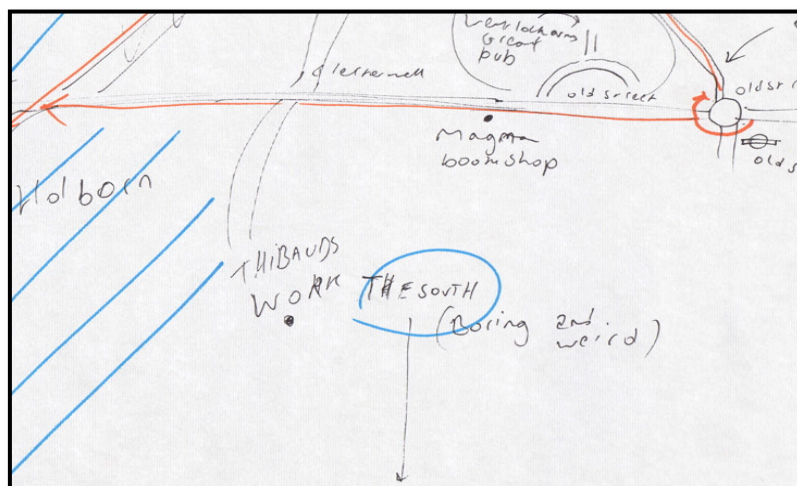
Figure 11: A section from Jonathan's map of London.

On the maps drawn by participants who were aged 54–58, South London was represented with as many landmarks, figures and memories as the North. As can be seen from the map drawn by Irene (54, Figure 12), there was no obvious division between the south and north of the river, and the city could be seen as extending to all of its districts. The map by Norma (58, Figure 13) pointed to the fact that there could be a generational difference in how London is perceived and presented.

Figure 12: A section from Irene's map of London.

Figure 13: A section from Norma's map of London.

In two of the focus groups in particular, most of the participants were from North West London and Harrow. Although they were born and raised in London and consider themselves locals, the places they checked-in at were mainly touristy places, which was quite surprising. During one of the group discussions, Jacquie said that *she should visit London more often*, implying either that she does not consider herself as living in London given her distance from the centre, or that she needs to visit the touristy parts of the city to gain a broader understanding and sense of London. Although under this category, the places that participants checked-in at were mainly touristy areas, rather than simply sharing locational information, they were instead sharing *events* and specific *social meetings*. The photos that accompanied such check-ins tended not to be photos of the places (as one would expect from a tourist), but were of their friends. As Tuan (1974, p.64) argues:

> The visitor's evaluation of the environment is essentially aesthetic. It is an outsider's view. The outsider judges by appearance, by some formal canon of beauty. A special effort is required to empathize with the lives and values of the inhabitants.

It is for this reason that it is usually photos of places rather than of the people in those places that accompany locational information sharing.

CHAPTER 6: 'PLACES ARE PLATFORMS FOR ALL THESE MEMORIES': LOCATIONAL INFORMATION USE AND NOSTALGIA

> Ability to recall and identify with our own past gives existence meaning, purpose, and value. The ancient Greeks equated individual existence with what was memorable, and post-Renaissance Europeans have increasingly seen the past as essential to personality (Lowenthal, 1985, p.41).

> [Places] are constituted in our memories and affections through repeated encounters and complex associations (Relph, 1985).

> The world we take for granted – the real world – is made like this, out of the accumulated thought and labour of the past. It is presented to us on the platter of the map, *presented*, that is, *made present*, so that whatever invisible, unattainable, erasable past or future can become part of our living … *now* … *here* (Wood, 1993, p.7).

Our experiences, and therefore our memories of those experiences, are located in both time and place. Although our associations with places may sometimes become detached, our memories are typically not just about something that happened, say, in the summer of 2008, but relate to the particular *place* where that event happened. To approach it the other way, our memories are not just about 'things that happened to me in Paris', but are considered also in relation to a crucial chronological dimension as well (Özkul and Gauntlett, 2014). As Meethan (2006, p.9) argues, 'to acknowledge that a sense of the self is produced through processes of biographical narration is also to acknowledge that such processes involve elements of performance'. Mobile technologies clearly have the potential to affect this process of memory and meaning-making, in that they offer new ways of storing and sharing information and reflections. These may take the form of communications addressed to family, friends and the outside world, and so contribute to the presentation of the self-identity to others (as discussed in the previous chapter). At the same time, they are likely to play a more internal role in the shaping of self-perception and memory, and thus identity (or at least some

aspects of identity). While discussing Giddens' (1991) conception of changing identities in "late modernity", Buckingham (2008, p.9) argues that 'the self becomes a kind of "project" that individuals have to work on: they have to create biographical "narratives".' Although the "observer" in Buckingham's argument is the others, individuals create narratives 'that will explain themselves to themselves, and hence sustain a coherent and consistent identity' (Buckingham, 2008, p.9). As a result, the audience of the biographical narratives that we create are not only the others, but also our own selves.

As our social and spatial interactions are affected by the fast pace of urban lifestyles, the individual who "has to create a biographical narrative" to hold onto this fast lifestyle, finds some relief within nostalgia. As Buttimer (1980, p.166) argues, 'nostalgia for some real or imagined state of harmony and centeredness once experienced in rural settings haunts the victim of mobile and fragmented urban milieu'. In a similar vein, Meethan (2006, pp.9–10) argues that:

> Coupled with the forms of mobility that are implicit in globalization, the condition of contemporary society is one in which a sense of personal biography, a narrative of place and self becomes the anchor around which we organize and narrate a coherent sense of who and where we are.

In this sense, it is argued that mobility and new communication technologies eliminate 'a traditional dimension of civic legibility' (Mitchell, 1995, p.101), meaning that they 'challenge traditional ways of representing social distinctions and stages of socialisation' (Mitchell, 1995, p.101). However, the novel and profound ways of narration offered by mobile and locative media do not eliminate the legibility of those biographical performances. Indeed, they can contribute to the existing means of narrating places and the self, based on the ability of locational information to communicate multiple and different aspects of places, which also projects the self onto places in the form of an autobiography. Hence, the ultimate goal in checking-in or sharing locational information is not only to express the self and establish an impression in others, but also to reflect on it as part of the narratable self. 'Our past experiences continually take on new meanings in the light of more recent events and must be constantly reworked and re-evaluated in accordance with our present outlook, even to the point of repudiating past selves' (Strauss, 1959, cited in Wilson,

1980, p. 141). Since our experiences take on new meanings over time, we reflect upon them in order to understand our new selves; however this does not mean that our new selves are totally different from our past selves. 'Not only is there a change or re-evaluation of the self, but also a change in one's socio-spatial pattern, which thereby remains consistent with the new self' (Wilson, 1980, p.141).

When the experience of a certain place is thought of, the place comes to mind not only because it is at the centre of the meaning constructed by experience, but also because of the time component. Mobile technologies clearly have the potential to affect this process of memory and meaning-making, in that they offer new ways of storing and sharing information and reflections. Accordingly, by going back over one's narratives of places and place-specific events that were once shared through locational information, we re-evaluate and reflect upon our own autobiographies. Basing my arguments alongside theoretical debates related to memory, meaning-making and nostalgia, in this chapter I analyse the role of locational information in remembering associations with places, past experiences and creating a sense of nostalgia.

6.1. Preserving the past and remembering the self

Paul Ricoeur (2004), in his influential work *Memory, History, Forgetting*, argues that memory is fundamentally reflexive. 'To remember (*se souvenir de*) something is at the same time to remember oneself (*se souvenir de soi*)' (p.3). Following a similar line of argument, Walker and Skowronski (2013) claim that memory can allow us to recall our experiences, examine and use them for various purposes – from solving a mundane problem in our everyday life ('Where can I find food?') to identifying our self through evaluation ('How have I changed since I turned 18?') (p.149). 'Places are defined in terms of their relationship with the particular subject who experiences them' (Trigg, 2012, p.5). By remembering, we can sometimes renew the sense and meaning of a specific place for us. As Ricoeur (2004, p.56) argues:

> Remembering is not only welcoming, receiving an image of the past, it is also searching for it, "doing" something. The verb "to remember" stands for the substantive "memory". What the verb designates is the fact that memory is "exercised".

Locational information use, in this sense, is a tool for remembering not only particular places, but most importantly, to remember and exercise *things* in the past, which may be social relationships, childhood memories or a short city break. Used in this way, locational information can contribute to our feelings about certain places, which are shaped by past events. Experiencing a place is part of meaning-making, in that 'memory is inherently linked to the ability of humans to give meaning to their experiences' (Walker and Skowronski, 2013, p.150). In this respect, the use of locational information (such as in the form of geotagging) promotes meaning-making by bringing an element of the past to the present, in the form of nostalgia.

The traces one leaves during the course of life help not only in the remembering of something, but also how one used to be during that specific period of time being referred to. Places play a crucial role in this, as the meanings assigned to them can form the basis for memories, or may even trigger the act of remembering itself. Values, memories, dreams and anxieties are affective states that sculpt the experience of a place (Trigg, 2012). Places are of high importance to us given the role of their histories in shaping our lives (for some, to some extent) and the stories and memories inscribed/embedded in them. Accordingly, all of the participants of the sketch mapping study, without exception, referred to their own stories of London. It was a common tendency to find similar aspects of London with other cities (especially among the participants who had moved to London from other countries, and even from different cities within the UK).

> [Sophie, 42] *The Thames is very important in London. I was born in China. My hometown in China is also centred by a river, the Han River. I think a river is the centre and the spirit of a city. I try to recall my memory about London.*

For Sophie, associating the River Thames with the River Han in her hometown in China is important in the sense that it brings to mind memories of both London and her hometown. In her sketch map, the importance of the river for her can be easily observed given its prominence on her map. Another respondent, Sally, mentioned that Piccadilly Circus reminds her of Times Square in New York:

[Sally, 21] *Piccadilly Circus … reminds me of NY where I used to live … because of the billboards and everything.*

Neither Sophie nor Sally mentioned the personal belongings they had brought from their hometowns to London, but did speak about the resemblances between the River Thames and the River Han, and Piccadilly Circus and Times Square. In this regard, finding something spatially or geographically similar in any given city can be considered as bringing past experiences and memories along with you, creating a sense of familiarity and providing a comfort zone. In his example of college accommodation, Cresswell (2004) asserts that everything in a student's room is common and is not unique to that particular room. However, upon closer inspection, one notices the history of everything in the room: 'These are the hauntings of past inhabitation. This anonymous space has a history – it meant something to other people' (Cresswell, 2004, p.2). As soon as one moves to any given new place, one transforms that place into a similar place with personal belongings or the way one arranges the furniture, which in turn reflects the identity of both the place and oneself (and one's past). In this regard, finding resemblances between two different cities is in some ways *transforming* the new place into a similar/familiar place. During this transformation, mobile communication devices act not only as memory devices (Humphreys, 2007), but also contribute to this transformation by providing an imagined presence, bringing distant others or places closer:

[Helena, 23] *It makes things seem much closer than they are.*

Similar to Cresswell's (2004) argument, Lowenthal (1985) asserts that the past is not only recalled in what one sees, 'it is incarnate in what we create. Familiarity makes surroundings comfortable; hence we keep memorabilia and add new things whose decor evokes the old' (p. 39). Cresswell (2004) conceptualizes this as 'saying something about you', and in this way, according to him, space is turned into a place. On the other hand, as Trigg (2012, p.2) argues:

Although we fundamentally change our surroundings, ultimately place exists independently of human life shaping us. Returning to a place after a long

period of time absence, we are often shocked by both the small and the vast changes, effectively alerting us to the radical indifference places have to the sentiment we apply to them. Here, our own selves can become the site of an internal quarrel as to how a place once was; by claiming to cognitively remember the feel of a place, our bodies can provide a different history of the past. The result is that a place can take on a life of its own, quite apart from the way it is experienced and remembered.

Following this line of argument, mobile and locative media offer their users novel and creative ways of preserving the past, allowing it to be remembered in the future (for the future self). These new ways of preserving the past may be in the form of sharing locational information, geotagging or sharing photos, thus creating an autobiography to remind our future selves where we come from and how we used to be. This brings elements of nostalgia to one's everyday life. Sometimes we consciously create our autobiographical life narratives, intending to *hang onto a moment*, or simply because the technology *automatically saves* our past, we unconsciously preserve our pasts.

While explaining how his smartphone automatically geotagged his photos and how he later used that locational information to remember what had happened last Christmas, one of the participants, Mark, highlighted this aspect of locational information use as a tool for preservation and autobiography:

[Mark, 22] *We had an experience when the Christmas was due. It started off at Trafalgar Square and then we went a little bit further, and then Tottenham Court road I think. Was that the plan?*

[Henry, 23] *I do not know where you went!*

[Mark, 22] *Basically everyone was quite drunk, and afterwards I went to get a bus which is … I went over here, in Finsbury, when I meant to go over there!* (showing the exact opposite direction on his sketch map, Watford) *And on the way, I do not know why but I took a lot of pictures with my phone! Of just nothing … Of street lamps, there was a door…*

[Jacquie, 21] *There was a bus stop!*

[Mark, 22] *There was a sign that said "lost man". And I think it appeals to me because it said "lost man" and I was lost. I did take all those pictures. I did not realise I took them … I cannot remember while I took them and when I got back to it the next day, looking through it at work … I found these things … I have no idea what they were, or why I took them. Because it geotags all the time of the pictures, I have a little line of Christmas due, Christmas due, Christmas due … somewhere over here … I was "OK, I did not know where I was, I did not know if I went that far, but I was wandering for about 2 hours!"*

[Henry, 23] *I left the pub after two or three hours after you to went home, and I was getting home first!*

[Mark, 22] *It is quite useful!*

[Researcher] How was it working? It was geotagging …

[Mark, 22] *Yes it was geotagging all the photos I'd taken.*

[Researcher] So it is pretty handy then!?

[Mark, 22] *It was pretty interesting! It was interesting but it had no use to me at the time!*

Although his smartphone's location-aware features were of no use to him at that time, Mark used them to make meaning of places when he got lost. The next day, when he saw that he had been to places that he had no recollection of, seeing his little line of Christmas on his smartphone he was able to read his short narrative of places and his night out in London. Whether stored in our minds or our mobile devices, memory always exists. 'From the simplest everyday tasks to the most complicated, we all rely on memories to give meaning to our lives: to tell us who we are, what we need to do, how to do it, where we belong, and how to live with other

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people' (Cattell and Climo, 2002, p.1). This is one of the reasons why some participants feel stress when they lose their mobile devices:

> [Susie, 22] *Argh! It would be awful.*

> [Sally, 21] *Yes, yes.*

> [Susie, 22] *I'd just go back home!* (Because her mobile phone is her connection to her home and brings back nice memories of her family and friends).

Memories may be associated with places, events, people and things *placed* during a certain period of time, and these memories and the feelings they evoke in us give us a sense of continuity. When talking about his memories of places in which he checked-in on Foursquare, Rodney mentioned the need to go back to those places:

> [Rodney, 25] *All of these places … I do not know if you would categorise them as special, but they all have certain memories, and some of these places I go very often.*

One of the most common ways of preserving the past is through photographs. As argued by (Bærenholdt *et al.*, 2004, p.105), 'through photography practices, people strive to make fleeting experiences a lasting part of their life-narrative'. In a similar vein, the research participants discussed how they used smartphones and their location-aware camera features in the creation of their life-narratives, as well to create a feeling of "nearness" (Bærenholdt *et al.*, 2004, p.118).

6.1.2. Everyday life narratives and mobile photography

The meanings of our social and spatial experiences are changeable, being dependent upon the present self. Therefore, what we remember and how we remember is subject to change according to our current situation. Consequently, photographs become important narratives of the past, in that they can somehow resist the changing nature of our lives and experiences. On the other hand, their meanings may also change in time. As also argued by Bærenholdt *et al.* (2004, p.122), 'the meanings of our photos are seldom static, because our life stories are characterized

by flux and rupture as much as by stasis. It is the combination of photographic images and human work that produces memories that escape being nothing but photographic memories'. Irene used her mobile devices to create a visual diary, which in some ways resembles her photographic memories:

> [Irene, 54] *I do use it as a sort of visual diary. Whenever I do something or go somewhere … I take a picture of random things which I post on Facebook as a little diary.*

To establish a sense of continuity, some of the participants talked about "recording" things on their smartphones using the camera feature of their phones:

> [Researcher] What kind of mobile technologies do you use at these places on your map?

> [Norma, 58] *Smartphone and laptop. And letters!*

> [Researcher] Do you carry your phone with you, like when you're walking by the canal?

> [Norma, 58] *Yes, I use it as a camera on the way. Record things.*

> [Susie, 22] *Probably, I took some photographs. Not really to share but to record it.*

When I asked Norma if she shared those photos with others, she immediately mentioned Facebook, explaining how she uploads and geotags the photos. Similarly, in the same focus group Irene also mentioned how she uses photos and shares the locations of places through her mobile phone:

> [Irene, 54] *When I do something or go somewhere, quite often I take a picture of random things, which I post on Facebook as a little diary.*

> [Researcher] Do you remember yourself taking photos in any of those places?

[Irene, 54] *Oh gosh, yes, everywhere! Even in the hospital when I was there in the lift. I took a picture of myself on the stretcher.*

[Researcher] So what do you think is the motivation behind doing that?

[Irene, 54] *I am a photographer anyway, and kind of an archivist. Also I travel a lot, and I hang onto things. Photography is a little way of hanging onto the past or the present. The moment.*

Irene considers taking photos not only as a way of preserving the past or the moment, but also as a way of sharing her life. Photographs not only fix the fleeting, but also provide nearness (Bærenholdt *et al.*, 2004):

[Irene, 54] *Sometimes, with the boyfriend, we send pictures to each other of what we are doing, rather than just texting. Just send a picture, 'Here I am' or 'here is this' or something funny. You know, we see it as a way of sharing life. I went to Kingsley Hall yesterday, a sort of 60s event. There was a conference of dialectics of something rather in the 60s [sic]. I took a picture of the audience and the hall and sent that to say 'where I am'.*

[Researcher] So that was a…

[Irene, 54] *It is a moment. A moment, yes. I hate losing anything. One thing about digital, it is not so easy to lose.*

In addition being hard to lose, another reason why participants chose to create personal autobiographies through their mobile devices was due to them being close-at-hand:

[Lillian, 31] *You tend to document more. In the past … you may forget to pick up the camera. Now if you're having a coffee with a friend somewhere, you have that mobile application.*

In contrast, another participant from the same focus group told me that she did not like sharing her photos with everybody, but rather sends them as an MMS or email only to people she thinks might be interested in where she was and what she was doing, just like Irene:

> [Sophie, 42] *I take photos of all those places. I do not share much of my private visiting information with others. When I want to share, I send them an email. Point-to-point. It is for my own diary. Sharing is only with very intimate friends, family members and good friends.*

Norma, Irene and Sophie were all in the habit of taking photos and using them to reveal where they had been through both their own personal diaries and their social networks. However, photographs are not always geotagged when shared on mobile platforms, because the meanings conveyed through visual representation could be deeper than attaching locational information to the photos. That said, in the end, the photos themselves may also reveal the location of the person sharing them:

> [Josh, 24] *Sometimes it is quite nice to tweet a picture which is quite ambiguous of where you are, no location at all. When we generally go for a walk, around Harrow, up to Harrow-on-the-Hill, go to the church, walk through the graveyard, and you can look up. All of them are quite nice. Just little snippets of a tree or park full of leaves … I am not tagging anything, I have not tweeted any words, it is literally just a picture … That's what I see and that's what sums up where I've just been.*

6.1.1. Elements of nostalgia and nostalgic sense of place

Nostalgia is a very old concept, with a meaning rooted in ancient Greece and its contemporary use being introduced in the 17th Century. In 1688, Johannes Hofer coined the term "nostalgia" to explain a medical diagnosis – extreme homesickness (Davis, 1979) – which 'was said to produce "erroneous representations" that caused the afflicted to lose touch with the present' (Boym, 2001, p.3). The Greek word, *nostos* means "return to home" (Davis, 1979; Boym, 2001) or "return to native land" (Lowenthal, 1985), which may exist or not exist anymore. The word *algia* means "a

painful condition" (Davis, 1979), "suffering" or "grief" (Lowenthal, 1985), or "longing" (Boym, 2001). Furthermore, '17th Century nostalgia was a physical rather than a mental complaint, an illness with explicit symptoms and often lethal consequences' (Lowenthal, 1985, p.10).

Today, we do not consider nostalgia as an illness, in that has moved on from being a pathology to become an emotion (Wilson, 2005). 'It signifies something more than memory of the past and something less than the "diseased state of mind"' (Davis, 1979, p.7). Criticising modernity, Lowenthal (1985, 1989) argues that today the term nostalgia has become a cover-all term for the whole past, which is widely commercialised. Although when defined this way nostalgia can be perceived only as a negative emotion, the way it is referred today can both be negative and positive (Eyles, 1985). While homesickness was seen as unpleasant, nostalgia has come to refer to fond memories and warm feelings towards the past (Davis, 1979 cited in Routledge *et al.*, 2013). Fond memories and warm feelings are the reason why some of the participants returned to their smartphones, to revive past places and people, especially by going through stored photos:

> [Irene, 54] *You know I am a very visual person so … Those little photographs are just slight little bubbles of memories that come up.*

As Davis (1979) argues, 'almost anything from our past can emerge as an object of nostalgia, provided that we can somehow view it in a pleasant light'. On the other hand, Wilson (2005, p.22) argues that 'while one's nostalgic memories may connote a pleasant or good time in the past, the fact that the individual is removed from that ideal situation can trigger sadness and a sense of loss'. Similarly, Boym (2001) defines nostalgia as 'a sentiment of loss' and displacement, but sees it also as 'a romance with one's own fantasy', connoting also a positive feeling. In the same line of argument, Mills and Coleman (1994) define nostalgia as 'the bittersweet recall of emotional past events', which they consider to be a type of autobiographical memory. Through "autobiographical memory", one can create narratives to mean something – either to the self or to others (Walker and Skowronski, 2013, p.151). Used this way, it can represent one's identity, as nostalgia can also be defined as 'an intra-personal expression of self which subjectively provides one with a sense of continuity' (Wilson, 2005, p.19). Victoria experienced a similar feeling of nostalgia,

based on her awareness that one day her "special" places may be shut down. To keep them alive in her memories she checked-in at those places, and in some ways feels nostalgic about them:

> [Victoria, 26] … *some places are more special than others. It is always small things that make that place special … I would not want to lose that little part of me. If there is a memory associated with some place, I would be a bit disappointed if it shut. Gone one day. Because there's always something there for me.*

Similar to Victoria's check-ins to remind her about the places she cares for and that are in some ways special for her, Billy used to pin special places on his personal Google Map. Although he did not share the map with anyone, unlike Victoria (Foursquare and Facebook), the need to preserve the past and fix a particular period of time by pinning a place was done with the same motive. Hence, when he lost access to his personal Google Maps account, he felt sad:

> [Billy, 19] *Saving places on Google Maps – all my memories died with that map when I lost it.*

How could Billy lose his own memories when through the loss of a map? Although his memories did *not* die, as he claimed, it was the nostalgia he felt about those places when seeing them on his map that may have been lost. Since the object of nostalgia is the past, it must be personally experienced (Davis, 1979); but on the other hand, nostalgia is not a product of the past, but rather emerges from the present. Under what circumstances can we feel that nostalgia actually resides in the present? (Davis, 1979). Our memories never terminate (unless one suffers from memory loss), and depending on our present situation in life, we may feel nostalgic about our past and our memories of the past when we remember them. For example, Lowenthal (1985) counts industrialisation, forced migration or mistrust of the future as causes of nostalgia. Additionally, bad moods, loneliness, sad news stories, meaninglessness in life and threats to meaning can also increase nostalgia (Routledge *et al.*, 2013). Thought of in this way, our mobile and locative media not only preserve our past, but as our lifetime companions that we carry with us wherever we go, they are also sources of nostalgic feeling.

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6.2. Narrating the past: Who? Where? What?

> Our objective is to explore *inner* space, a little-known region of that
> dark continent *inside* a man's head (Downs and Stea, 1977, p.4).

'Memories are not replicas or documentaries of events; they are interpretations. Human memory is highly constructed, and individual's sense of self and identity results from narrative constructions integrating past, present, and future' (Cattell and Climo, 2002, p.13). Due to elements of interpretation and "distortions", they are 'tightly connected with emotions, which lead us to create memories of things not actually experienced, reshape existing memories, and introduce other inaccuracies or distortions through blocking, bias' (Cattell and Climo, 2002, p.13). Hence, when talking about our memories, the narratives we create around events, happenings, places and people are charged with feelings, such as nostalgia.

'Nostalgia is part of the legacy of the romantic movement, and is an effect of change, and the massive changes that take place in cities induce this emotion to an intense degree' (Wilson, 1997, p.137). This is one of the reasons why in a transient city like London, users of mobile and locative media turn to their "memory" devices when realising the fast transformation of their everyday lives. Although a smartphone is ontologically a "mobile" device, as a tool it brings relative stability while its owner is attempting to keep up with the fast pace of metropolitan life. Especially in highly mobile cities such as London, the inhabitants find themselves continuously informing others about their history and origins (Wilson, 1997, p.15). On the other hand, 'even people who are not highly mobile, who remain in the same place for many years, may discover that they need to change and adapt their identities as places are transformed around them' (Wilson, 1997, p.15). As such, the places we inhabit, and thus ourselves, change and transform, and are reflected on our narratives of the past.

It is almost impossible to imagine our lives without considering our regular social interactions. The meaning that is attributed to and constructed by space and spatial relations define urban space in the mind of each individual mind, meaning that a dialectical relationship exists between sociality and space. Lefebvre (1991, p.35) defines social space as 'the space of society, of social life'. In the focus group study, the social construction of space was a common theme that emerged from the

sketch maps of London. Participants often referred to their friends, families or colleagues when explaining what they had drawn, what activities they engaged in when in particular places in London, and how they made use of mobile and locative media. For example, Jacquie's map included Hampstead Heath and Leicester Square, and she recalled some of her memories that were associated with those places (Figure 14):

> [Jacquie, 21] *That's me, my boyfriend, Mark and another person. we went to Hampstead Heath and watched the fireworks on New Year's Eve. Also, I spend a lot of time going to King's Cross when going in and out of London. And that's where I went ice-skating.*

Figure 14: A section from Jacquie's map of London showing her and her boyfriend ice-skating and watching fireworks at Hampstead Heath.

As Downs and Stea (1977, p.27) observe, 'an image of "where" brings back a recollection of "who" and "what",' and so in depicting Hampstead Heath and Leicester Square, Jacquie is recalling memories of being with her friends and boyfriend (*who*) while watching the fireworks and ice-skating (*what*). To describe mobility, she shaded and circled railways and train stations as nodes of mobility.

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Although mobility for her does not end when she gets off the train, because she passes the dead time while commuting with her smartphone, she automatically associates trains and some parts of lines with mobility and being mobile, simply because she could obtain a mobile signal and connect to the Internet on her smartphone.

Those genuine social relations that one establishes within a city allow the sense of a place to gain authenticity. In this way, the individual is provided with a sense of belonging to the community, which is believed fosters the construction of personal identities, and in turn, communities (Relph, 1976). 'The authenticity', as Relph (1976, p.64) argues, 'lies in the directness of the genuine experience, which is not mediated and distorted through a series of quite arbitrary social and intellectual fashions about how that experience should be'.

6.2.1. What about "How?"?

People using locational information to create genuine experiences in urban spaces add different layers of social information to various spaces, regardless of whether or not they *exist as locations*. Billy described such a phenomenon on his map of London by writing "You are here", stating that everywhere he goes, there is a potential to be geo-tagged. As argued by Downs and Stea (1977), due to social and spatial mobility, it is usually not enough to know only where to get things or how to find people, as it is also very important to know where to locate things and ourselves in space. Locative media, in allowing a user to tag their whereabouts, acts as a cognitive map that we need to refer to in order to achieve the goal of getting from one place to another. So in cognitive mapping, as another dimension to "where, who, what", the question "how" is also important. On the other hand, by always being located, users of locative media gain a sense of knowing everything, everywhere:

> [Jane, 21] *I know that I'll always know where I am now; when I did not have my phone it was adventurous.*

When talking or thinking about our own experiences of a place, we usually refer back to our personal biographies – our stories that have been created socially and somehow inscribed on our mental maps. As such, there is an element of nostalgia in cognitive mapping, in that it involves activities of recalling and

recollecting. The nostalgic sense of place requires us to look back, in that it is dominated by feelings towards a place at some time rather than in the present (Eyles, 1985).

6.2.2. Recall and Recollect: When?

Feelings about certain places are shaped by past events, and do not necessarily involve significant others in terms of shared memories and culture. As such, although space is a co-product of social interactions, what is remembered does not always include the social aspects. It was common among the participants to try and keep a record of their feelings towards different places, kind of like a biography or diary, for which they said that they go over their past photos, mobile Facebook status updates and Foursquare check-ins to remember those places and what they had done there, as well as their feelings at the time.

One of the main uses of locative media, especially smartphones, in these situations is taking pictures, geotagging them and uploading them onto Facebook or Foursquare. For instance Jane (21) and Charlotte (20) expressed that they use their smartphones to take pictures either to remember a place and memories associated with those places, or to share those special moments with their loved ones. Both wrote on their maps where they had used their smartphones and how they used them (Figures 15 and 16, respectively).
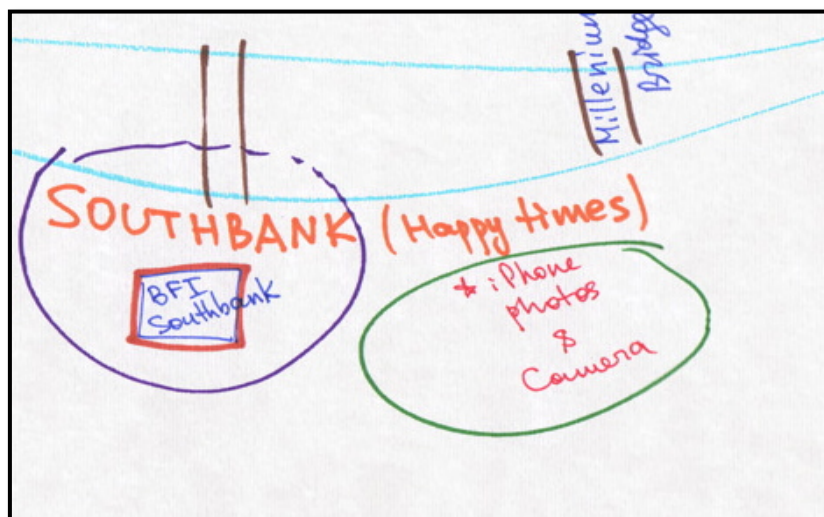
Figure 15: A section of Jane's map of London.
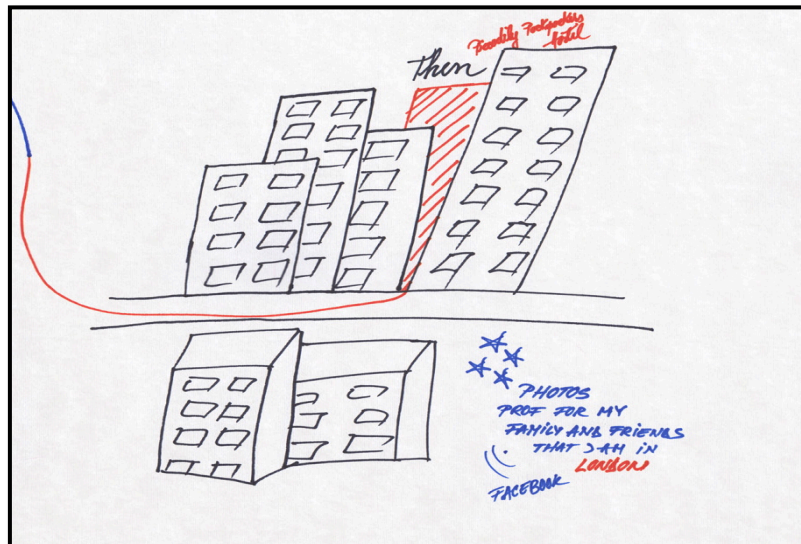
Figure 16: A section of Charlotte's map of London.

When drawing sketch maps and using them to tell stories, it is interesting to see how people recall memories associated with places and include them on their maps as iconic images. For instance, Ashley (25) drew a pipe next to Baker Street to represent Sherlock Holmes at his fictional home (Figure 17).
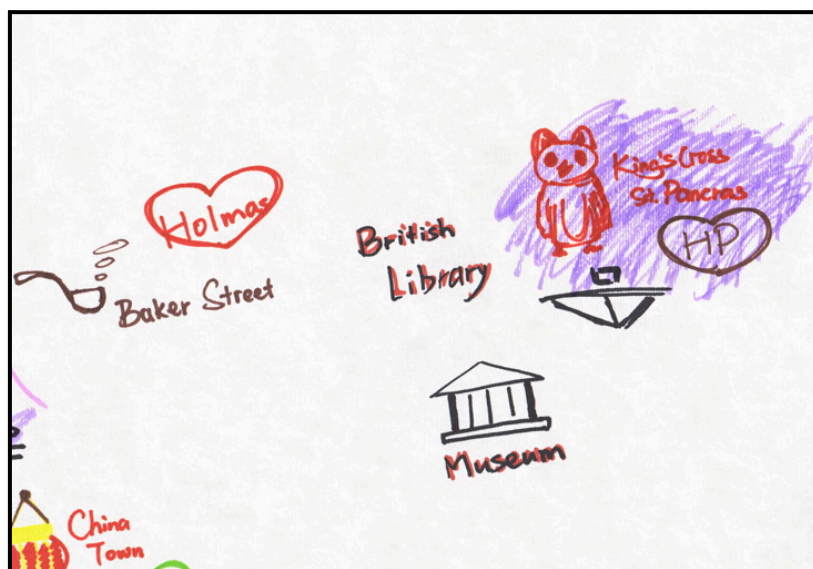
Figure 17: A section of Ashley's map of London
showing Baker Street and King's Cross train station.

She then added King's Cross St. Pancras Station, as the location of Platform 9¾ in the Harry Potter novels and films[37]:

[Ashley, 25] *Sherlock Holmes is I think my first memory of the UK. … my father bought the book for me when I was 7, so Baker Street… I think it is a dream place. I think the second most important memory about London is Harry Potter. So King's Cross, the station in Harry Potter, is the second one.*

Morgan's (37) memories of London are connected with the places she visited with her children. She explained what she had drawn, and why (Figure 18):

[Morgan, 37] *I've added more places that I've visited. We visited the London Eye in 2006. The London Aquarium is near that … the National History Museum … he dinosaur exhibit … with my daughter and son.*
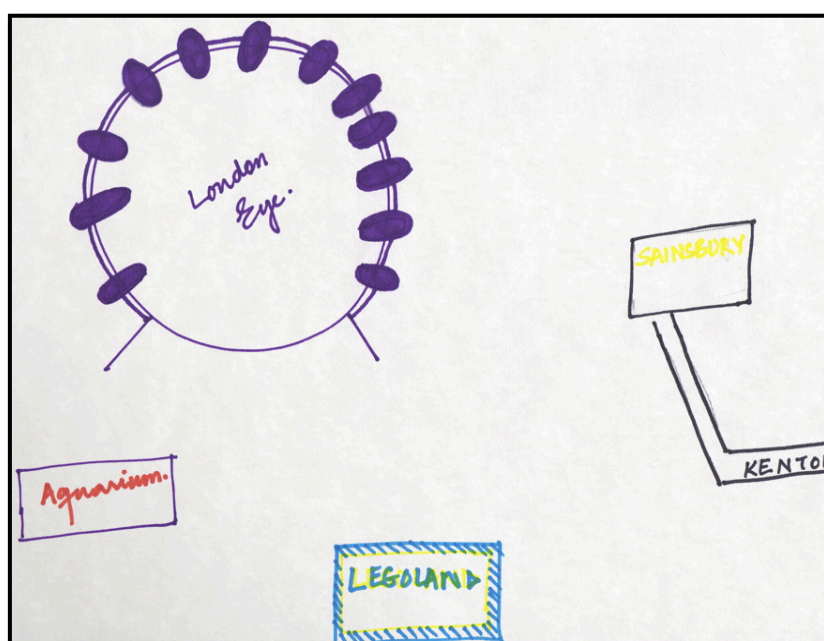
Figure 18: A section of Morgan's map of London

These examples suggest that places, even if they are ordinary and taken for granted by some people, acquire special meaning not only through the social activities engaged in there, but also due to their associations with books, other

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[37] The same example was used in the previous chapter to explain how the mediated images of a place affect one's perception of that place.

people's stories, movies and media in general. On the other hand, it is also important *how* we remember places, and such associations do not always have to be positive. For instance, for Emily, Borough Police Station represents a "dark memory" (Figure 19):

> [Emily, 43] *Borough is the place that I will remember for my whole life. I went there to sign a paper to get registered, because I am a foreigner. I hate to be there … I was there at 8 o'clock and left there at half past 4 in the afternoon. I was like a refugee. … in Central London, all the students in September go there within seven days after arrival.[38]*
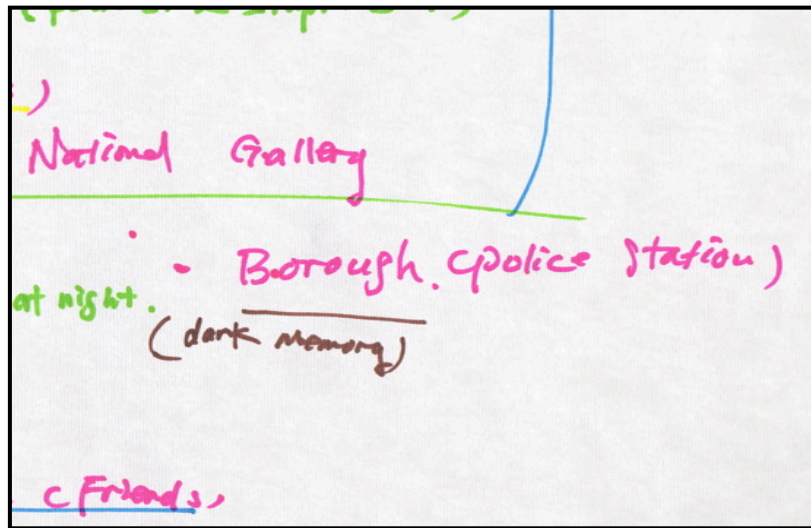
Figure 19: A section of Emily's map of London.

Emily's verbal account bears similarities with the way she has drawn this particular location. When asked why she had written "dark memory" in brown underneath the place, she explained that because her association with the place was overwhelmingly negative, she wanted to emphasize that and separate it from other places in London.

As tools of memory (recorded either willingly through photos, check-ins and geotagging, or unwillingly through automatic/default locational updates and geotagging), mobile and locative media help us recall and recollect our social and

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[38] This quote is also used previously (Chapter 5) in order to depict the different perceptions and representations of places. In this case, it also explains that a sense of place can be negative, and so it is referred to here in order to discuss the negative memories associated with places.

spatial experiences in everyday life. In big metropolises such as London, it is possible to define the city's inhabitants as mobile and transient, as there is a constant flow of people and information. Within this immense flow, the sharing of locational information creates little bubbles of memories of both places and people in the form of narratives. These can remind us of our past, and hence, our past selves, while also forming bridges between our past and future. Although nostalgia is generally defined as an ode to the home or to the past self (hence, connoting a negative feeling), nostalgia generated through mobile and locative media can create feelings of happiness and comfort by reminding us of our memories.

CHAPTER 7: MOVEMENT AND SPATIAL ORIENTATION: DIFFERENT ASPECTS OF PLACE-MAKING AND SENSE OF PLACE IN LONDON

> In great metropolises, no man can know well more than a small fragment of the total urban scene; nor is it necessary for him to have a mental map or imagery of the entire city in order to prosper in his corner of the world. Yet the city dweller seems to have a psychological need to possess an image of the total environment in order to place his own neighbourhood (Tuan, 1974, p.192).

The aim in this chapter to explore and understand how the use of locational information in mobile communication devices changes one's spatial practices and means of navigation in London in relation to locations, spaces and places that 'in sum comprise the geographical world' (Seamon, 1979, p.15). As Seamon (1979, p.15) argues,

> Wherever we are, be it small as an apartment or expansive as a desert, strange as a distant country or taken-for-granted as a small adobe home, we are always housed in a geographical world whose specifics we can change but whose surrounds in some form we can in no way avoid.

Starting with our first bodily movement and spatial exploration, crawling, we somehow begin to make sense of our geographical world. Our homes are pieces of this geographical world, and so are the cities in which we live, regardless of whether they are large or small. Furthermore, we constitute an important element of cities, not only as observers, but as 'ourselves part of it, on the stage with other participants' (Lynch, 1960, p.2). As participants and elements of what constructs a city we make continuous spatial decisions that involve the continuous movement of our bodies, goods and information at all scales. These decisions range from how we send or receive items from one location to another, what tools and devices we use for these purposes, and how we deal with unexpected problems that get in our way, such as train line suspensions, punctured tyres or disconnections from communication networks.

According to cognitive approaches in the disciplines of geography and urban planning, although the structuring and identification of any environment are an innate ability of human beings (Lynch, 1960; Downs and Stea, 1977, Tuan, 1977), we rely on internal and external references in order to participate, undertake spatial choices and make decisions(Kitchin and Blades, 2002). The way we do this is not a "mystic instinct", as there is rather "a consistent use and organisation of definite sensory cues from the external environment' (Lynch, 1960, p.3). As also argued by Kitchin and Blades (2002, p.1), 'we rely not on external references, such as maps, but on a previously acquired spatial understanding of the world in which we live; our ability to remember and think about spatial relations at the geographic scale'. Within this line of thought, in learning and making sense of the spatial environment, we rely upon primary experiences such as walking in a city, and secondary sources, such as road signs and maps (Kitchin and Blades, 2002). However, it is important to note that 'both sources of spatial information have to be combined in the cognitive map of an individual (Kitchin and Blades, 2002, p. 47), and that 'Experience is a cover-all term for the various modes through which a person knows and constructs a reality' (Tuan, 1977, p. 8).

In this chapter it is argued that mobile maps, in their provision of locational information, serve both as an external reference source and a source of direct experiences in one's spatial participation and the generation of a sense of place. My concern herein is not what mobile technology users do, but what they experience and how they do that. Consequently, my approach is neither cognitive (although I used sketch mapping as a tool to stimulate group discussion), nor behavioural. Instead, I consider the relationship between spatial behaviour and locational information use as a phenomenon, following the work of Seamon (1979).

Seamon (1979, p.34) argues that cognitive approaches to understanding spatial behaviour are very much dependent on such processes as thinking, figuring out and deciding. In contrast to the stance of cognitive theorists, Seamon asserts that cognition plays only a *partial* role in everyday spatial behaviour (1979, p.34), and further discredits pure behaviourist approaches to movement and spatial encounters, suggesting that they 'discount all inner experiential processes, such as cognition, emotion, bodily intelligence'. Behaviourist perspectives also come under criticism from Seamon, who argues that 'prereflective knowledge is not a chain of discrete, passive responses to external stimuli; rather, that the body holds within

itself an active, intentional capacity which intimately "knows" in its own special fashion the everyday practices' (Seamon, 1979, p. 35). Employing a similar approach as Seamon, this study blends cognitive and behavioural discussions with empirical data from the focus groups, with the intention being to find a centre ground among the different approaches that have been developed to facilitate an understanding of the spatial experiences of mobile technology users in London.

Based on the findings of the sketch-mapping focus groups, I found that one of the most common uses of locational information is for navigation through London. This mode of spatial orientation includes the most basic forms of navigation, such as walking, public transport, cycling, driving, as well as (different) uses of various maps, especially the Google Maps smartphone application. Building on this, I analyse how locational information is used in mobile communication devices as a primary and secondary source of spatial learning, and as a means of acquiring a sense of new places, and as means of direct experience of the spatial environment.

According to Kitchin and Blades (2002), 'primary learning is navigation-based, with the collection and processing of spatial information explicitly linked to an individual's interaction with an environment through spatial activity' (p.35). There are a number of building blocks that affect primary learning (Kitchin and Blades, 2002), among which can be counted environmental cues and features such as landmarks and paths, as well as memorized ordered views or scenes from which a cognitive map of the spatial environment can be formed (Kitchin and Blades, 2002). For habitual movement, from a behavioural perspective, there has to be an external stimulus that reinforces a particular pattern of spatial choice and behaviour (Seamon, 1979). In this study I contend that any mobile communication technology serves both in the process of creating a cognitive map and in stimulating spatial behaviour. For example, one might consult a smartphone application to find a nice restaurant nearby and decide which route would be the quickest to get there; but on the way to the restaurant, the same person may receive a photo in the form of a text message from a friend showing a traffic jam along the route, and may, therefore, decide to take another route. In this scenario, what that hypothetical person does to find a place may not be as important as how s/he experiences the spatial environment as a result of the technology.

7.1. The shift from landmarks to smartphones

For many of the research participants, using landmarks and paths was a common method of navigation and creating a sense of place in London. The respondents stressed the importance of landmarks, which they sometimes referred to as 'checkpoints', 'monuments' or 'basics of London', especially when talking about their first spatial experiences in the city. The River Thames had particular importance as a landmark, being the first thing drawn by most of the participants. Vicky told me why she started her map with the river:

> [Vicky, 42] *My first drawing was the River Thames. I see the river as a natural landscape … it structures the whole city as south and north. It is quite unique.*

During the development of a cognitive map, there is a 'set pattern of development' (Kitchin and Blades, 2002). Following the River Thames, the second most common landmarks drawn on the sketch maps were the Tate Modern, the BT Tower and the Gherkin, which were used as points of reference for some participants while navigating through London.

> [Lee, 22] *The Design Museum and the Tate are like two checkpoints for me to see what's where in the East. That's pretty much it.* (Figure 20)
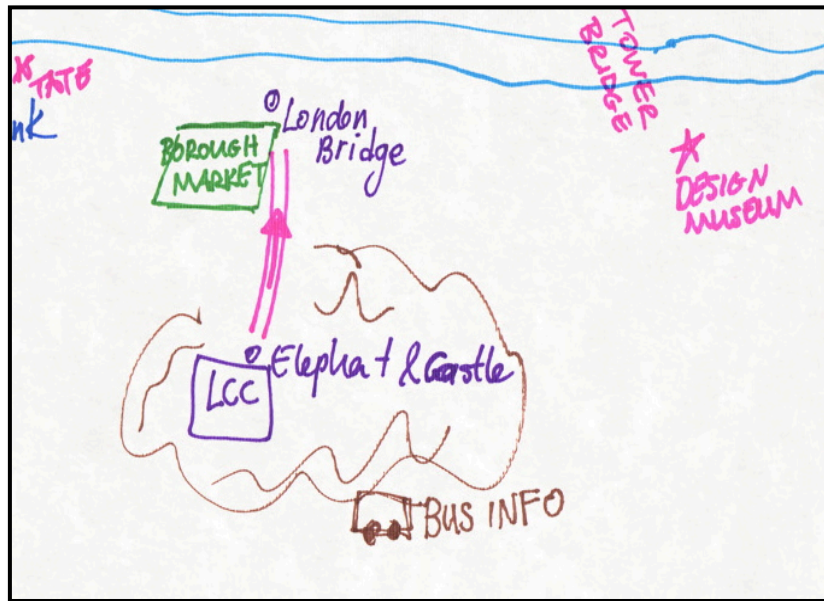
Figure 20: A section from Lee's map of London showing the landmarks: Tate Modern, London Bridge, Tower Bridge and Design Museum.

[Ryan, 39] *I guess I kind of navigate London by landmarks. The first thing I drew was the flat where I live, and then Oval Cricket [Ground] and the BT Tower.* (Figure 21)
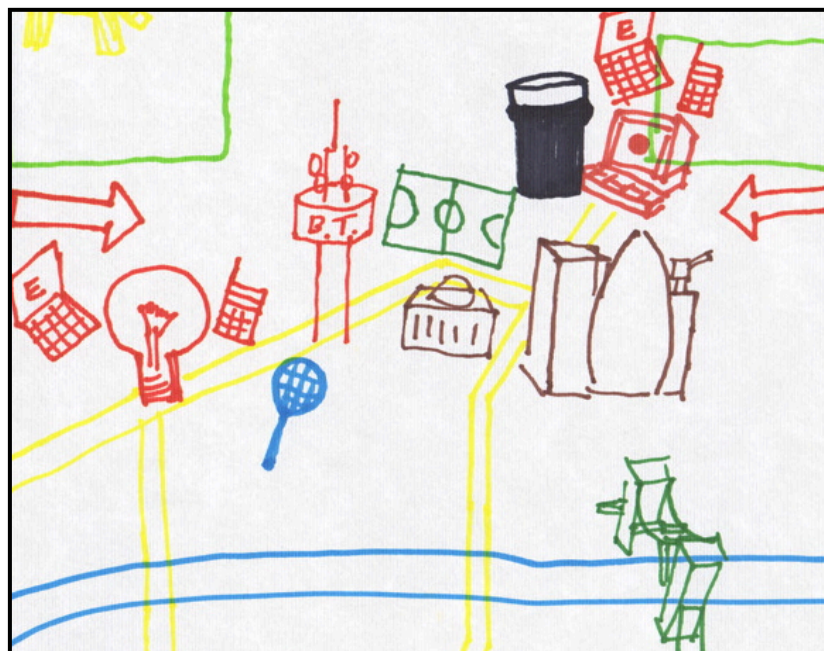

Figure 21: A section from Ryan's map of London showing the landmarks: The Red Light District, the BT Tower, the Gherkin and Tower Bridge.

[Sally, 21] *I mostly use monuments to orientate myself. I usually think of London as different monuments and how long it takes to get from one to another.*

Interestingly, some of the respondents stated that they better knew where the landmarks were located once they start walking in the city. Siegel (1977) suggests that 'an individual notes and remembers landmarks, and once landmarks are established an individual can "attach" actions to these, so that the pattern of landmarks and actions is encoded as a route' (Siegel, cited in Blades and Kitchin, 2002, pp.35–37). In this regard, walking in London becomes an "attached action" while navigating in the city. Although the set pattern of development started with the Thames in many maps, the locations of the other landmarks altered (as discussed in the methodology chapter, cognitive maps are not geographically accurate, see Kitchin and Blades, 2002, p. 57). Accordingly, the research participants explained some level of difficulty in drawing and placing the landmarks on their maps, although they acknowledged that they knew the locations of those landmarks by heart once they started walking in the streets and seeing them:

[Lee, 22] *I can map them actually when I am in the street. So instead of drawing them and placing them on a piece of paper… It is quite difficult, but when I am walking, as Rodney said, I have checkpoints to know, in my head somewhere.*

[Larry, 35] *Tottenham Court Road. I think this is Bank, but I am not sure. And here you have the Tate and the Design Museum. You have two bridges in between; at least, I am not sure. It is not geographical, I know once I am walking between them.*

Landmarks and paths become more important especially when one gets lost, as they help in locating oneself. Accessing locational information in such situations can connote feeling *secure*. As Lynch (1960, p.4) argues:

We are supported by the presence of others and by special way-finding devices: maps, street numbers, route signs, bus placards. But let the mishap of disorientation once occur, and the sense of anxiety and even terror that accompanies it reveals to us how closely it is linked to our sense of balance

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and well-being. The very word "lost" in our language means much more than simple geographical uncertainty; it carries overtones of utter disaster.

Maybe "terror" is too strong a word to use to describe when one gets lost; however, 'safety and security are among the most basic reasons for owning a mobile phone' (Ling, 2004, p. 37), especially in cases of emergency. Although getting lost may not always be an emergency, the anxiety resulting from not knowing one's whereabouts can construct a similar ground to use mobile phones. One thing is for sure, getting lost may result in some sort of dependency on others, or on way-finding tools such as maps. However, by having the technology ready-at-hand, a dependency on (the spatial knowledge of) others can actually start to take the form of a dependency on a particular form of technology, in this case, mobile communications. For instance, Mary did not look for a street map to find her way, or asked somebody for directions., Her preferred method was to call a friend, and the focus group data reveals a similar strong dependence on mobile technologies.

Lillian (31) also mentioned her use of mobile technologies to navigate in the city. Interestingly, she relied on Pedro's iPhone and iPad, hence, on Pedro, to find her way, especially in parts of London of which she had inadequate spatial knowledge (which she referred to as "adventures") (Figure 22).

Figure 22: A section from Lillian's map of London.

Similarly, Steve, who also does not have a smartphone, talked about a similar use to Lillian's:

[Steve, 23] *With iPhone, I rely on my friends if I get lost. Someone will take out their iPhone and then we'll get there in the most efficient way.*

Both Lillian and Steve stated that they love discovering different parts of London and exploring the city using a trial and error method, without consulting way-finding tools. However, once they got lost, they admitted that they felt the need to call friends or use their GPS-enabled mobile phones to obtain locational information.

Additionally, London's cosmopolitan nature and cultural differences can also play an important role in this shift from asking people for directions to relying on mobile technologies, as the commuting culture in London can sometimes prevent people from asking random strangers for directions. For Jonathan, there is a certain tension associated with the "sudden social pressure" of being asked directions:

[Jonathan, 23] *I know from myself when somebody asks me for directions, I give the best I can ... I think it is the sudden social pressure. Someone asks you on the street, and you'd concentrate on where you're going. So you're not usually hanging around, you're going somewhere ... I know how to get from Old Street to Regent Street; and then from Regent Street to Piccadilly. The point is that I jump between points. It is the same way people use the underground. They kind of know how to get from ... it is kind of a jump between places. So I think sometimes I send people to weird routes [sic]!*

Although a city can be defined as 'a human settlement in which strangers are likely to meet' (Sennett, 1974, p. 39), one usually develops ignorance to prevent social interactions with strangers, similar to Simmel's *blasé attitude* (Simmel, 1969, pp. 47-60). 'This mental attitude of metropolitans toward one another we designate, from a formal point of view, as reserve' (Simmel, 1969, p. 53), which was defined by some of the participants as the common culture in London, associated with mobile technologies. In one focus group, some of the respondents (Charlie, Victoria, Larry, Helen) raised concerns about the extensive use of mobile technologies in public

spaces, although they agreed that they did the same thing, especially while commuting. They told me that when there is idle time, they start engaging with their mobiles, virtually leaving their immediate physical surrounding and blocking out potential social encounters.

[Charlie, 25] *If I am waiting for someone, somewhere, than that's when my head is down and I am not paying attention to my surroundings. Which is kind of sad, I suppose, because people are not paying attention to this nice architecture, the atmosphere and stuff. I suppose it is making people more…They just want to stick to their own little space [sic].*

[Victoria, 26] *Yes!*

[Charlie, 25] *You know they do not want to talk to anyone.*

[Larry, 35] *Less social!*

[Charlie, 25] *Yes, you are less social. Whereas you could be standing there with your hands in your pockets, standing by the person next to you.*

[Helen, 25] *I think I'd find it quite strange if someone turned to me and started talking to me. I think people do that, they talk to people in a sense, they still do that … sometimes I feel anxious like "God, I am not doing anything, I am sitting here, waiting for someone, it has been 20 minutes, I watched people, I had my coffee or whatever, now I am a bit anxious' and I feel like I need to be doing something. You know, log on to Facebook or go to a webpage … I feel like I look like I am engaging in something rather than just standing there.*

[Larry, 35] *I think it depends more on the country and culture … But that's not always been … in the train you're just like … [sic]*

Gergen (2002) conceptualises this behaviour in public spaces as "absent presence", where 'one is physically present but is absorbed by a technologically mediated world of elsewhere' (p. 227). However, as Larry indicates above, this is not always the case in every culture. As argued by some of the respondents, absent

presence and mobile technologies can create a less social environment, which may prevent someone from asking for directions in London. Although it is clear that mobile technologies can contribute to such an attitude, it may also be argued that a hesitation to interact socially is not merely an attempt at self-preservation. Asking people directions in London is not always the best solution when trying to find a place, because it is hard to tell who is local, and hence, who may have tacit knowledge of the urban space, and who may not. Similarly, during a discussion in one of the focus groups, the respondents agreed that you cannot actually ask random people for directions in London:

> [Sally, 21] *But now there are so many people who do not know London. Non-Londoners, so you do not know whom to ask beforehand.*

> [Jonathan, 23] *I reckon it is better when you ask people outside London, because people may have lived in a major city. You're more likely to have lived there for your entire life, and more likely to be local. It is more likely that someone would want to stop you and talk, because it is a small-town attitude.*

> [Susie, 22] *I've been lucky, to be honest. I never had anything like you say. People kind of help me [find] where I need to go.*

Converse to the sudden social tension that may be caused by a stranger asking for directions, or to the idea that one may not be a local, smartphones are seen as a reliable sources of locational information. As discussed by some of the participants, nowadays one is usually expected to carry/use such a technology while navigating in London.

> [Lillian, 31] *One time I was with my best friend and she came to Waterloo, we wanted to walk to King's Cross and we wanted to cut through Pimlico. It was just a usual Saturday. Location-wise, we just had to go straight ahead. If we took that road, you'd gonna be fine and [sic] … we'd find it. But I wanted to be sure … so I stopped a guy, kind of a city boy more than a guy, kind of a city guy just … to ask if, location wise, are you on the right way … and he was like 'do not you have a TomTom?' and I was just like 'no, we do not'. I would not ask you if I did!*

[Researcher] You said it would make human interaction better?
(reintroducing the point made by Lillian earlier)

[Lillian, 31] *Yes, because at least he would have told me where to go! Because there is pretty much of exchanges in human life based on what you do not have or what you do not know and you ask people and location is one of them.*

[Helena, 23] *But it depends on… Once I asked somebody and they got their phone out and found the place for me.*

Participants from both the pilot and sketch-mapping studies told me that by using the locative features of their smartphones, they dealt with the anxiety of getting lost and felt empowered. The respondents who did not own a smartphone, interestingly, reported that they called their friends or relatives to get directions if they got lost or needed to go to a place that they had never been before. Although the signage system is broadly spread and there are a number of street maps mounted across London, only one of the participants, Steve, brought up this fact: 'In London there are a lot of physical maps. That's becoming more and more popular'.

In either case, whether or not one owns a smartphone, it is apparent that in order to acquire a sense of place in London (especially a new place), users of mobile technologies rely on mobile communications and the location-aware features of those devices. According to the study, landmarks still play a crucial role as a primary source for learning the spatial environment (as can be seen both from the group discussions and the individual sketch maps), and mobile communication devices, especially smartphones (although secondary sources for the acquisition of spatial knowledge), have started to affect how they navigate, and hence learn places in London. Most importantly, not only do they act as supplementary sources, but have in time become *the* source of the direct experience.

7.2. From maps as "secondary sources of building spatial knowledge" to maps as "sources of direct experience"

Maps are defined as secondary sources in the construction of cognitive maps and the acquisition of spatial knowledge (Kitchin and Blades, 2002); and under this category it is possible also to count television, books, newspapers, atlases, magazines, movies, talking to others, games and hobbies, in the order of importance, based on the study of Saarinen *et al.* (1988) (Kitchin and Blades, 2002, p.44). The River Thames was the first thing drawn by many of the participant on their sketch maps, but its importance in the acquisition of spatial knowledge went beyond its role as a natural landmark that structures the city geographically. In one focus group, while Mark was drawing the Thames, another respondent, Henry, commenting on Mark's map, said: 'You have just drawn the Eastenders map!!!' (Figures 23 and 24).

Figure 23: A section of Mark's map of London.

Figure 24: EastEnders opening title sequence (screenshot from BBC series).

Similarly, as a secondary source of information, Harry Potter stories had helped Ashley (25) to retrieve the location of King's Cross, which was used in the movies. To underline her interest, she labelled it with a drawing of an owl and the initials "HP". Based on these two examples, it can be argued that the mediated representations of places, especially landmarks, can help in the creation of a cognitive map and in the acquisition of locational information. However, the main distinction between relying on primary or secondary sources in acquiring a cognitive map is that the latter supplements the former, which creates a direct experience (Kitchin and Blades, 2002).

As Kitchin and Blades (2002, p.45) argue, spatial information derived from direct experience is different from that acquired from maps. 'Maps show the spatial relationships between all the places *represented*[39] on the map, but when an area is learnt from direct experience this knowledge has to be constructed gradually' (Kitchin and Blades, 2002, p.45). Maps, in this context, can only supplement the direct experience of the environment; however, the use of mobile maps (especially Google Maps' Street View and/or 3D-view components), the participants stated, could actually lead to direct experiences of London. Steve, while explaining how he used maps in London, emphasized how Street View was different for him:

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[39] Emphasis added.

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[Steve, 22] *You can actually see the whole place on Street View! Yes. You can see all the London landmarks, you can see all the landmarks from the world. … Seeing it is very strange on a 3D virtual map.*

Hence, by making the landmarks of the world available to its users and by making it possible to walk in the virtually represented London, mobile maps can actually create a similar experience as if they are primary sources in acquiring spatial knowledge. This experience originates from the mobile maps feature of locating the user. Farman (2012) discusses that 'the point of view offered by these maps engages the user along a spectrum from "disembodied voyeur" to "situated subject"' (pp.45–46). However, their success in helping users learn how to navigate in a city is still questionable, as many participants reported that relying heavily on maps on mobile devices had a *side effect* that Susie and Jacquie worded as "*paying attention, but to where?"* For example, one of the respondents, Larry, told me that he uses Google Maps on his smartphone most of the time when navigating in London, and for that reason, he believes that he does not *remember* routes and directions.

[Larry, 35] *I usually go to places and forget about them until I see them again.*

Some of the respondents, such as Helen, also pointed to such a problem in acquiring spatial knowledge with an analogy.

[Helen, 25] *It is a bit like a friend who knows the area so well that takes you to places. So when you're with someone who knows the area, you just go with them. You do not even… Brings … [they bring] you to the same place next time. Like the next day, you'd have known where to find it. And if you got a smartphone, you do not actually understand where you're going or I mean … the next day you'll still need to look it up and … you're not going to remember it. It is a bit strange that the person who knows the place and taking you there and when you look and it takes you to places. I am just seeing it in varying ways and I am like… how it would be… It is great to have people whereas smartphones are not your friends [sic]!*

Similarly, Susie, Sophie and Sally also discussed why and how they do not pay attention to their surroundings when using mobile devices to navigate in London.

> [Susie, 22] *It is just you do not have to think. I used to use satellite navigation at home when I am driving. I do not even think when it tells me where to turn. When I have to use my mum's car, I am useless, I am just lost forever, although I've done the route like 10 times before, I've just cannot pay attention.*

> [Sophie, 42] *I think the more you use it, the more you become dependent on it. … I am very thankful to these technologies, especially Google Maps, which really helped me to move in London. After living here for such a long time I became so dependent on Google Maps. Without Google Maps I am still tend to be lost [sic]. It's kind of a mixed feeling.*

> [Sally, 21] *Like a trade-off … If I do not have the technology with me, I think I'd remember more how to get to places.*

Interestingly, although many of the respondents argued that mobile maps and their reliance on them had made them unaware of their real surroundings and had made it harder for them to acquire spatial knowledge, they could not really classify it as a negative attribute. Especially, participants, such as Sally, who enjoy discovering new places by chance, said that mobile communications and mobile maps actually offer an *advantage*:

> [Sally, 21] *But I also think it is beneficial because when you look at yourself on the map you notice that there's something by that you should check out. You would not have had otherwise without that technology. So there's sort of a trade-off there.*

The city does not end with the visibly observable (Gordon and de Souza e Silva, 2011) and we sometimes want to get lost intentionally in a city to discover new things and places, and mobile maps and location-based applications nurture this desire. Although the first thing that comes to mind when one thinks of maps is their use to *find* a place, one usually ignores the *different connotations* of finding a place, which may also be *exploring* and noticing something *different by chance*. It could be

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argued that this is due to the categorisation of maps as secondary sources in acquiring spatial information. However, the first maps were made to explore and to find new routes, and to discover new places on earth. This forgotten dimension has been reintroduced with the advent of location-based services, following the introduction of GPS into everyday life.

7.2.1. Escape and Explore: Creating a new sense of places

> At every instant, there is more than the eye can see, more than the ear can hear, a setting or a view waiting to be explored (Lynch, 1960, p.1).

The will to find and experience something different has also a social aspect, sharing the experience with others. Some of the participants indicated how they use locational information to discover new places and socialise with people in London. When the participants in one of the sketch-mapping focus groups started talking about smartphone applications such as Run Keeper, which allows the user to share their routes with their networks, the social aspect of locational information sharing became clearer. This was also clear in Sally's sketch map, in which she drew her running route along the Thames and talked about sharing her route with her friends,

> [Sally, 21] *People can join in…!*

In addition to the social use aspect of sharing routes, Sally also revealed another side to it, which was the ability to keep one's network up-to-date about the traffic.

> [Susie, 22, to Sally, 21] *Don't you think that you're sending something to everyone, kind of this little bit of spam?*

> [Sally, 21] *I send it as a text.*

There is also a sort of coincidental use of maps in smartphones. As some of the participants discussed, mobile maps, with the feature of locating the user, may also be used to find something nearby in the form of "micro-navigation" as one of the respondents, Charlie, explained:

[Charlie, 25] *I suppose, I just mainly use it for navigation, so … I do not know it is hard because I think I know London pretty well. I suppose I am using navigation to micro-navigate rather than broadly navigate. Because I know where to go if I want to go to Shoreditch or Chiswick or Fulham or wherever I know… I do not really have to look at my phone. It is probably more assuring to look at my phone rather than finding out where to go. But then when I arrive at somewhere, or if I am meeting at a specific place, it is more micro-navigation so that I know what specific street to go down. In my head, I know the tube map very well and the main layouts of roads and areas.*

Exploring new things in a city is not only specific to the users of such applications and those who share their locations, as non-users who are somehow connected to those users via social networking can experience a *new* sense of a place based on their friends' locations. For example, one of the respondents, Helen, explained that although she did not use a smartphone and share locational information, she checks her friend's check-ins or geotagged photos on Facebook:

[Helen, 25] *On Twitter, or on Facebook for instance, if I see someone going somewhere then I look at it and if I think that it is nice I'll add it on my Facebook. It is basically the places where I want to … then I say 'Oh, I should go there' and I would go one day, definitely go there. … That's how it works for me at least.*

However, some of the participants discussed that they *do not* use such applications to discover new things in London.

7.2.2. Google maps on mobiles: 'My map of London is a Google Maps of London!'

Among the research participants from both studies, Google Maps, either on the laptop or on the phone, was the most used type of map. The participants stated that they no longer carry traditional paper maps, but instead use either their smartphones or carry printouts from Google Maps. In one of the sketch mapping focus groups I asked the participants what they did when they got lost. Those who had a smartphone stated that they used the Google Maps application, while the others

who had only a traditional mobile phone said that they called or texted people who they thought might be able to help them find their way:

[Ashley, 25] *If I am lost, I use Google Maps.*

[Wendy, 23] *I do not remember the last time I got lost, but usually I end up calling someone whom I know would be by the computer. To look it up on the map for me.*

[Steve, 22] *When I am lost I usually text five people or so, sending the same text like 'where is this place?'. One of them would be by the computer.*

[Morgan, 37] *On the iPhone, on the smartphone.*[40]

Similarly, in another focus group, Jonathan, who does not have a smartphone, revealed how he actually uses his friends' smartphones:

[Jonathan, 21] *With iPhone, I rely on my friends if I get lost. Someone will take out their iPhone and then we'll get there in the most efficient way.*

Although with the introduction of GPS into everyday life, especially with 3G enabled smartphones, the number of wonderers in a city carrying paper maps and A–Zs has started to decrease, but there is an interesting tendency to print out Google Maps and carry them. The very essence of map-making and cartography was for the transfer of knowledge, and somehow this required mobility (Dodge *et al.*, 2009; Farman, 2012; Latour, 1987). As Wood (1993, pp.7–8) argues,

The map does not let us *see* anything, but it does let us know what *others have seen* or found out or discovered, others often living but more often dead, the things they learned piled up in layer on top of layer so that to study even the simplest-looking image is to peer back through ages of cultural acquisition.

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[40] The participants Ashley, Wendy, Steve and Morgan are not from the same focus group. Hence, the quotes are not from a conversation among the four.

Since generating cartographic information became standardised, maps started to become *immutable mobiles* (Latour, 1987), 'So that the map became a stable, combinable and transferable form of knowledge that is *portable* across space and time' (Kitchin *et al.*, 2009, p.15). Hence, not only pocket maps were designed to be portable, but the basic principle of map-making and producing cartographic knowledge *is* mobility. As such, maps, just as with mobile phone maps, 'are each designed to be portable and to function while moving through space' (Farman, 2012, p.46). However, there are some key distinctions between mobile device maps and pre-digital maps. As Farman (2012) argues, one such difference is related to the mode of representation of the spatial environment on the maps and its consequences. 'Users of maps employ them because they are reliable and only when they fail us does their interrogation come to the fore' (Farman, 2012, p.46). Due to problems of accuracy in GPS and the speed in updating information based on the speed of the Internet, printouts from Google Maps are deemed to be more reliable when compared to the mobile version and/or its counterparts. Some of the respondents of the sketch-mapping studies explained how they use printouts, why they prefer printed maps, and whether they use them as *supplementary* to mobile Google Maps, or applications.

> [Amy, 30] *For me, I do not use Google Maps, because I know places that I go. If I need to go somewhere new, I'll print out a map beforehand. I like physical and I am very bad at reading maps. My geography is a bit bad. [I am] Bad at directions.*

Some of the participants stated a preference to *draw* a map based on Google Maps rather than printing one off, and a similar use of Google Maps and checking maps before a journey was discussed in two different focus groups. This time, instead of carrying printouts, the participants told me that they chose to draw their own maps.

> [Kat, 22] *I tend to look up on the Internet where I am going and then drive. Sometimes I just draw a map. Most of the time I rely on my natural sense of direction.*

> [Helen, 25] *I do use a lot of Google Maps. … What I do is that before I go somewhere, if I do not know the place, I draw a little map of that place and just take it with me. …*

And sometimes, most of the time I forget it, but then because I've drawn it, then I remember it well. So I would probably memorise one or two streets, or which direction I need to go. But I do not really use smartphones.

On the other hand, some of the respondents had adapted another method to have mobile maps with them, which was basically taking a photo of the Google Maps or having a screen shot.

[Emily, 43] *In my place I use laptop to check something, and when I check for something I take a photo of the map. Because it is easy to save. I am a little bit stupid. I do not know how to download. I've already downloaded a map but I cannot open it. I use it when I get lost. Still I take a photo often from my laptop and Google Maps and take a picture of it. It is so stupid.*

[Irene, 54] *It works!*

No matter how one uses a map, either on the phone or as a printout, all of the participants in the study, without exception, stated that they used Google Maps. Those with smartphones use the Google Maps application, while those without either take a photo from a laptop, draw a little map or take a print of the map from Google Maps.

7.2.3. Locality and local knowledge of a place

Being able to locate oneself in a (foreign) place can contribute to the feeling of having local knowledge of a place. The basic applications used on mobile devices, especially in smartphones in this category, were Google Maps and BlackBerry Maps. When using the map features on their phones the participants stated that they felt *secure, empowered* and *local*, since they knew that they would never get lost as long as they had their smartphones with them. Wendy explained how she could not find one particular place, although she had been there many times, and how her friend, who had never been to that place, found it via her iPhone:

[Wendy, 23] *It is quite interesting that my friends and I are quite against iPhone. I can think of the time that I was meeting a friend at Primrose Hill and she had an iPhone*

and I could only remember the way there since I've been, and she found it on her iPhone straight away, and I just thought 'Gosh!' if I went there on my own, it would absolutely take me ages to remember how to get there. And she just found it by pressing a button and having no being there before and suddenly she knew exactly where she was going. I do think that people who have absolutely no idea where they're going, obviously it is incredibly useful. And it was for me at that particular time. Sometimes it is sort of nice to say 'oh I know where I am!'.

Hence, it can be understood that this use of locational information via mobile communication technologies creates a feeling of belonging and local know-how, as the anxiety of getting lost diminishes over time. In one of the focus groups during a discussion about finding your way with the help of smartphone applications, a common feeling among the participants emerged – that being local is associated with freedom to navigate, as well as to feel secure:

[Researcher] You said locality … does it make you more local?

[Sally, 21] *I think so. I used to work in Old Street and used to look at the map to find places where I could have lunch. And I think I know the area quite well already I've been working there for two weeks.*

[Jonathan, 23] *Yes, if you use technology properly, you can become a local before you even have been to a place … you get quite good at Google Maps. You go on street view and you look at exactly what it looks like. And you know sometimes streets look so weird, like the junctions, so you can go on the street view and look exactly where Google Maps is telling you to go. If you use it like that you become a local without even being there. Next time you go, you won't even have to use it. So you lose that dependency.*

[Sophie, 42] *I think it is quite the opposite to me [sic]. Even with the help of the technology, and I just feel secure, more secure, but I do not feel local. And I find my ability to feel bodily local, bodily being familiar with the area is lower. Even with similar places like we have the Cavendish Campus, I have been there many many times, but after five times of going there with the help of Google Map, next time I still have to check Google*

Maps. You know that place, from Great Portland Street, it is quite easy, but I still feel insecure if I do not check Google Maps [sic]. So I feel quite the opposite.

When navigating through the city using locational information on a smartphones, the city becomes familiar, and newcomers can feel as if they are local. That said, even locals cannot know every part of London. In addition to using Google Maps on their smartphones to find their way, some of the respondents from both studies discussed how often they use it, and also how they use it to search for nearby places. This was considered an advantage of such technologies for some, to some extent:

[Sally, 21] *Everywhere I go, the GPS is on … And everywhere except here, because I know the area quite well so I can walk [sic].*

[Sophie says that she always uses Google Maps to search for the shortest route]

[Sophie, 42] *I started to feel very addictive to that [sic].*

[Researcher] Dependency?

[Sophie, 42] *Yes, dependency. I am very addicted to find, always find the shortest way. Because I like cycling. It is very important for me to, it is not like point-to-point, what is the exact shortest way from A to B?*

[Sally, 21] *I use Google Maps almost everyday. Everywhere in London, not only to find where to go, but find like the nearest supermarket or the nearest gym, or whatever. And I also use things like a tube route to find out how to get there fastest by tube or when the next bus is coming. I use it quite often.*

It is sometimes more important to know one's whereabouts than to have something to tell you when to turn right and left. Since maps on smartphones provide the user with familiarity, they can contribute to place attachment and the establishment of a sense of place of somewhere new. According to Fullilove (1996),

'to be attached is to know and organize the details of the environment' (Fullilove cited in Scannell and Gifford, 2010, p.3). This form of use of locational information can thus create a form of attachment to a specific spatial environment. In one of the group discussions, Larry explained how he uses his check-ins to remember places that he had visited previously:

> [Larry, 35] *If I have to meet somebody, and if I have no idea or something, I just know that I look on the Google maps and the station, if I need to go to the station, and then I say what is the name of the place and when I am sure where it was, I would say checked-in on Foursquare.*

Although Foursquare is always about self-display and self-presentation, in the quote above Larry implies that his checking-in at a place and sharing locational information is not to present his self or to present a place, but rather to allow him to find that place the next time he visits. As such, it would be erroneous to say that users of mobile and locative media share their locational information with people just because they want to show-off or reveal an aspect of their identity. Although this is certainly true for some, the different aspects of sharing locational information should be analysed. In this case, the places where Larry checks-in are not necessarily *special* places, as the Spanish Bar was for Rodney. While it may be a very random place, by sharing the information and making it available for later retrieval, Larry is able to generate a kind of local knowledge of London.

Whether used as a tool for the transfer of knowledge or for the discovery of new places in the world, maps have always served our need and desire to be mobile. Maps have always been portable, and mobility is not only specific to maps that we carry on our mobile devices. However, with the introduction of GPS-enabled mobile technologies into our everyday lives we have started to become dependent on the routes or directions that map applications generate for us. It must be said that this dependency is not only a result of having the technology ready-at-hand, as the very nature of the fast metropolitan lifestyle also plays a role. One cannot communicate directly with fellow commuters or cannot guess who has local knowledge of any given city and who does not, and in this sense, landmarks still play a crucial role as a primary source in learning the spatial environment. That said, mobile communication devices, and especially smartphones, have started to affect

how one navigates, and hence learn new places in a city. As the study reveals, for some, mobile maps allow them, to some extent, to become familiar with new places, but they can also limit our spatial learning if used only as secondary sources of spatial information. Most importantly, as the first cartographic maps of the world reveal, they act not only as supplementary sources, but also as sources of a direct experience, enhancing one's awareness of the spatial environment socially. To conclude, the maps contained within our mobile devices remind us of our own exploratory and adventurous nature by allowing us to discover and explore things in a serendipitous manner.

CHAPTER 8: CONCLUSION

Over the course of this thesis I have analysed how mobile and locative media, especially locational information sharing on mobile devices, can affect the social and spatial interactions in big metropolises such as London (at least for some, to some extent), where physical mobility and mobile communication technologies constitute important elements of everyday life. Although mobility and mobile communication technologies have been criticised for contributing to the decreasing importance of place, causing inauthentic and unrooted experiences of everyday life (Augé, 1995; Meyrowitz, 1985; Relph, 1976), research into mobile media has shown that location-aware features of these technologies can also contribute to the creation of individual, social and spatial experiences of urban spaces (de Souza e Silva and Frith, 2012; Farman, 2012, 2013; Gordon and de Souza e Silva, 2011; Humphreys, 2007; Humphreys and Liao, 2011). This research has analysed the ways through which users of mobile media make use of their locations, or those of others, in order to do one or more of five things:

(1) Represent different aspects of their identities and senses of places,

(2) Associate and identify themselves with places,

(3) Reveal different and new aspects of place-making while experiencing the city that they live in,

(4) (Re)create their attachment to (old or new) places through the feelings of nostalgia and being local, and

(5) Tell their everyday life stories and share them with others, or sometimes for their own selves, creating retrospective and topographical narratives.

In contemporary everyday life, the use of mobile and locative media offers users many new and different ways of presenting both places and the self. Although how we tell stories about places and ourselves through our social and spatial interactions in urban spaces has been studied at length in the current mobile media literature (Farman, 2013; de Souza e Silva and Frith, 2012; Humphreys and Liao, 2011), those studies were based on the analysis of very specific location-based social networking applications or on locative mobile gaming. As one limitation of such

approaches, the usage of these technologies was evaluated based only on what the users *shared*, or in other terms, how they *presented* themselves (Goffman, 1990).

Analysing the most checked-in places on any mobile and locative platform could provide us with information about the people who share them and the places that they have visited, although it is not possible to fully understand the characteristics of the user and of the places visited based on specific applications. Accordingly, I included a visual and textual analysis of the participant's sketch maps to my analysis, which provided a broader picture of the users of mobile and locative media, and the ways in which they present themselves or places through sharing their locations.

With the advent of mobile and locative media, location has become more discernable and important as a feature of place. Using the locational features of their mobile devices, users create narratives of places and their everyday lives, and in this regard, a simple check-in on Foursquare or a geotagged photo sent as an MMS could easily become a narrative of both the places and the self. It should be noted that self-presentation and presentation of places may differ based on one's interpretation of those narratives. As argued by Bruner (1987), '[a] life is not "how it was" but how it is interpreted and reinterpreted, told and retold' (Bruner, cited in Cattell and Climo, 2002, p.16). As a result, there is always a tension between the expressions given and given off, as described by Goffman (1990), in the presentation of self in everyday life; and this tension applies also to the presentation of places through the sharing of locational information in the form of check-ins or geotagged photos and status updates. By showing only one aspect of the sense of any given place, one can present a place differently, creating one's own narrative of places (Crang, 1997). In presenting places, users of mobile and locative media can present various aspects of their selves, which is one of the reasons why, in the sketch mapping study, some of the participants presented East London as a "shit hole" or as a place "where hipsters live", or pictured south of the river as "boring". The narratives about places that we share on mobile and locative media become narratives of our own identities, such as where one is from, whether one is local or not, or whether one is a tourist or not. However, these presentations do not always result in the intended impression being achieved, meaning that self-presentation through place-specific information may be limiting in terms of the expressions given and given off.

As storytelling platforms, sketch maps about the sharing of locational information on mobile devices can help people to explain not only how they navigate in a city and acquire a general sense of the metropolis, but also how the representations of various places differ from or resemble their self-narration of places. We may expect sketch maps to 'provide insights into the relationship between people's environmental representation and their behaviour in the environment' (Kitchin and Blades, 2002, p.7); and thus they may serve as platforms upon which people may spend time creating their own representations of places, and telling their stories based on those representations.

Typically, the maps capture the crucial characteristics of a sense of place – where things happen, and with whom – mixed with inescapable emotions and associations, and blending the sense of a place with the aspects of time. The sketch maps, used as storytelling platforms, can therefore be infused with nostalgia as a way of preserving the past. Tuan (1977, p.188) explained the relationship between the pace of change in one's life and nostalgia as follows:

> In general, we may say that whenever a person (young or old) feels that the world is changing too rapidly, his characteristic response is to evoke an idealized and stable past. On the other hand, when a person feels that he himself is directing the change and in control of affairs of importance to him, then nostalgia has no place in his life: action rather than mementos of the past will support his sense of identity.

The notion of rapid change and the need to hang on to a moment are closely related to modern urban lifestyles and their struggles with mobility. Conceived in this way, among other senses of places, such as those that can be described as social or instrumental, the nostalgic sense of place has special importance for the individuals. When users of mobile and locative media check-in at a place or attach locational information to places, they are sharing their memories and understandings of those places, along with the physical coordinates of those places in the form of storytelling. Drawing maps of a city in which our everyday life takes place can unearth different associations that may somehow be forgotten or may go unnoticed, as they may be hidden within a pile of status updates, random check-ins or photos. It is not only the location of things and the people that matter,

but also the nostalgic elements that are hidden in each of those locations. We may sometimes bypass the importance of those memories and associations just by *remembering* to check-in or sharing memories about places with our social networks, but in the end, it is not only what we tell and share, but also how we remember them that is important. Emphasising a pleasant memory about/in a place with a little heart, or marking it in a different colour in order to differentiate it from other places (as some of the respondents have done) while drawing a map of a city can sometimes carry and express deeper meanings than just saying 'I had a wonderful time here!' or 'I hate this place!', or 'I love London'. Sketch maps, therefore, can suggest the ways in which places are turned into meaningful places and memories, which also have a very close relationship not only with how we perceive and (re)present places, but also how we form narratives.

Individual perceptions of space and the associations made with specific places define the way we experience the everyday world. Paul Ricoeur's (1984, 1985, 1988) three-volume study of how narratives are made meaningful, *Time and Narrative*, and the discussion of these ideas in relation to personal identity in *Oneself as Another* (1992), acquire new value when we consider the lives in the city that are mediated by today's communications technologies (Özkul and Gauntlett, 2014). As Gauntlett (2007, pp.166–172) argues, for Ricoeur, understandings are achieved through storytelling, a process which takes place across time, with self-understanding acquired via the same route. With the stories we tell, we share our ideas and our spatial and social interactions with others and with the world, selecting a number of particular elements, and arranging them to suggest a particular meaning (Özkul and Gauntlett, 2014).

In this thesis, in the light of conventional and contemporary discussions on space and place, I use the term "hybrid space" to define the mobile space in which the users of the mobile communication technologies interact, both with each other and with their physical surroundings. By virtual, it is argued that the presence of the users of these technologies as well as the non-users, depend on their perception of space and the location information shared with each other as a means of communication.

Location is an important element of what constitutes a place (Lukerman, 1964; Relph, 1976), and is an aspect of the sense of place, referring not only to the location of things and the people that matter to us, but also the meanings of the

relationships that are hidden under each location. That said, in daily language, the notion of place has been used to explain location (Cresswell, 2004), according to which, the term "location" can be said to have lost significance in daily practices. When location-aware technologies started to proliferate in communication and media practices, we started to rethink its importance; however, because location *cannot* simply be defined as longitude and latitude, it continues to be a complicated notion. In particular, when users of mobile and locative media "check-in" at *places*, they are not thinking about the physical coordinates of those places, but rather the individual, social, material and cultural values of those places. Although it is the locational information that is shared in their check-ins, other aspects of place, such as the social, still remain more important than the location itself, for many users. These aspects of places are created over time through social interactions, as space is a social construct (Lefebvre, 1991). In a mobile world, where the means of travel, both physically and virtually, undergo continuous development, maintaining existing social relationships becomes much more important. Locational information, and sharing that information with significant others, have always been important, and so it is not only location-based services and locative media that enhance our attachment to places, but also general location information usage through mobile communication technologies.

Today, just by checking-in at a train station, we can convey a message that we are returning home; by sharing a photo of a cup of coffee, we may be conveying the message, "wish you were here"; or by calling our loved ones 20 times a day (as expressed by one of the research participants), we may feel a lot more connected, despite being physically distant. Accordingly, location-awareness should not be thought of as specific only to a particular type of technology, but in relation to the social space and how we maintain our social relationships. Whether one owns a smartphone or not, it is apparent that in order to acquire a sense of place in London (especially a new place), users of mobile technologies have begun to rely on mobile communications and their location-aware features. Landmarks still play a crucial role as a primary source in learning the spatial environment, while mobile communication devices, especially smartphones, have started to affect how users navigate, and hence learn places in London. Most importantly, they act not only as supplementary sources, but have become the *source* of direct experiences over time, enhancing one's awareness to the spatial environment socially.

Mobile and locative media enhance our experiences of places and improve our understanding of our spatial environment. However, as this research reveals, they also limit the ways in which users can present both themselves and places. Furthermore, these technologies allow users to interact and share with each other, resulting in collaboration in the creation of urban spaces. In this sense, locative media serve as a platform where the stories of individuals and places are told, while at the same time revealing how the inhabitants of a city use its public spaces. Accordingly, mobile communication technologies in general, and locative media in particular, not only cause a feeling of detachment from places, as at the same time they afford and renew one's attachment to places.

To conclude, the city expands, revealing the hidden and unnoticed, allowing users of mobile communication technologies to explore and experience new aspects of their spatial and social interactions with the physical environment. Every experience is unique, and locational information adds to these experiences in a city. Locational information use (retrieval and display) increases the users' attachment to places by creating sense of new places, empowering the users and making them feel like they have local knowledge of these places. In addition, the use of locational information to communicate one's identity fosters place attachment. By sharing the locational information, one is able to establish a personal relationship with a place, and what that place might mean to others when they see that information. Nostalgia and remembering (usually) are positive feelings and emotions that a place triggers. Rather than the physical attributes of the place, they can also contribute to place attachment. Hence users of mobile and locative media can form attachments with places as a result of feeling local and empowered while navigating in the city, recalling memories of the places they have been and discovering new aspects of places that might well have gone unnoticed within the fast pace of metropolitan life, as well as by sharing their own associations and experiences of places in a city.

Retrieving and sharing locational information can reconfigure our understanding of places. Although location and distance seem to be losing significance in everyday life with the increase in mobility, the use of locational information on mobile devices helped the participants in the study to maintain those meanings and values that places carry for them. Contrary to the understanding that mobile communication technologies and mobile media cause the erosion and diminishing meanings of place, the use of locational information has the potential to

bring about a (re)attachment to places, allowing users to explore the hidden meanings of places and to assign different ones. In order to understand how our perception of space and our daily practices have changed with the use of mobile and locative media, as scholars of the discipline we should try to understand location and its use in mobile technologies, rather than focusing only on specific location-based services (or applications) and behaviours, such as checking-in. Given the many implicit ways of sharing our locations, such as sending photos, broader focus on the analysis of location-awareness may help us gain a better understanding of the changes that have occurred in the perception of space and the construction of meanings of places. For future research, the analysis of mobile and locative media use in everyday life could be extended to cover the disciplines of urban planning and environmental psychology, which would allow us to better understand how we inhabit and dwell in places. As a methodological remark, as researchers we expect people to be able to explain things that may be difficult to explain using words alone (Gauntlett, 2007). As such, in order to better understand spatial perception and personal experiences, creative, and especially visual methodologies (Özkul and Gauntlett, 2014) may be used together with, or as a supplement to, verbal elicitation.

APPENDIX A

SALVADOR & AMANDA

LEICESTER SQ - MOVIES

BRUNSWICK

RUSSEL SQ

VILLANDRY MAC & CHEESE CHLOE

Hampstead Heath
Green Park
Regent Park
St. James Park

BRICK LANE LEILA

PETE
BEDROOM BAR

PARTY!

RAHWAN PAB

BOROUGH MARKET

TATE MOD & BRIT

WORK

NAMTA

LSE

DRURY LANE

Amy, 30

Zone 4
Harrow Campus
Uni of Westminster
Wembly

Holmes
Baker Street

British Library

Kings Cross
St. Pancras

HP

Nobility

H&M
Topshop
Oxford Circus

Hamleys

China Town

Food

Museum

Olympics

Excel

National Cafe

London Bridge

Tower Bridge

Westminster

Big Ben

London Eye

Canada Water

Heathrow 1,2,3 & 4,5

N

Ashley, 25

Barabara, 18

Billy, 19

Charlie, 25

Charlotte, 20

Uxbridge

Rayners Lane

Harrow

Northwick Park

Kenton

Baker Street

Kentish Town

Kings Cross

Port Royal

Ealing Common

@Ealing Broadway

White City

Shepherds Bush

Regent Street

Oxford Circus

Carnaby

Chiswick

Natural History

David Bowhman

O2

Maps: Before i leave but not when i'm out.

Emily, 43

WEMBLEY

mobile phone
camera

NATIONAL GALLERY

mobile phone
camera

HAMMERSMITH

laptop
mobile phone
kindle
camera

ELLA'S BAKEHOUSE

camera
mobile phone

kindle
mobile phone
camera

camera
mobile phone

laptop

mobile phone
camera
kindle

SOUTHWARK

camera
mobile phone

Francesca, 21

TFL

STATIONS

UNI (+HALLS)

CRAPPY INTERNET

OLD MET LINE TRAIN FABRIC

HAMPSTEAD (NO SIGNAL)

WEST HAMPSTEAD

FINCHLEY ROAD

BAKER STREET

GIRLFRIENDS OLD HOUSE

BRENAS HOUSE

ST PAULS

ALDGATE

OLD STREET

TRENDY

DLR

WHITE TFU

THE LISTENING POST @ THE SCIENCE MUSEUM

SOUTH KEN

THE PROTESTS AT PARLIAMENT SQUARE — HORSES + A MAN IN A SANTA SUIT

GOOGLE MAPS FOR NOT GETTING LOST (AS MUCH)

OXO

MEGABUS

PHONE MEGABUS CODE

NEW CROSS

BRIXTON

Gian, 21

UNIVERSITY

METROPOLITAN LINE

market

Saturday afternoon favourite brunch places

home, library, pub, park, love

Library

Library

Library

Library

library

HOME ♥ FRIENDS

CAFES PUBS, RESTAURANTS, SHOPPING CINEMA

BRICK LANE - MALAYSIAN PANCAKES

FAVOURITE PART DEFINITELY SOUTHBANK MOVIES, MUSIC

CLUB

FAV PUB

FAVOURITE BRIDGE

TATE MODERN

FAVOURITE VIEW

AFRICAN FOOD

Gillian, 29

Helen, 25, A

F.T
25 Female
PhD student

Waterloo

MM
Tate Modern   Globe

MM
NT   BFI

Royal
Festival
Hall

London
Eye

Thames   M

Embankment

Front...

Charing Cross   Boots

M M
Strand

Covent
Garden

Drury Lane

Trafalgar
Sq.

M

M - physical
MM - both physical +

Helen, 25, B

Helena, 25

Henry, 23

Irene, 54

NOT TO SCALE BY KATHRYN Aged 21 ½

Key
= map data
= mobile internet (facebook-social networks etc)
= general mobile usage ie can't live without

Jacquie, 21

I'm Harrow Campus

* 3G! I'm with T and always walking on my iPhone

* iPhone took pictures

Hampstead Heath

snow

* all sorts of techy/cool stuff

My Home (Kilburn)

Regent's Park
* Camera

Canary Wharf

* Google Maps
Notting Hill ♡

* Euston Internship

British Library

Angel

City

Kensington Gardens

Parks

WEST END
Food Parties Night clubs
Concerts Drinks Theatre
Musicals Cabaret
Soho Shops Food

China Town!!!
Covent Garden
* Google Maps

Kilburn = friends

* Google Maps

* all sorts of techy/cool stuff
My House
LIVERPOOL STR

Tower Bridge

* South Kensington Ice cream

favourite walk

□ My friend's place

Millennium Bridge

SOUTHBANK (Happy times)
BFI Southbank

* iPhone photos & Camera

Borough Market

Lots of food! Yum!

GREENWICH
+ Park
* Camera

* Heathrow
I was supposed to be an airplane

Jane, 21

Victoria

Living there

Big Ben

Westminster

Fulham

Cafes & restaurant

Fulham Rd.

Park

before leaving

Dawes Rd Home

140:46

Buckingham

Hyde Park

James's

Pall Mall

Piccadily

Regent St.

Carnaby

FCO

Number 10

Trafalgar

Press Assoc.

Old Bailey

Covent Garden

Occupy London

St. Paul's

outside central london.

London Eye

Thames

Tate Modern

Jennifer, 31

203

Jonathan, 23

Josh, 24

M1

Hampstead Heath

↑M1

☆LUTON
Dortmund (Harriet)

☆STANSTED
Venice
Amsterdam
Hamburg

Harrow ← West Harrow,
Harrow-on-the-Hill,
Kenton, Harrow etc.)
Uxbridge etc.)
→ to St. Albans

West Hampstead

Willesden Green
(Kim/Rosie etc.)

Archway & Highgate (Harriet)

Kentish (Home/music/N.Erika)
Holloway (Bea)

Camden (nights out)

ROUNDHOUSE
CHALK FARM

ZOO

Regents Park

Angel (North One/Anna)

Notting Hill Rd
Portobello Rd
+ Chiswick (hilarious!)
Knightsbridge
+ Kensington
(Museums,
Robert Visitors
interview)

Hyde Park
(urban wonderland)

↑to Manchester

Euston St Pancras

Cavendish
(classy hospital)

Oxford Circus
Oxford Street

SOHO
We are here

Covent Garden
Melesca
ROADHOUSE with Rob!!

EAST!

Old Street (nights out)/Squat Party) → Party

Baker Street (Easybus)
We are here!

Embankment (Walkabout)

Liverpool Street → to Essex & Felixstowe

CANARY WHARF (John Cobb)/Bea/Parties

Victoria
(Coach Station)
Train
to Rochester
everywhere!

Southbank (Graduation)

205

Wimbledon (Oons)/(Grandad)
↓
to Wittering

Greenwich (Michael)

Clapham
(Aisha/Mark+Sam)

Brixton

Elephant & Castle
(Ministry of Sound)

☆HEATHROW
Australia!
U.S.!

☆GATWICK Gibraltar
U.S.

Black Heath
(Grayboes)

Kat, 22

Larry, 35

NAVIGATION

TRANSPORTATION

Kings Cross

Norfolk Arms

Angel

Flower Market

HORTON STREETS

Shoreditch

OLD STREET

Brick Lane

Bond St

Oxford Circus

Tottenham Court Rd

BUS INFO

Piccadilly

Spanish Bar

Covent Garden

Bar

FIRST SNOW in london

TATE

Southbank

TOWER BRIDGE

DESIGN MUSEUM

BOROUGH MARKET

London Bridge

LCC

Elephant & Castle

BUS INFO

Lee, 22

Lillian, 31

Mark, 22

Mary, 18

Michelle, 30

FLATS.

WOMXIS St.

ARSENAL.

LONDON MET. UNI.

HOLLOWAY RD.

GR. PORTLAND St.

WELLS ST. CAMPUS

RIDING HOUSE St.

REGENT ST. CAMPUS

BOOTS

Oxford circus.

MOBILITY

Kings Cross

MOBILITY

Baker St.

National History Museum.

PRIMARK

Church

MOBILITY

Finchley Rd.

HARROW ON THE HILL

CRICKET FOOTBALL

GROUNS

Wembley Park

London Eye.

Preston Rd.

Northwick Park.

HARROW TOWN CENTRE

MOBILITY

HARROW BUS STATION

MOBILITY

SAINSBURY

1

HARROW CAMPUS

2

3

4

5

6

HARROW HALLS OF RESIDENCE

KENTON RD.

Aquarium.

LEGOLAND

Morgan, 37

Norma, 58

Rachel, 21

215

Rodney, 25

Ryan, 39

217

Sally, 21

daughter's school

Harrow recreation ground

Tesco

St.Mary's
Harrow-on-the-Hill

Landmark of home

University of westminster Harrow campus

Hampstead
Hampstead suburban garden
Regent's park.

Sainsbury's

Hyde park.

river-side walk.

Heathrow airport.

Link between two homes.

Sophie, 42

219

Harrow.

Harrow _on_ _the_ _Hill_
I lived here 08/09

Preston Road
Northwich Park
Wembley Park
Baker Street.

Cantelowes Skatepark
Camden Road
I lived here 09/10
York Way
Camden High Street
King's Cross

Shoreditch High Street
BETHNAL GREEN ROAD
Bethnal Green
I lived here 10/11
Bethnal Green Road
BRICK LANE

Bank
Liverpool Street
Whitechapel

Wapping

Westminster
Tate Modern
THE SHARD.
Waterloo
Southwark
London Bridge
Rotherhithe
C.W
Elephant & Castle
Bermondsey
Walworth Road
North Greenwich.
Canada Water.
Surrey Quays.
Mudchute Skatepark.
Greenwich Foot Tunnel.
New Cross Gate. New Cross

Battersea Park
Battersea Power Station

Old Kent Road
New Cross Road
Queens Road.

Steve, 22

Susie, 22

Victoria, 26

WILLESDEN GREEN
(where I work)

to where
I come from

• the MUSEUM of
childhood – one
of my first memories
of London as a child

Noodle King
• (yummy!)

BETHNAL GREEN ROAD

Liverpool St. Station
– the gateway to my discovery
of London

Primrose Hill

• Regents Park
boating lake

Oxford St
No Mobility
zone.

ROYAL OPERA
House

the best
Bagel shop
ever!

Brick Lane

SPITALFIELDS

COVENT
GARDEN

Soho area
– where I spent
a lot of time partying
with friends in my
youth

THE CITY

£50

• the london eye
– where I spent
New Year.

BEAUTIFUL OPEN SPACE

ROYAL ALBERT HALL

• Canada Water Station

• Cannon St Station

New Cross Station

New Cross

Peckham

Camberwell

Goldsmiths
– where I graduated.

HOME ☺

Wendy, 23

APPENDIX B

Book chapters

Özkul, D. and Gauntlett, D., 2014. Locative media in the city: Drawing map
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