DOMESTICATING THE MOBILE PHONE IN KIBERA:
HOW NAIROBI'S URBAN POOR ARE INTEGRATING THE MOBILE PHONE INTO THEIR EVERYDAY LIVES

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Certificate of authorship

I certify that the work presented in this dissertation has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged in the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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Abstract

Although the mobile phone is a very recent technology, its role in everyday life and its social, cultural, political and economic implications have already received substantial scholarly attention. It has been found to alter the way people interact, present themselves, coordinate their daily activities and establish and maintain relationships. In turn, users have been shown to actively shape the meaning of the mobile phone in their lives.

However, as scholars have noted, these impacts are context-specific, with most studies exploring mobile phone behavior among affluent western populations. This study focuses on the urban poor living in the Kibera slum in Nairobi. Drawing on domestication theory's concepts of technological appropriation, incorporation, objectification and conversion, the study explores how and why Kibera residents are appropriating mobile phones and incorporating them into everyday lives that are characterised by extreme poverty, collective social relations and limited social agency.

The study adopted an interpretivist approach using three qualitative data collection methods: in-depth interviews, focus group discussions and photovoice. In photovoice, the study respondents used cameras provided by the researcher to take photos in response to jointly negotiated themes. Participants selected, discussed and interpreted their photographs within a group setting, their interpretations then serving as triggers for further group discussion.

Analysis of the interview, discussion group and photovoice data shows that Kibera residents are domesticating the mobile phone in a manner that reflects both their agency and their unique context. Three key findings

augment existing literature on mobile phone practices. First, participants are actively capitalising on the mobile phone's usefulness to sustain existing socio-cultural values, in particular to maintain and nurture close relationships within and outside Kibera. Second, participants are choosing how and when to use their mobile phones in light of the economic and insecurity implications of their context. Third, participants are jointly constructing and enforcing unwritten rules about appropriate mobile phone usage according to local understandings of public and private space. Finally, rather than using the mobile phone in social display practices, the particular pressures of Kibera are leading residents to develop a repertoire of concealment practices.

More broadly, the study gives credence to the value of user agency in shaping the nature, scope and functions of communication technologies. Such studies provide rich insights into participants' motivations for acquiring technology despite financial difficulties and the practices through which they negotiate the technology's value, uses and non-uses within their socio-cultural context. ❖

Chapter 1

Studying the mobile phone in Kibera: background and context

1.1 Impetus for this journey

'My mother', 'my father', 'first-born daughter', 'everything to me'. No, we were not talking about the most significant relationships in our lives. I was sitting among a group of Kibera residents in Nairobi. I had just asked them to describe in two or three words what the mobile phone means to them. I was in Kibera, the second largest slum in Africa, exploring how its residents are using mobile phones in their everyday lives. My research aimed to describe and theorise how users are shaping the meaning of the mobile phone within their unique socio-cultural landscape.

Since my earliest interactions with the people living in the slums of Nairobi back in the late 1990s, I have been interested in understanding the place of communication technologies in the lives of the urban poor. In 1997, I first took up a job as a social worker with a non-governmental project dealing with vulnerable children in Kibera. As part of my duties, I visited the homes of many of the children and met their parents. On the way to the children's homes, I crisscrossed almost every part of Kibera. It was my first experience in these neighbourhoods. Many of my assumptions about this community were challenged as I began to learn more about the residents through my conversations with them and from personal observations.

One observation that struck me immediately was the high presence of communication technologies in Kibera. Taking a casual walk along the small

alleys, I noticed television aerials poking out of almost every rooftop. Most aerials were not properly positioned. They were tied on long sticks in a bid to get good reception. Almost every home I visited was small. Most of the space was taken up by the bed or a small table, but squeezed into one corner of the room was a television set and/or a radio. I began wondering why people who are earning less than two dollars a day would be willing to invest in communication technologies. These technologies are perceived as relatively expensive luxuries, yet the Kibera residents who buy them can hardly meet their basic needs for food, shelter and clothing. What was it about communication technology, I wondered, that made them willing to invest the little they have to get it? What value and meaning did they attach to these communication technologies? How were these technologies shaping their socio-landscape?

I wanted to answer these questions from the perspective of the Kibera residents themselves. I reasoned that since technology acquisition is a deliberate decision made at a personal level, it was important to hear residents' personal stories about why they are appropriating these technologies and how they are using them in their everyday lives. This curiosity has influenced my line of inquiry since then. It influenced my Masters thesis, in which I focused on television in Kibera (Mwithia 2001). Along with others, in 2011 I initiated a World Council of Christian Communication sponsored project that aimed at training selected Kibera residents in media literacy. Now in 2013, I was in a house in Kibera exploring these questions with regard to mobile telephony.

1.2 Background to the study

As Castell points out, like television in the 1950s and the internet in the 1990s, the mobile phone has become a key technology in redefining the communication landscape in the recent past (2002). Although Castell made

that claim more than a decade ago, it remains true today as the uptake and spread of the mobile phone continues to increase at unexpected rate. With a global uptake of six billion, accounting for 96 per cent (and counting) of the world's estimated population of seven billion (ITU 2013), the mobile phone is currently hailed as the most ubiquitous and pervasive communication technology globally. Its diffusion has even outpaced earlier communication technologies such as the television, radio and landline telephone. Globally, it overtook the landline telephone in 2002 (Donner 2008). For example, between 2000 and 2012 there was a 75 per cent increase in mobile phone uptake in Kenya, while landline subscription declined from 291,000 to 251,000 (ITU 2013). Ling (2012) observes that the mobile phone is so ubiquitous that we are all expected to have one; we also expect others to have one. This is an assumption that was demonstrated by my study respondents.

The indiscriminative spread of the mobile phone cuts across the socio-economic spectrum (Collum 2010; Song 2011; Haddon 2011; Porter 2012). Its uptake among the poor has exceeded expectations. Unlike earlier communication technologies that were perceived to be the preserve of the rich, the mobile phone has been adopted at high rates among those of low income (Kalba 2008). In comparing the mobile phone to the internet, Ling and Horst posit that 'while the internet seems to have stolen all the headlines, the mobile phone has quietly provided people at the bottom of the income pyramid access to electronically mediated communication' (2011, p. 364). In comparing the mobile phone to the landline telephone in Rwanda, Donner (2006) observes that while the landline telephone was a preserve of the economically able, the mobile phone is the first telephone subscription for the majority of the poor. According to the United Nations, International Telecommunication Union (ITU, 2009), by 2009, there were approximately 4.1 billion mobile phone users worldwide and Cullum (2010) points out that

two-thirds of them were in third world countries. Singh (2011) as well notes that by the end of the first decade of the current millennium, Africa's mobile phone growth of over 50 per cent was said to be the fastest in the world. Significant leaps in adoption were observed primarily in the first decade of the turn of the millennium (ITU 2013). In March 2013, the UN released a report stating that in a world population of seven billion, six billion have access to a mobile phone, while only four and a half billion have access to functional toilets (ITU 2013). This underscores the well-documented pervasive status of the mobile phone today.

Mobile phones started rolling out in Kenya from the mid to late 1990s. However, it was not until the middle of the first decade of the 21st century that the mobile phone became affordable for the majority of Kenyans. This is largely attributed to the government's liberalisation of the mobile phone market. The initial players in the provision of mobile phone services in Kenya were Kencell and Safaricom. Liberalisation of the market later saw the entry of other players such as Orange and Yu. In a review of mobile phones in Kenya, Aker and Mbiti (2010) note that there was a spike in mobile phone acquisition in 2007 and 2009. They attributed this spike to a fall of prices after the value-added tax exemption of mobile devices and the entry of new operators in the market. Value-added tax exemption lowered the cost of new mobile phone devices. New entrants in the market resulted in stiff price competition that drove the prices even lower as providers tried to increase their market share. By 2013, mobile phone subscription in Kenya stood at 28,080,771 (ITU 2013). This roughly accounts for almost 75 per cent of the total population. In a study focusing on mobile phone ownership and usage in Kenya, Wesolowski et al (2011) found out that there was some level of mobile phone ownership in every income bracket. People with a monthly income as low as one thousand Kenyan shillings (AUD$8.50) had a mobile

phone. This finding was corroborated by a World Bank publication (2010) that found that 60 per cent of Kenyans living on less than US$2.50 per day owned a mobile phone. The report's authors speculate that the steady decline in the cost of the mobile phone has seen the device move from a luxury item to a daily necessity among these populations.

Although there are no available statistics on the uptake of mobile phones among the urban poor, it is safe to infer from the above discussions that those on lower incomes, including those who live in what are referred to as urban slums, have not been exempt from this high uptake. In the context of this study, an urban slum is defined as an informal, illegal and unplanned structures in an urban centre (UN-HABITANT 2003). Urban slums are home to the majority of the urban poor. Their proximity to the cities places slum residents at an advantage with regard to access and higher exposure to innovations than those of the same socio-economic status living in rural areas. Many have pointed that out that slum areas were previously hindered from gaining access to the landline telephone due to a lack of proper infrastructure. Now the mobile phone is sidestepping this need for infrastructure and is spreading rapidly in the slums (Wong 2008; Sambasivan et al 2009). My personal experience from visiting the slums of Nairobi today is that places like Kibera are awash with mobile phone advertisements. The streets are lined with mobile phone shops and scores of young men hawk mobile phone recharge cards. Shops offer recharge services for those without electricity in their homes. Every few metres one is likely to either hear a phone ring, music playing from a phone radio or someone talking on a mobile phone.

1.3 Approaches to mobile phone research

Approaches to studying the relationship between humans and communication technologies have ranged between those that emphasise the

impact of technology on society and those that emphasise the role of the user in influencing that impact (Ling 2004). Deterministic approaches emphasise the technology's autonomy over the user. This approach projects technology as a decisive agent of social change that can have an impact irrespective of the socio-cultural context of the user. For instance diffusion of innovation assumes that innovations are adopted as they are. It does not consider any possible modifications of the technology or in the way its affordances are applied to the user's lifestyle. Research in this tradition has tended to focus on the impact and implications of technology on society at large (Hynes & Richardson 2009 P. 484).

In contrast, non-deterministic approaches emphasise the importance of human agency in the adoption of technology and in its impact on the user. Social determinism, one of the theories within this approach, assumes that technologies are constantly being 're-interpreted by users and given a new, often unexpected, trajectory' (Ling 2004, p. 23). Closely related to social determinism is the theory of affordances (originally developed by Gibsen 1979 and outlined further by Norman 1990). Affordance theory assumes that there is a unique interplay between the physical characteristics of the technology and the way users perceive and use it (Ling 2004). Although these approaches are useful in highlighting the role of the technology user in shaping the technology, on the negative side, similar to deterministic approaches they ignore the role of socio-cultural process and their possible influence on consumption (Ling 2004; McQuail 2005; Ling & Donner 2009).

More recent arguments have emphasised the importance of the user's cultural context in shaping the meaning, perceptions and impact of technology. These social constructionist theorists argue that the meanings of technologies can best be understood within the broader socio-cultural context of the users (Ito 2005; Hynes & Rommes 2006; Mefalopulos 2008;

Soorymoorthy et. al 2009). To this end, some theorists have asserted that the mobile phone's influence is diverse, as users in differing contexts appropriate the technology in ways that meet their different needs (Goggin 2011; Katz & Aakhus 2002). These uses are not always as envisioned by the designer (e.g. Haddon 2003, 2005; Katz & Aakhus 2002). Scholars argue that the decentralised nature of the mobile phone's functions and uses affords the users higher control than previous communication technologies, allowing owners to use it in ways that meet their needs (Serveas 1996). In discussing *katai* (the Japanese word for the mobile phone), Ito (2005) highlights the socio-cultural and historical specificity of its perception and use. Ito asserts that technology is not free from its local contexts and cultural setting (p. 6). She sees the meanings and uses of the mobile phone to have been seamlessly integrated by users into their everyday settings. Tehunen's study of mobile phones focused on the relationship between interactive communication technologies, culture and social logistics in India (2008). He concluded that the process of mobile phone appropriation is affected by the socio-cultural context of the user. Hahns and Kibora (2008) used a participant observation approach to identify cultural or context-specific peculiarities in the way the people of Burkina Faso are fitting their mobile phones into their everyday life. Hahns and Kibora note that these culturally specific factors influence the acquisition process and other practices that accompany mobile phone use.

1.4 Context of the study: Kibera

Since its establishment during the colonial era in 1899, Nairobi (the capital city of Kenya) has grown from a small town of a few hundred mostly white settlers to a cosmopolitan city hosting approximately four million people. An estimated 60 per cent of this population lives in over 100 slums spread across the city. These slums occupy only 5 per cent of the Nairobi area, leading to high population densities (Amnesty International 2009; UN-HABITAT 2008).

In fact, Nairobi hosts one of the largest slums in the world: Kibera. Until 2009, the population of Kibera was estimated to be between 500,000 to one million (Amnesty International 2009), making it the second largest slum in Africa. However, the latest government census indicates that Kibera has a population of approximately 170,070. Although this figure has been disputed by different quarters, some still maintain that Kibera is one of the largest slums in the world. This large population occupies approximately 2.5 square kilometres situated about five kilometers from the city centre, thus creating a densely populated area very close to Nairobi's central business area (Amnesty International 2009).

According to UN-HABITANT (2008), residents of Kibera live in deplorable conditions and for the most part lack essential services. They do not have access to clean water, proper sanitation, solid waste management structures and proper or efficient health services. The conditions have often been described as inhumane and disturbing. As would be expected of highly congested, informal settlements, Kibera residents do not have proper road networks and there is thus poor connectivity between locations inside Kibera and other parts of the city. Aside from the main road leading to Kibera's outskirts, the only other paths are small alleys that crisscross the neighborhoods. For the most part these alleys are dotted with litter and raw sewerage. In some parts huddles form of unemployed men; these groups are often blamed for rising insecurity in the area. Despite living in conditions that increase the potential to contract diseases, Kibera residents do not have access to proper healthcare services. The few health services available are far apart and poorly equipped. Residents are obliged to travel out of Kibera for better medical attention but this comes with extra transport costs and a medical fee.

Although there is a legal supply of electricity in Kibera, not everyone has access to electricity at home. Again, this has been hampered by poor in-road

accessibility, making it difficult to network supply to the interior parts. A glance around the rooftops reveals electricity wires dangerously hanging out of improvised poles (in some cases a simple stick), often an indicator of illegal connections. During my two years of working in Kibera I noticed that many residents use paraffin lamps for lighting and batteries to keep their televisions or radios charged (Mwithia 2001).

The poor infrastructure in Kibera has been blamed for lack of other services such as telephone connectivity. Public pay phones are scarce. As my study participants pointed out, while the rest of the city and particularly the central business district is dotted with public pay phones, there are only a few along the main road leading to Kibera, and hardly any inside the slum itself. Of note as well is the fact that not only do residents need to walk some distance to access the pay phones, but they also have to join long and time-consuming queues to access the service. This further complicates the challenges faced by Kibera residents in trying to connect with one another and the rest of the world and particularly with family members living in rural areas.

Kibera residents work mostly as casual laborers. Many work as domestic staffs in the upmarket residential areas of the city. Others depend on daily casual contracts in the industrial area situated less than five kilometres from the city. They also find jobs in the numerous construction sites across the city. Many residents also run small businesses in the market or are working for such businesses. On average, Kibera residents earn less than 1000 Kenyan shillings (AUD$8.50) per week. As Mutisya and Masaru (2011) point out with regard to life in Nairobi slums, Kibera residents find themselves living in a vicious cycle of problems.

1.5 Studies of mobile telephony in Kenya

The high uptake of the mobile phone across the socio-economic spectrum raises questions about the various ways the mobile phone is being appropriated in these diverse contexts. A scan of existing literature reveals that the bulk of studies on mobile phones among the poor have taken a deterministic approach, focusing on uptake, impact and use. Questions about how people are fitting the phone into their everyday life and as a result shaping its meaning within their socio-cultural landscape remain largely unanswered.

The bulk of studies on mobile phone use in Kenya focus on the different implications it has had on various sectors. Studies cut across different fields of interest such as health (e.g. Chi & Stringer 2010; Gisore 2012; Githinji et al 2013), economic activities or commerce (e.g. Gant 2012; Gikenye 2011; Hamilton 2010; Nganga 2013) and cultural or social implications (e.g. Osborn 2008; Jones 2006; Ndungu 2011; Wesolowski 2012). The few studies that have focused on the social dimensions of the mobile phone have still taken a more deterministic approach. For example, Ndungu and Waema (2011) focused on development outcomes of the internet and mobile phones in Kenya, from a household perspective.

A closer look at mobile phone studies and Kibera reveals a lack of systematic research into the residents' roles in determining the use and meaning of the mobile phone within their context. What exists are projects of limited scope, and anecdotal information about the mobile phone in this context. The limited literature available focuses on the mobile phone's role in specific events or social processes. For example, Osborn (2008) focused on the role played by the mobile phone in fueling political unrest among Kibera residents during the 1997 post-election violence in Kenya. Graesholm (n.d) explored the role of the mobile phone in making the slums governable. He

particularly focused on Kibera residents and how the mobile phone is reducing barriers to participation in political debates. Hellström (2011) similarly, albeit briefly, points out the role played by mobile phones in participatory civil movements. Morawczynski and Mark (2009) using Kibera residents as part of their sample observed how the poor are using mobile financial services. Wisolowski and Eagle (2010) studied human dynamics in Kibera using mobile phones to track movements in and out of the slum. Though none of these studies or papers mentions the level of mobile phone uptake in Kibera, they help validate the presence of mobile phones in Kibera and thus provide justification for an investigation into how mobile phones are being embedded into residents' everyday lives and the meanings residents are assigning to it.

1.6 Aim of this study

This study investigates the processes by which the residents of Kibera are appropriating the mobile phone into their everyday life. The study endeavours to provide an account that captures Kibera residents' experiences with the mobile phone and that respects their autonomy and agency in shaping its meaning within their everyday life. To this end this study explores four main dimensions of mobile phones in Kibera:

- the process by which residents appropriate or acquire a mobile phone
- how residents use mobile phones and the gratifications (or functions) they derive from the phone
- practices accompanying mobile phone use, such as carrying and displaying phones
- the meanings Kibera residents are attaching to mobile phones.

1.7 Theoretical approach in this study

Domestication theory was selected as the ideal framework to help understand the mobile phone in the context of the study participants. Domestication theory provides a framework to understand interactive communication technology use in the context of the user (Silverstone et al 1992). Domestication theory's underlying assumption is that technology users have a role in shaping the nature, scope and functions of technology within their context (Haddon 2003). Unlike earlier approaches to the study of communication technologies, domestication theory allows for an exploration beyond simple uptake, gratification and benefits to include how the users actively further define the meaning of the technology within their socio-cultural context (Haddon 2003, 2006; Ling 2004; Hynes 2009; Hynes & Richardson 2009). Additionally, as a social constructionist approach, domestication assumes that an innovation is shaped in use. This is direct opposition to earlier lines of argument that see technology as fixed in meaning. For example diffusion of innovation theory assumes an almost uniform impact of technology on its user. Domestication theory helps the researcher trace what Kopytoff referred to as 'biographies' of the technologies in the life of the user (Kopytoff 1986 cited in Hynes 2009). In this way domestication theory casts technological acquisition and use as a continuous process and not a one-off event. Domestication theory has allowed this study trace the process by which Kibera residents integrate the mobile phone into their everyday life, focusing on the time before acquisition, the acquisition process itself and then how residents continuously appropriate the phone into their everyday routines and practices.

To complement domestication theory this study also draws on other theoretical frameworks that help further unpack and explain adoption and

consumption of innovations. Thus the study employs concepts and insights from the diffusion of innovation theory developed by Everet Rogers, the technological acceptance model developed by Fred Davis and uses and gratification theory proposed by Katz and Blumer.

1.8 Research design

The study adopted an interpretivist research design, employing a range of qualitative methods. In-depth interviews were conducted with five residents of Kibera. These were complemented by three focus group discussions. Finally, a method called 'photovoice' was used to enable participants to take and discuss photos of their everyday mobile phone practices. Two teams of five and four participated in the photovoice exercise. An interpretivist approach complements domestication theory because it recognises the importance of participants' contexts in interpretation of their lived experiences (Croucher & Cronn-Mills 2014). The interpretivist approach therefore allows the study participants to describe and interpret their experiences with the mobile phone.

1.9 Scope and limitations of the study

This study focuses on the mobile phone as an assemblage of multiple functions (offering multiple communication platforms as well as other functions) and investigates how the mobile phone is being incorporated into the everyday life of users in Kibera. Based on an interpretivist approach, the study endeavours to provide an in-depth understanding of the existence of the phenomenon at hand and not the spread of the practice. Although there are limitations in the extent to which these findings can be generalised among the Kibera residents, use of focus group discussion endeavours to capture the views of a society rather than just individual articulations. It allows the researcher room to draw cautious conclusions about the larger

society but does not claim that the findings are true for each individual Kibera resident.

1.10 Significance of the study

Lie and Knut (1996) assert that while the place of technological devices in society is obvious, their meanings are not. As I will explain later, the domestication approach assumes that the meanings of technologies are not necessarily embedded in the device; instead, they are embedded in the practices and uses people put them to within their context (Hynes & Rommes 2006). We can arrive at an understanding of the meanings people attach to the mobile phone by focusing on specific practices of mobile phone appropriation, highlighting uses, rules governing use and behaviour patterns associated with mobile phone use. Following this approach, this study observes that while Kibera respondents were motivated to acquire a mobile phone to simply make communication easier within their social network, with time the mobile phone gained a more central position in how they ran their everyday activities. In fact, the mobile phone has now become indispensable. As the opening quotations in this chapter indicate, residents need to have their phones with them almost constantly. Yet those who own a mobile phone limit the use they make of it and define the benefits they expect from it in ways that 'work' within their unique socio-cultural context. In response to the economic and security constraints of the Kibera context, in most cases mobile phone uses are instrumental and task-oriented. The significance of this study is therefore to illustrate how Kibera residents are carving out their own role and meaning for the mobile phone in their context.

The methodology adopted also gives significance to this study. A combination of the domestication framework and an interpretivist approach privileged the study participants to articulate their experiences with the

mobile phone. This allowed them to describe their practices and explain the reasons informing those practices. In this way the study provides an avenue through which their voices can be heard as part of mobile phone discourses, recognising their knowledge, skills, values and beliefs. The findings are key to understanding the contextual meaning of the mobile phone from residents' perspectives. As the opening quotations indicate, the mobile phone is like a family member: mother, father, and sister. Describing mobile phones in these terms indicates that for Kibera residents the mobile phone provides a constant connection to the relationships that matter most to them.

When, during the course of the research, I came to realise that most participants are using their second, fourth and even fifth mobile phone, I sought to explore the process of acquiring the second and subsequent mobile phone. I was particularly interested to know if methods of acquisition, development of criteria or consultation practices differed. Existing literature on the adoption of innovations focuses on what I would call first acquisitions and hardly ventures into the processes of replacing the first innovation with another of the same kind. Findings from my study indicate that selection criteria vary over time. Residents begin by wanting only a very basic mobile phone, primarily informed by the needs to communicate and be affordable. However, residents' desires progressed to wanting a phone with more affordances, such as internet and radio access and a torch. However, these desires were still subservient to affordability.

The findings of this study are also significant for other mobile phone related discourses. The responses of Kibera residents shed light on context-specific factors influencing appropriation and objectification among the poor. The study contributes to discussions about the role of one's social networks and the concept of trust in enabling the adoption of innovations. The study also adds to the growing discourse on mobile phone attachments and reasons

determining those attachments. This is particularly reflected in residents' accounts of how they carry their phones, why they need their phones at all times and where they place them when not in use. One striking finding is that, in response to the specifics of the Kibera context, residents' carrying practices differ markedly from those previously observed among other populations. Kibera residents opt to conceal rather than display ownership while in public.

1.11 Thesis structure

Having given a brief overview of the study in this chapter, in the next chapter I present the theoretical framework for the study. After reviewing domestication theory in more detail, I explain the importance of incorporating select tenets of diffusion of innovations theory, the technological acceptance model and uses and gratification theory to explore dimensions important to understanding the adoption process. The overarching research questions are articulated and sub-questions for each are identified.

Having contextualised the study, chapter three then reviews literature related to mobile phone uptake and spread, identifying factors influencing its ubiquitous status across the globe, particularly among the poor. Premised by the portability and personalisability of the mobile phone—core characteristics that set the mobile phone apart from other communication technologies—this chapter further explores the various influences the mobile phone has on diverse dimensions of everyday living.

Chapter four presents the research design of the study. It identifies the interpretivist approach as the ideal perspective from which to investigate the mobile phone in the everyday life of the user. It further articulates the specific methods of data collection: interviews, focus group discussions and photovoice. It justifies each method in relation to the research questions and

articulates the data analyses process. In this chapter, I also share my experience of entering Kibera for data collection and I introduce my study participants.

Chapter five explores the process by which the mobile phone entered the lives of the study participants. The chapter focuses on the time before acquisition and the actual process of acquisition. It further identifies and explains practices that characterise this process. It also investigates the acquisition of second and subsequent mobile phones. The chapter concludes that participants envisioned the mobile phone as having relative advantages over previous forms of communication such as snail mail, telegraph and landline telephones. Their expectations of the benefits of mobile telephony were anchored largely in the experiences they derived from sharing other people's mobile phones. Thus mobile phone sharing became a catalyst towards acquisition. The chapter further concludes that criteria governing use were initially simple but became sophisticated with the later acquisitions or with future acquisitions. Even then, for Kibera residents affordability is the overriding criterion. In researching their purchase, participants carefully considered whom to consult and whom not. Close, trusted relationships were preferred over salespeople. Participants cast doubt on the genuineness of any advice the salespeople are likely to give them.

Chapter six moves beyond the acquisition stage to investigate the mobile phone in the everyday life of the user. It identifies the different uses the study participants made of their mobile phones and the rules developed to govern use. Using the uses and gratification approach, the chapter further explores the different gratifications participants seek in using mobile phones. It also explores phone usage as a convergence of other applications that extend the users' range of choices. The chapter finds that Kibera residents are making deliberate choices about what functions of the mobile phone to use and how

to use them. The chapter concludes that the mobile phone is finding its relevance and value within the context of the immediate and personal concerns of the user. Overall, deliberate choices about usage among the study participants indicate their awareness of their own agency in determining the usefulness of the mobile phone within their context.

Chapter seven is premised on the mobile phone's unique characteristics of portability and wearability and explores the physical objectification of the mobile phone. It describes and analyses the way participants carry and where they place the phone when it is not in use. Special focus is given to behaviour that indicates attachment to the mobile phone. The study found out that the perceived security of the neighbourhood determines carrying practices. Thus, for the most part participants conceal rather than display the mobile phone while on the move. Placement is designed to ensure constant connectivity, so the mobile phone is for the most part placed within arm's reach. However, this is also a cost-saving mechanism, as hearing an incoming call saves one from incurring the cost of calling back. The chapter concludes by arguing that while placement practices reveal an attempt to maintain constant connectivity, the carrying practices display a willingness to compromise that connectivity for the safety of the mobile phone.

Chapter eight draws together the main findings of the study and identifies the meanings Kibera residents assign to the mobile phone. The chapter highlights similarities and differences with previous studies. It explains the study's relevance and implications for the wider discourses of domestication theory and mobile telephony. In concluding, the chapter argues that the unique practices Kibera residents are developing to guide mobile phone use within their context are introducing new nuances into what it means for the mobile phone to be a personal, wearable and mobile device. Participants are equating the mobile phone with real relationships as a way to

place value on it. The phone has become a constant and reliable conduit for these significant relationships with people who often live far away, either in the villages or at school. The findings are relevant to mobile phone related discourses and practices within both academic and practical arenas. ❖

Chapter 2

Theoretical framework and research questions

This chapter presents the context of the study by outlining the theoretical framework and articulating the research questions. In section 2.1 I identify domestication theory as the main theoretical framework guiding this study. I then introduce diffusion of innovation theory, the technological acceptance model and uses and gratification theory and explain their contributions to the study. In section 2.7 I present and explain the research questions.

2.1 Theoretical framework

2.2 Domestication of communication technologies.

Given its relevance to the topic of mobile phone use, domestication theory was selected as the ideal framework to inform and structure this study. Domestication theory has been described as a framework that considers the complexity of everyday life and technology's place within its dynamics, rituals, rules, routines and patterns (Berker et al 2006). A term traditionally used to refer to human taming of wild animals, 'domestication' is here used to refer to how new technologies are integrated into the daily routines of the users (Haddon 2001, Berker et al 2006; Hynes & Richardson 2009). Due to its context-specific nature, domestication is a process heavily laced with and shaped by the values of the society, as well as the type of life and identity the user aspires to (Haddon 2001, Ling 2004).

To understand this notion of domestication and its relevance to contemporary discussions about the consumption of communication technologies, it is important to trace domestication theory's origin, main arguments and applications over time. Discussions of the media's influence on society have oscillated between those that emphasise the power of the media and those that highlight the role of the user and the context of consumption in determining influence and consumption patterns. The latter, known as the uses and gratifications approach (to be discussed later), is credited with ushering in a paradigm shift, moving from a view that assumes that media effects and consumption are uniform across audiences to one that highlights the role of the audience in determining the use and impact of the media text.

However, as Morley notes, this uses and gratifications tradition emphasised individualistic practices but ignored the larger socio-cultural arena that the individual operates in and its influence on consumption (1989). In his encoding/decoding model Stuart Hall refutes the claim that interpretation is structured at an individual level, instead seeing it as taking place at a sociological level (cited in Morley 1989 p. 2). This perspective takes into consideration the fact that individuals act as members of a social group in a given context.

In the same vein Morley argues that consumption of communication technologies must consider the home as the unit of consumption (1989). He and Silverstone (1990) argue that the processes and dynamics that are a part of the context within which communication technologies are consumed influence the patterns of consumption and the construction of the meanings of those technologies within that context. They see the home as a moral economy within which the consumption of communication technology takes place. For Morley and Silverstone, consumption of these technologies take

place within the 'facilitating and constraining micro-social environments of family and household interactions' (p. 33). Focusing on television as a communication technology, they posit that television arrives into a context that is already complex, defined by routines, practices, histories, beliefs and values. In light of this, they reason that it is important to take into account the politics of the home along with the power relations among the family members, notions of gender and traditionally ascribed roles and their implications for the way the television is consumed. In their view, the activities of the user in relation to the technology are either constrained or articulated within this environment (Morley & Silverstone 1990; Silverstone 1991). This line of argument implies the influence of context in the consumption of communication technologies and in effect in shaping the meanings of those technologies.

It was against this backdrop that Silverstone, Morley and others later developed a framework for understanding the relationship between private households, the public world and the role of communication and information technologies in that relationship (Silverstone, Hirsch & Morley 1992). They use the term domestication to describe the process by which the technology is fitted into the everyday life of the household (Lally 2002 p 54). This term connotes the taming of something (wild) that comes from the outside into the context of the user, that is, the household (Ling 2004; Berker et al 2006). They argue that communication technology crosses over from the public space into the private space, moving from the market place where its design is formulated based on anticipated patterns of consumption. However, it is consumed in a different context, the home environment. Here the user adapts the technology, beginning a process of embedding it into the home or domestic context along with its attendant practices, routines and values. It is during this process that the technology is ascribed new meanings. In this

case, then the process of consumption is not just about consumption of meanings but also about the production of meaning by the consumer (Morley & Silverstone 1990 p. 49).

Morley and Silverstone use Kopytoff's notion of 'biographies of things' to argue that communication technologies 'have their own life as they are domesticated into the distinct cultures of families and households' (p. 17–18). In this regard, the life of the object or the communication technology can be traced from the time of invention to the time and manner of its use or non-use. It can be 'used as a tracer of its social and cultural context of its continuous creation and recreation' (p. 18). Morley and Silverstone identified four dimensions to the process of domestication: appropriation, objectification, incorporation and conversion. As Ling (2004) notes, these dimensions capture the movement from when the potential adopter first becomes aware of the innovation and develops perceptions of its potential usefulness, to when the adopter acquires it and finally through to how the user continuously embeds it into their lives. The discussion below captures the main tenets of domestication theory and at the same time incorporates other scholars' contributions towards an understanding of each dimension and the practices that are enacted in this process.

2.2.1 Stages of domestication

Appropriation is the point at which we become aware of the existence of the innovation. At this point we begin developing evaluative attitudes about the possible benefits it offers. Appropriation describes the process by which the technology is introduced into the life of the user (Silverstone 1991; Silverstone et al 1992; Morley & Silverstone 1990). At this stage, ownership takes place and the technology gains a position of significance in the life of the user. This stage focuses on the negotiations that characterise the decision-

making process prior, during and soon after acquisition (Haddon 2001; Ruggieoro 2000 in S.P Walsh et al 2009).

Nafus and Tracey (2002, p. 206) observe that 'technology evokes ideas about social consequences of change'. This leads the potential user to a series of activities in preparation for the anticipated change. They define and refine what is necessary and what is not and set boundaries on what to buy, when to buy and how much to spend. With the exception of a few, Stewart (2007) notes that these negotiations will include consultations with others. Potential consumers will seek information and all manner of assistance as they make these decisions. Those consulted range from relatives, neighbours, friends, and colleagues at work to the sales people at the shop. These local, informal consultants are usually perceived as experts by virtue of training or experience with the technology. Some are consulted not because they have the technical know-how but because they are a 'significant other' in the life of the potential buyer. For instance, teenagers consult their parents. Spouses consult each other on various aspects of the acquisition process.

However, Lehtonen (2003) notes that although the sales people are often consulted due to their perceived expertise in the technology, this is done with caution as the potential user is aware that the salesperson's loyalty lies more with the product and the business than with their needs as potential future users. The final decisions about acquisitions are a by-product of these negotiations and of the users' perceptions of the anticipated benefits of the technology (Haddon 2001). Highlighting the role of informal networks in negotiating purchasing and acquiring the technology casts acquisition not as an entirely individual behaviour as reflected as a process influenced by one's social networks.

Objectification refers to the process of creating a 'place' for the technology. This is expressed in usage and in the physical and temporal

disposition of the technology (Haddon 2001; 2005). However, as Hynes (2009) notes, the spatial aspect is more central in this dimension. Silverstone et al (1992) posit that this stage reveals aspects of class and status through the way the object is used to construct the environment in a bid to enhance the object's aesthetic or symbolic value. This aspect is important to the extent that the items are bought not only for their functional use but also for this aesthetic value and the potential this has in constructing one's representation of self. Objectification also includes choices of display that are commonly accompanied by adornment and other practices that reflect the purchaser's tastes, values and social class. More often than not these displays of the technology are informed by the message such displays will communicate to others (Haddon 2006).

Incorporation is the process by which technology is integrated into the daily routines of the user. According to Haddon (2005), while objectification focuses on the object and its displays, incorporation focuses on its uses and functions. Incorporation recognises the fact that the user is at liberty either to use the technology as envisioned by the designer or to recreate his or her own uses (Silverstone et al 1992). It is assumed that once the technology is brought into the life of the user, the producer's design and anticipation of its use are altered as users incorporate the technology into their everyday lives (Lally 2002). This dimension reflects interplay between three things: the technical dimensions of the device, the socio-cultural context of the user and his or her personal preferences and tastes (Haddon 2001; Ling 2004). This is further played out as the user defines appropriate uses of the technology by developing rules guiding how to use it, when to use it and how much time to spend on it. Rules governing use are developed as a result of a myriad of socio-cultural processes that include but are not limited to the user's time,

space, other communication technologies, social activities and relationships (Stewart 2007).

Just like appropriation, incorporation focuses principally on consumption patterns that are viewed as dynamic, not static (Haddon 2001). The dynamism is occasioned either by the technological changes of the device or by changes in the social structures of the user. Structural changes can take place as the user navigates around common social rules and dilemmas and attempts to define acceptable practices for the new technologies (Humphreys 2005). Ling (2004) posits that the newer technologies are more predisposed to frequent changes and consequently more susceptible to reinterpretation than older technologies. Thus, rules governing appropriate times, places and reasons to use new technologies are more easily renegotiated than those governing older technologies, especially at the beginning of the new technologies' uptake. Once again the user's informal social networks play a critical role in guiding the continued appropriation (i.e. use) of the technology (Stewart 2007).

The fourth stage, conversion, focuses on how technology is used as a social currency to display values and cultural preferences and to position the user in desired or social circles. This is achieved by the user exploiting various ways of signaling to others that they are consumers of the technology (Haddon 2001, 2006). The technology is used as a symbol of prestige, representing social status and group affiliation (Silverstone et al 1992). This stage relates closely to objectification as it also assumes that deliberate choices of brand, color and style reflect one's identity and are symbolic of one's social status.

Though the four stages are typically presented in the order discussed above, consequently reflecting a progression from one stage to the next, the process is a fluid one, with no clearly defined boundaries between the stages.

As Haynes (2009) notes, domestication is a non-linear process with renegotiations occurring over and over again. For example, as alluded to earlier, appropriation occurs throughout the consumption process as the user makes choices among the different services the technology offers. However, focusing on each of the dimensions demonstrates that the domestication framework is a micro-level approach (Ling 2004) that makes it possible to unpack the practices and decision points technology users engage in as they attempt to integrate the technology into their everyday life (Haynes 2009).

2.2.2 Domestication in the era of mobile and personal communication technologies

The introduction of communication technologies that are personal and mobile in nature has led to a reconceptualisation of the term domestication to apply beyond the physical confines of a home. Morley revisits it in an article entitled *What does the 'house' have to do with it? Contradictory dynamics of technology and dislocation of domesticity* (2005). In this text, he considers the techno-social landscape in the wake of new communication technologies and updates the domestication perspective. He notes that new technologies that are mobile and personal in nature such as the mobile phones are transforming the relationship between private and public (p. 34). As a result, today's media are no longer consumed only in the home. Instead, we are constantly being exposed to media in our everyday lives. Morley draws on Tomlinson's (2001) idea of the dislocation of home' (cited on page 34) to explain that with mobile technologies, users are able to roam with 'their networks', in a sense creating their own cocoons or some kind of mobile community. Thus, mobile technologies allow users to take their 'home' wherever they go (p 34).

Similarly, Bakardjieva focuses on what she refers to as 'domestication running wild'. She questions the relevance of the household as the site of moral economy where technology is consumed in the face of new

communication technologies (2005). Bakardjieva's analysis focuses on computers and the internet, arguing that these technologies are blurring the walls between the public and the private (previously understood as the distinction between outside or within the confines of one's household). She argues that this happens as these technologies flow between both spheres and users' interpersonal networks, to the extent that it is difficult to situate users' consumption in just one locale (the home). Bakardjieva's analysis highlights the value of user agency in the face of these particularly personal and mobile technologies. She concludes that 'home' is a phenomenological experience that 'is not a real-estate unit but a feeling of safely, trust, freedom' and control over one's affairs She sees it as the terrain that users have agency over and within which users can change their conditions of existence (p. 68). She further states:

> Home is the container of interpersonal relationships that are supportive of my identity project, nurturing of my personal development and, overall, encouraging to my growth of human capacities. Home is where I, as an agent, maintain my integrity and devise my strategies for action in places less hospitable or in the face of oppressive forces. (p. 68)

This notion changes the perspective of home as a specific place to home as a dynamic relationship between the public and private, with people's activities cutting across the boundaries as well. Bakardjieva concludes that we no longer have to conceptualise an opposition between the public or the market place where these technologies are produced versus their consumption within the household as the site for the moral economy. Instead, the new technologies allow the user to have a 'sense of agency and control in shaping the conditions and choosing the priority of one's actions' (2005, p. 69). These actions transcend the boundaries that were previously seen to divide the two realms.

This perspective can also be understood in light of Haddon's (2003) assertions. He too revisited the concept of domestication in relation to mobile phones, recognising that consumption of such technologies is likely to take place within one's social networks that include relationships beyond the home or one's family members. He notes that these networks carry with them their own politics, histories and norms that can have a bearing on how the mobile phone is consumed among network members.

2.2.3 Bias in domestication studies

Although domestication theory offers powerful concepts we can use to analyse the appropriation and consumption of new technologies, domestication studies reveal several significant biases. First, Haddon (2003, 2006) notes the focus on the household as the site of technology use. He points out that by virtue of the term domestication, early studies using this theory focused on technology within the household, particularly the television (e.g. Morley & Silverstone 1990; Silverstone 1990; Silverstone et al 1992). This was because by the end of the 1980s, the television was found in every household in the West. The home was seen as the moral economy where decisions of media consumption and thus the use of communication technology took place (Silverstone 1991).

Although other communication technologies consumed within the home have now been included in domestication studies, Haddon (2006) notes that this focus on households continued for some time. Later studies looked at the use of digital discs such as DVD and VOD (video on demand). These studies investigated among other things, the impact new technologies were having on the already existing ones, in this case on the television. For example, Ling, Siri and Stephen's (1999) study of VOD noted how the introduction of television-based technologies altered the role of the television. This happened as users attempted to accommodate the new technology.

Drawing on the concept of convergence, Kilker (2003) pointed out that the multiplicity of options leads to a degree of meta-control in the way people manage the place of the technology in their lives. This is because the multiple options available allow for more configurations for the user. Later there were also attempts to apply domestication theory to the consumption of computers at the workplace (e.g. Noble & Lupton 1998; Anderson & Tracey 2001; Cummings & Kraut 2002; Livingstone 2005; Hynes 2009) and in the home environment (e.g Lally 2002). These studies explore among other things, how the internet and/or the computer influenced the home and/or work environments and at the same time blurred the boundaries between work and private life.

As noted above, the arrival of the mobile phone ushered in the need for an approach that allowed an understanding of domestication not as a taming of the 'wild' in physically confined contexts such as at home or work, but as a process that took place across the daily lives of the users, implicating the larger socio-cultural context of the user. This revised interpretation assumes a seamless integration between the user's home, work and social life (Haddon 2001, 2003). Since then several studies have used the domestication framework to study the mobile phone among various populations. For example, Haddon (2013) focuses on mobile media and children. He highlights the importance of recognising the collective peer group as a factor in the domestication of technologies at this social level. This would involve examining the practices that peer groups apply to decide what constitutes an acceptable and fashionable device. Haddon further observed how individual members of the peer group position themselves in relation to the ascribed norms that govern the group (2013).

Continuing this broader application of domestication theory, Ling (2004) uses the domestication framework to describe what he sees as the ongoing

interaction between the mobile phone and its accommodation in society. He uses it to explore its varying dimensions from adoption to its place and uses in the different arenas of life. His analysis considers safety and security, coordination in everyday life, dichotomies of public and private, and mobile phone usage among specific groups such as teenagers.

Similarly, Hijazi-Omari and Ribak (2008) used the domestication framework to study the use of mobile phones among teenage Palestinian girls in Israel. Hijaz-Omari and Ribak used the four dimensions of domestication reviewed earlier (appropriation, objectification, incorporation and conversion) to explore how Palestinian girls acquired a mobile phone and how they were continuously embedding it into their everyday life. Lee, Smith-Jackson and Kown used the domestication framework to investigate older users' experiences with the mobile phone. They assert that the domestication framework was useful in describing and analysing the processes of accepting, rejecting and using the technology (2009 p. 2). They argued that their study of domestication was ideal in helping producers and designers to develop products that enhance the user's experience. Other studies have also focused on how the already existing socio-cultural structures are influencing its use. For example, studies have focused on the influence of age or gender in mobile phone usage (e.g. Kisesniemi & Pirjo 2002; Puro 2002; Hijazi-Omari & Ribak 2008; Courtois et al 2012; Porter et al 2012; Goggin 2013; Wamalwa 2013).

However, research on domestication of the mobile phone has concentrated on the West. As explained in chapter one, non-determinist studies focusing on the mobile phone among the urban poor have mostly been undertaken in South Asia. For example, one of the most highly referenced studies is that of Wong (2008). Wong uses aspects of social constructionism to explore the importance of the user's social context in the

technology adoption process among the urban poor in Bangladesh. Closely related to this is Rangaswamy and Cutrell's (2012) study. They explored the integration of the mobile phone as an entertainment tool in the lives of young people living in the Hafeepet slum in India. Several studies of mobile telephony in Africa using select dimensions of domestication have concentrated either on rural populations or on the cities in general (e.g. Hahn & Kibora 2008; Pfaff 2010; Kenow 2012), but not specifically on the urban poor, which is the area of interest in this study.

2.2.4 Application of domestication theory in the current study

This study takes the theoretical position of the later domestication studies, applying the concepts of domestication beyond the home context. My research focuses on the mobile phone as a technology whose application transcends the boundaries between the private and public and is personal in nature. The study investigates the user's agency in shaping the technology's meanings as they try to embed it into their everyday lives. As Ling (2004) notes, the theory's four dimensions of appropriation, objectification, incorporation and conversion capture the movement or trajectory of the domestication process. They cover the time when the potential adopter first becomes aware of the innovation and develops perceptions of its potential usefulness in their lives; then the time when they acquire it; and finally the manner in which the technology is continuously embedded in their lives.

Because of this ability to capture the entire trajectory, domestication theory provided an ideal framework for understanding the mobile phone in the life of Kibera residents. This allowed my line of inquiry to capture the movement of the mobile phone from the time the study participants acquired one through to how each individual continuously embedded and adapted it into their everyday lives. This in turn allowed me to explore how participants are attaching meaning to the technology. Domestication theory's underlying

assumption that technology users have a role in shaping the nature, scope and functions of the technology allowed for a research approach that privileged respondents to describe and explain their actions and aspirations and the catalysts that influenced their acquisition and use of the mobile phone.

2.3 Uses and gratification theory

As a social constructionist approach like the domestication theory, uses and gratification theory recognises the role the user plays in shaping the meaning and uses of communication technologies (Blumler & Katz 1974). This theory focuses mainly on the gratifications users derive from the consumption of media. It contends that communication behavior is goal-directed and purposeful as people choose what to consume based on their needs, wants and expectations (Chen 2010 p. 757). Thus uses and gratification theory casts media audiences as active. This is in direct opposition to earlier media effects theorists who assumed that media audiences were passive. Instead, uses and gratification theory argues that media audiences assume an active role in interpreting and integrating media content into their everyday lives, facilitating, limiting or influencing the effects it has on them.

One of the most cited scholars in the uses and gratification tradition, McQuail (1974), summarises these uses into four main categories: surveillance, personal identity, personal relationships and diversion.

Surveillance refers to our need to monitor our surroundings. McQuail argues that people seek information that enlightens them about their immediate environment. Personal identity captures the claim that people tend to choose messages that agree with or reinforce their already existing beliefs or assumptions about the world and how they perceive themselves. People make choices that set them apart from others by reflecting their preferences for information or pleasure. Personal relationships refers to the

ways in which information from media texts aids in developing and shaping one's understanding of relationships and, by extension, ways of relating to those around us. Diversion refers to the role communication can play as a means of escapism, relaxation, thrill seeking and fantasy. Communication can be used to mentally 'remove' people from their real environments.

Developed in the era before the introduction of more recent communication technologies such as the mobile phone, research within the uses and gratification framework focused predominantly on the then existing mass media such as radio, television and newspapers (e.g Katz, Gurevitch and Haas 1973). Scholars observe that in the wake of the new communication technologies that are personal and interactive in nature, there has been a resurgence of interest in the uses and gratification framework, with emerging literature focusing on the uses and gratification of these new platforms of communication.

For example, Chen (2010) argues that the nullification of the sender–receiver model of communication by the new interactive communication platforms that allow people to send and receive information simultaneously makes uses and gratification theory even more applicable. Petric, Andraz and Vasja (2011) see the theory as ideal for studying the complex communication terrain provided by the current generation of mobile phones ('smart' phones) that are essentially an amalgamation of both the old and the new technologies. Uses and gratification theory has been applied to various platforms of the new communication terrain. Some have explored the uses and gratification of web-based functions (e.g. Luo, Chea & Chen 2011). Others have applied it to twitter (e.g. Chen 2011) and facebook (e.g. Quan-Haase & Young 2010; Smoke, Ellison, Lampe & Wohn 2011). Urista, Dong and Day used it to study facebook and Myspace among young adults (2009). There are also studies applying uses and gratification theory to the mobile

phone (e.g. Walsh, White & Young 2010; Wei 2008). For the purposes of this study, I will briefly review seminal work that has focused on the gratifications sought in using the landline telephone as a predecessor to the mobile phone. I will then highlight several studies that focus on the gratification sought in using the mobile phone.

2.3.1 Gratification sought from the landline telephone

Keller's (1977) study 'The Telephone in New and Old Communities' is regarded as one of the seminal works on this topic. Keller described the telephone as an indispensable tool for the contemporary society of the day. She hailed it as a means to close the geographical distances between people and argued that it did this at a higher speed than previously experienced by earlier communication earlier technologies, such as telegrams. Consequently, the telephone redefined the meanings of 'nearness' and 'distance' by enabling users to enjoy greater connectivity with friends, family or services that were geographically distant. She identified two main gratifications sought from use of the domestic telephone: instrumental gratifications and sociability. Instrumental gratifications were derived from being able to schedule appointments, order products or services and search for information. The telephone came in handy during emergencies as well as owners could now call for assistance. This gave owners a sense of reassurance in the event of such circumstances. Social gratifications were derived from practices such as chatting, spreading news around the suburban grapevine or keeping in touch with family.

Dimmick, Sikad and Patterson's (1994) study similarly focused on the gratification of the household telephone, this time among residents of Columbus, Ohio. They identified three gratifications derived from the use of the telephone. Like Keller (1977), they identified sociability and instrumentality. However, they added a third gratification: reassurance.

Dimmick, Sikad and Patterson argued that sociability encapsulated the social integration gratification. This accounts for the relational or associational dimensions of telephone use. Similar to Keller's descriptions, here the phone is used to feel close to family and friends, as well as for pleasure and feeling that others care. It is also used to seek companionship. This finding was reiterated in a later study by Dimmick, Susan and Laura (2000 p. 240). They noted that the telephone was highly effective in personal relationships, such as expressing emotions and affection, exchanging information, providing companionship etc. As people connect with one another, they are consciously removed from their present 'aloneness' to having company through the telephone. Dimmick, Sikad and Patterson similarly classified task-oriented uses as instrumental. The telephone was seen as 'instrumental in the practical activities of daily living' (p. 658). They also referred to this as 'social coordination' (659). It entails bringing people together in time and space. For instance, bringing a buyer and seller together, scheduling or planning activities, planning commuting times or routes etc. By reassurance, Dimmick, Sikad and Patterson argued that the telephone is used to reassure users of the well-being of one's close relationships who may be at a distance. The telephone gave owners a sense of confidence in their ability to get assistance in the event of an emergency. Embedded in this are notions of surveillance of one's environment through the monitoring and addressing of either real or imagined (psychological) threats.

A year after the publication of the above study, O'Keefe and Sulanowski (1995) also used the uses and gratification framework to study telephone use. This study also identified four dimensions of phone use. Although expressed differently, these dimensions are consistent with the themes already recognised in studies of gratifications of telephone use. One gratification O'Keefe and Sulanowski identified was time management. This related to

practices such as facilitation of appointments. Akin to the instrumentalisation identified by Dimmick, Sikad and Patterson (1994), O'Keefe and Sulanowski identified acquisition. In their formulation, acquisition involved locating useful sources of information in order to manage a situation. Closely related to McQuail's concept of diversion, they also identified entertainment elements such as having fun, passing time and relaxing through phone use. This is corroborated by a later study focusing on the mobile phone by Leuing and Wei (2000), who identified pleasure as one of the gratifications derived from mobile phone use.

2.3.2 Gratifications sought from the mobile phone

Moving from the landline to the mobile phone, uses and gratification scholars have identified various uses and gratifications for the new technology. In a study, focusing on mobile technology, culture and social logistics, Tenhunen (2008) observed that the mobile phone was used to strengthen sociality and intensify kinship systems, practices that give one a sense of reassurance. This was partly evidenced by the fact that 81 per cent of his study respondents made calls to close relations. Respondents emphasised the usefulness of the phone as a means to contact relatives to inform them of upcoming rituals such as burials and weddings (p. 523). Tenhunen argues that users are able not only to execute the responsibilities that come with the relationship but also to simultaneously maintain and strengthen those relationships. These notions are also captured by Yeow, Yee and Regina (2008), who posit that the increased ability to coordinate with family is one of the significant factors determining overall mobile phone satisfaction. For example, working mothers found the mobile phone useful in organising family activities, maintaining relationships and performing various caregiving roles. These expressions capture not only instrumental but also reassurance gratifications.

Inherent in the uses and gratification framework is the notion that media users are constantly aware of both their social and psychological needs. This in turn informs their deliberate choices with regard to media use. Akin to surveillance (McQuail 1974), psychological needs include one's sense of security. Some have argued that since its inception the telephone has been seen as lifeline during emergencies (Wallis 2006). As noted by Ling (2004), the notion of the mobile phone as a lifeline is one of the central images of the device. Various theorists have argued that communication during emergency periods has been a contributing factor in the increased uptake of mobile phones. This perceived use of the mobile phone is aligned with the claims of earlier theorists such as Katz (1997), who argued that uncertainty reduction and personal security are among the most important effects perceived by users of wireless communication. Walsh et al (2009) explored psychological factors related to mobile phone use among a population study sample of 32 young Australians. The study found that the mobile phone provides users with the reassurance of safely. The mobile phone came in handy particularly during times of emergency and was used to maintain surveillance during such incidents or whenever faced with a potential threat. Wei (2008) explored the uses and gratifications of the mobile phone as a hybrid of other functions and concluded that motivations to use the mobile phone influenced owners' usage of applications beyond voice. This highlights the critical role of motives in determining owners' use of communication technologies such as the mobile phone that offer a convergence of multiple functions.

2.3.3 Application of uses and gratification theory to the current study

As discussed earlier, in the domestication framework the concept of incorporation considers the way the technologies are used. Incorporation of the uses and gratification framework alongside domestication theory permits a detailed analysis of the practices related to mobile phone use and the

motivations leading to those practices or forms of use. Conclusions from the research cited above on the uses and gratification of the landline telephone and the mobile phone will be used to enhance the analysis of the data in this study, in particular in analysing the reasons Kibera participants use the mobile phone in the ways they do.

2.4 Diffusion of innovations theory

Diffusion of innovations theory focuses primarily on how adoption takes place and the factors that influence it. Although research in this tradition is rooted in earlier literature on diffusion (e.g. Tarde 1903), it was not until 1962 that Everett Rogers popularised it. In his book *Diffusion of Innovations* (first published in 1962; latest edition 2005) Rogers focuses not only on the process by which the technology becomes diffused throughout the social system, but also on how individual adopters make decisions to or not to adopt. He argues that potential users' beliefs about the innovation—whether an idea, device, practice or technique that is new to an individual or institution—coupled with users' immediate socioeconomic factors and level of exposure influence their decision to adopt or not. Rogers (1995) outlines factors central to understanding the process of innovation and in so doing highlights adoption as a process, the role of the innovation in influencing adoption and degrees of innovativeness

2.4.1 Five-stage process

Rogers describes adoption as a five-stage process, with knowledge the first stage. Here the potential adopters become aware of the existence of the innovation. However, they lack adequate knowledge about it. This stage is followed by the persuasion stage, where interest about the innovation is aroused. Here they engage in deliberate attempts to build knowledge about the innovation. Akin to consultation in domestication theory, in this stage potential adopters search for information related to the innovation. This

information ranges from the cost of the innovation to the potential benefits it offers. Knowledge acquired during this stage is critical in developing potential adopters' own beliefs about and attitudes towards the innovation and in influencing the extent to which they are persuaded of the value and novelty of the innovation in their own lives. The degree of persuasiveness will lead them either to adopt or to decline to adopt, in turn resulting in implementation or not.

At the third stage of decision, the potential adopter evaluates the innovation and weighs the pros and cons of adoption or non-adoption. At the implementation stage, stage four, initially referred to as the trial stage, the individual gets the 'feel' of using the new idea. They are able to test the value of the idea without fully committing to it. This is accomplished within an environment of limited risk. The fifth and final stage involves either adoption or rejection of the new idea. This stage is where the adopter takes a final stand, either continuing on to fully commit to the idea or withdrawing from it after a limited trial. However, it is important to note that withdrawal can happen at any stage in this process and does not always occur as the fifth stage.

2.4.2 Perceived innovation characteristics

As Dearing (2009) points out, the perceived characteristics of the innovation come to bear on the adoption process, particularly in persuading the potential adopter. The individual's subjective perceptions about the innovation are a construct of the perceived attributes they harbour about the innovation (Vishwanath & Gerald 2003). These attributes inevitably influence the degree to which the individual is persuaded to adopt or not to adopt. Vishwanath and Gerald argues that these attributes are: relative advantage, compatibility, complexity, triability and observability.

Relative advantage addresses the extent to which the value of the innovation supersedes that of the already existing alternatives. The innovation's level of efficiency and effectiveness must be higher than the already known methods of meeting the same needs. Compatibility evaluates the extent to which the innovation is consistent with already established ways of doing things, values, experiences and needs, meaning that the innovation should fit within the context of the potential adopter. Complexity addresses the ease with which the innovation can be understood and operated. The user must see it as something they can master with the least amount of effort. Triability captures the degree to which one is able to sample the innovation in small, non-risky amounts before total commitment. Triability becomes particularly important at the trial stage of the diffusion process. Observability focuses on the visibility of the results of using the innovation. The more the results are visible, the more likely it is that the innovation will be adopted.

2.4.3 Diffusion as a communication process

Diffusion has also been described as a communication process in that diffusion focuses on the information exchange through which the new idea is transferred from one or several people to others. This highlights both the role of mass media and interpersonal channels in the diffusion process. The concept of diffusion highlights the role of mass media in creating awareness, while interpersonal networks are seen as critical at the persuasion stage. Rogers and earlier diffusionist theorists such as Gabriel Tard (1903) highlighted the role played by opinion leaders in disseminating information about the innovation and in persuading others in their groups to adopt it (cited in Melkote & Reeves 2001, pp. 121).

Opinion leaders, usually perceived as having more knowledge about the innovation and as having an influence on the other members of the social

system, play a critical role in providing potential adopters with essential information before they decide to adopt or not to. Ideals conceptualised under this notion of consulting opinion leaders resonate with domestication theory's recognition of consultation during the period of acquisition and the emergence of experts to facilitate acquisition and usage of the innovation.

2.4.4 Five adopter categories

Rogers posits that people within a given population do not all adopt the innovation at the same time. He identified five adopter categories that are primarily defined by one's predisposition to either adopt earlier or later in comparison to others in one's social systems. He uses the term 'individual's innovativeness' to define the degree to which an individual is relatively early in adopting innovations (Rogers 1995). According to Rogers, groups differ in their personal characteristics (e.g. age, personality), media behaviour (access to media, heavy or light consumption of media content) and position in the social structure (education level, economic strength). Innovators—the first of Rogers' five categories—are said to be the people who first introduce the new idea to the society. They are described as younger, more educated and having a higher exposure to the innovation than others. They also have a lower threshold of resistance to new ideas. Consequently, they are outgoing and willing to embrace risks involved in taking up new ideas. Innovators are usually very few in number compared to the four other adopter categories.

The second category is early adopters, consisting of people who will typically adopt because of the positive appraisal of the innovation's attributes by others. Early adopters are claimed to have higher social status but to be more discreet and discerning in their adoption preferences than the innovators.

Those in the third group, referred to as the early majority, are influenced by the fact that others have adopted. They imitate the behaviour of others,

believing it is the right thing to do (Dearing 2009, p. 506). They are not as economically comfortable as the early adopters although they are of above average social status. Those in the fourth group, the late majority, are usually a bit more sceptical about social change than the earlier categories and they approach any new idea with caution. In comparison to the early majority they are of below average social status. Lastly, the laggards are those who are the very last to adopt an innovation. They are typically averse to change and newness. They value already established traditions and see newness as a disruption of order.

2.4.5 Critique of diffusion of innovations theory

The process outlined by diffusion of innovations theorists has not been without critiques. It has primarily been critiqued for taking a modernisation approach to social change. Modernisation essentially conceptualised social change as a one-sided process, implying one-way communication processes that are typically top-down in nature. Change was seen as initiated by the rich or upper class. It then trickled down from the rich to the poor or from administration (e.g. government) to society at large. Thus, no thought was given to the possibility of those in lower ranks initiating change. Nor did it allow for change to flow upwards from the lower social groups (Melkote & Steeves 2001). In addition, it did not recognise the values, skills and knowledge of local groups and their potential role in driving change in the society.

These ideals were later refuted as theorists increasingly began to appreciate the role of the 'recipient' in accepting or rejecting new ideas. This study notes that despite this critique, the process of diffusion of innovations still highlights the social and individual characteristics or will of an individual in the process of adoption. This is captured in its articulation of

the individual's subjective evaluation of innovation and the influence of the social networks in the adoption process.

2.4.6 Application of diffusion of innovations theory to the current study

Select tenets from diffusion of innovations theory are used in this study. Concepts and categories explained as part of the process of adoption are used to understand the period just before participants adopt mobile phones. Innovation characteristics such as relative advantage and compatibility are used to explore participants' motivations to adopt and decisions about how they went about acquiring a mobile phone. Discussions of opinion leaders and information-seeking behaviour will be used alongside similar discussions under domestication theory to further explore the appropriation and acquisition processes among the study participants.

2.5 Technological acceptance model

Davis's (1986) technological acceptance model is based on Ajzen and Fishbein's (1980) theory of reasoned action and theory of planned action. Both of these theories argue that people's attitudes towards behaviour and their perceived self-efficacy in enacting the behaviour influence their decision to execute or not execute the behaviour. In the context of technology, the technological acceptance model argues that success or failure of an information system is dependent on the potential user's attitudes towards using it. These attitudes are a direct function of the system's features.

Davis points out that two attitudes are fundamental in this process: perceived usefulness and perceived ease of use. Perceived usefulness is defined as the extent to which the technology will enhance the user's performance (1989, p. 320). He explains that this is based on the word 'useful', which connotes an advantageous edge in using the innovation. Perceived ease of use is defined as the degree to which the prospective user

expects the adoption to be free of effort (p. 320). This assumes that the easier it is to use the innovation, the more likely it is that the potential user will adopt it. This is a dimension that is determined not only by the system's features but also by one's self-efficacy. As the potential user increasingly perceives the innovation to be easy to use, their sense of self-efficacy is enhanced and this in turn strengthens their intention to adopt (Bookye, McGinnies & Prybutok 2014; Davis et al 1989; Chen, Yen & Chen 2009).

After exploring the relationship between the two attitudes of perceived ease of use and perceived usefulness and intentions to use (or actual use), Davis finds that 'usefulness' is more closely linked to usage (adoption) than 'ease of use' (1998). This led Davis to conclude that 'users are driven to adopt an application primarily because of the functions it performs for them and secondarily for how easy or hard it is to get the system to perform those tasks'. He further argues that 'users are often willing to cope with some difficulty of use in a system that provides critically needed functionality' (1989 p. 333). This argument further corroborates a point I argued earlier in discussing diffusion of innovations theory: the centrality of the functional and instrumental dimension of the innovation in determining acceptance. Davis further observes that perceived ease of use acts through perceived usefulness to impact on the intention to use an innovation or adopt a new behaviour.

The technological acceptance model has been widely been used to study the adoption of technology particularly within organisations. For instance, Talukder used this model along with the theory of reasoned action to explore factors determining adoption of technological innovations within select organisations in Australia. He concludes that perceived usefulness is one of the two main influences on adoption of technology among his participants. Kulo and Sheing-Neng (2009) used the technological acceptance model to

understand consumers' behavioural intention to use 3G mobile value-added services. They found that perceived usefulness has the most impact on the respondent's attitude towards adoption. This was followed by perceived ease of use.

Similar to the aims of this study, a number of previous studies have used the tenets of the diffusion of innovations and the technological acceptance model together to explore potential users' motivations to adopt innovations. Lopez-Nicolas, Fancisco, Molina and Harry (2008) integrated these two approaches in assessing the acceptance of advanced mobile services among Dutch consumers. They hypothesised that social influence as conceptualised under diffusion of innovations would be a key element in determining intention to use the innovations. They found that social influence had a positive impact on perceived ease of use.

2.5.1 Application of the technological acceptance model to the current study

In this study, the technological acceptance model is used alongside the diffusion of innovations framework to explore the participants' intention to adopt mobile phones. In particular, perceived usefulness will be used to guide discussions about participants' perceptions of the expected benefits that led participants to adopt mobile telephony.

2.6 Theoretical approach explained

This section has presented the theoretical framework informing this study. Although primarily motivated by the need to adopt a non-deterministic approach (as explained in chapter one) to understand how Kibera residents are embedding the mobile phone into their everyday life, this study also recognises the value of other theories that explain the process by which innovations enter and are further appropriated into the life of the user. As noted earlier, domestication theory is informed by social constructionist

approaches that attempt to explain the role of the user in shaping the meaning of technology. The uses and gratification tradition, credited with making the shift from a deterministic to non-deterministic approach, was initially critiqued for its individualistic focus. However, it is important to appreciate its relevance to understanding the consumption habits for technologies that are personal in nature and its ability to highlight individual practices and gratifications sought.

The diffusion of innovation and technological acceptance models argue that the process of acquisition of an innovation begins long before actual acquisition. They elaborate the process by which the innovation moves from the public sphere to become part of the user's life. These models are ideal in understanding the user's motivation that leads them to adopt the innovation and the practices that accompany this process. These are aspects that this study considers crucial to understanding how the technology becomes embedded into the user's life. Although primarily viewed as deterministic in nature and thus privileging technological agency over user agency in shaping the meanings of innovations, both the diffusion of innovations and the technology acceptance model are ideal in helping to further unpack the processes of appropriation. They both emphasise the roles of information-seeking behavior and the formation of attitudes towards the innovation, and offer accounts of how this ultimately influences adoption or non-adoption. These models also shed light on the role played by the individual in the acquisition process, a practice that is more pronounced in the acquisition of personal communication technologies.

2.7 Application of the theoretical approaches to the research questions

As explained in chapter one, the aim of this study is to provide an account that respects the autonomy of Kibera residents in shaping the meaning of the

mobile phone within their context. The underlying assumption of domestication theory is that technology users play a role in shaping the nature, scope and functions of communication technology. This assumption enabled me to adopt a research approach that privileged Kibera residents' descriptions and explanations of their actions and aspirations and of the catalysts influencing their acquisition and use of the mobile phone (Haddon 2001). To achieve this, the four main tenets of domestication theory—appropriation, objectification, incorporation and conversion—informed the four main research questions that guide this study. Use of this approach helps capture the biography of the mobile phone in the lives of the study participants. An incorporation of the other three theories explained above—diffusion of innovations, technology acceptance and uses and gratification—helped complement the analysis of this process. It is against the backdrop of this review of relevant literature that I developed the research questions and sub-questions as outlined below.

2.7.1 Research question 1: What are the processes of mobile phone acquisition among Kibera residents?

This question captures aspects of appropriation that primarily deal with the process of technology acquisition. The question allows an investigation into the decision-making process Kibera residents engage in prior to and at the time of acquiring their mobile phones. This question also investigates aspects of negotiation and consultations, thus exploring the motivations and aspirations that inform acquisition as well as the negotiations around issues such as what, where and when to buy a mobile phone. The concepts of relative advantage and compatibility from diffusion of innovations theory and the concept of perceived usefulness from the technology acceptance model are used as lenses through which to further interrogate the process by which the mobile phone entered the life of the study participants. To this end, three sub questions are considered:

- RQ1a. What motivations led the study participants to acquire a mobile phone?
- RQ1b. How did they go about acquiring one?
- RQ1c. What specific behavior accompanied the process of acquisition?

2.7.2 Research question 2: How are Kibera residents incorporating the mobile phone into their everyday life?

This question explores the uses, rules governing use and symbolic and aesthetic values attached to the mobile phone by Kibera residents, examining how the mobile phone has been incorporated into respondents' daily routines. Answering this question will facilitate an understanding of the motivations and aspirations about the use and non-use of the mobile phone, consequently reflecting the perceived functional purpose of the mobile phone among Kibera residents. Uses and gratification theory will be used to further understand why the respondents use the mobile phone the way they do, thus exploring gratifications sought. Three sub-questions are considered under research question 2:

- RQ2a. What uses are the study participants putting the mobile phone to?
- RQ2b. What gratifications are participants seeking from using the mobile phone the way they do?
- RQ2c. What practices accompany mobile phone use?

2.7.3 Research question 3: How are Kibera residents objectifying the mobile phone?

Aspects of objectification will facilitate an understanding of the symbolic value and aesthetic meaning the respondents attach to the mobile phone. This study acknowledges the fact of the physical and social objectification of innovations. This research question explores the physical objectification of the mobile phone among the study participants, focusing on the physical

placement of the phone and carrying practices when it is not in use. Three sub-questions guided this exploration:

- RQ3a. Where do the study participants place the mobile phone when not in use and why?
- RQ3b. How do the study participants carry the mobile phone when not in use and why?
- RQ3c. Do they ever leave the house without their mobile phones?

2.7.4 Research question 4: What meanings are Kibera residents attaching to the mobile phone?

Primarily using conclusions from the first three research questions, this fourth question explores how Kibera residents are shaping the meaning of the mobile phone. Significant to this are meanings and the value they have attached to the mobile phone. In addition to the sub-questions under the previous research question, this final question explored two additional sub-questions:

- RQ4a. How would participants describe their relationship with the mobile phone?
- RQ4b.How do participants compare the mobile phone with other communication technologies?

2.8 Summary

This chapter has presented the different theoretical approaches that have informed mobile phone research. It highlights the importance of using a non-deterministic approach, namely domestication of technologies, to understand the mobile phone within the social cultural context of the user. I have also identified three other theories that help further unpack the process of embedding the mobile phone into the life of the user. These theories are diffusion of innovations, technological acceptance model and uses and

gratification theory. Drawing on concepts from all of these models, I have presented the four research questions and their sub-questions. I now turn to consider research that relates to mobile telephony. I focus on literature that draws on the interactivity, portability, wearability and personal nature of the mobile phone to explore its influence on various dimensions of life. ❖

Chapter 3

Literature review: the mobile phone in everyday life

In the previous chapter I set out the basic theoretical framework guiding this research, within which I formulated four main research questions. In this chapter I review mobile telephone literature relevant to addressing those research questions. The review begins by identifying factors influencing mobile phone uptake. I then review literature that focuses on the portability and personal nature of mobile phones. I consider the discussions in the literature that explore the mobile phone's influence on diverse dimensions of life such as its challenge to traditional distinctions between private and public, present and absent, and its impact on relationships, security, entrepreneurship and the presentation of self.

3.1 Adoption

In *Media Life*, Deuze (2011) argues that media is becoming invisible. He explains that media has become so pervasive and ubiquitous that it is disappearing from society's consciousness. Similarly, Ling (2012) posits that the mobile phone is also disappearing. He says that its presence in society is so widespread that it is now taken for granted. These perspectives capture the extent to which communication technologies (in Ling's case mobile phones) have become embedded into the everyday life of contemporary society. The mobile phone has become so interwoven into the flux of the society that possessing one is no longer regarded as unusual. As noted in chapter one, adoption has exceeded expectations, particularly among those

of low socio-economic status. Academic and non-academic literature is rich with explanations for the high subscription to mobile phones. These explanations attribute the trend to regulatory policies, market dynamics, infrastructural advantage, and the nature of the mobile phone itself, among other factors.

Regulatory policies have contributed to the increased uptake of mobile phones. For example, in Kenya (the location of this study's research site) until 2004 there was only one mobile phone service provider in the country. Following the liberalisation of the market, one more player (Safaricom) entered the market. Today Kenya has four service providers: Airtel, Safaricom, Orange and Yu. An increase in the number of players in the mobile phone market is said to have directly accelerated the diffusion and adoption of mobile phones, with the increased competition inevitably driving operational costs down. This works to the advantage of the user as the operators try to outdo one another by offering attractive deals to increase their customer base.

Others have argued that the introduction of prepaid mobile phone plans has provided a bedrock for the high subscription rate especially among the poor (e.g. Portus 2008). As Kalba (2008) points out, without prepaid services, a high percentage of those of moderate and lower incomes would not have access to the mobile phone (p. 642). In a study focusing on low-income earners in Pakistan, India, Sri-Lanka, the Philippines and Thailand, Silva, Zainadeen and Ratnadiwakara (2008) found out that 90 per cent of the mobile phone owners in the five countries were on prepaid plans.

They conclude that the use of prepaid plans enables these users to control their mobile phone expenditure. The introduction of tariffs that allow lower calling rates to given services or at certain times of the day have also made it possible for these groups to use mobile phones. The ability to recharge in

very low denominations means that many lower income users can afford to recharge their phone whenever they need to. For example, in Kenya, there are recharge denominations as low as 20 shillings (approximately AUS$0.20).

The availability and affordability of the mobile phone's predecessor, the landline telephone, was limited by infrastructural challenges. This was especially so for those living in the rural areas and in less physically planned residential places such as in the slums. However, the wireless nature of the mobile phone has helped overcome these infrastructural barriers, thus making mobile services available and affordable to these previously restricted sectors of the population. This is because it is easier to set up mobile phone towers than to lay the requisite landline cabling in such neighbourhoods. This has led to higher signal coverage and thus increased ease of access, leading in turn to higher ownership of mobile phones among these populations (Donner 2005; Ling & Donner (2009).

Research has also pointed to the emergence of mobile phone use patterns unique to the poor as a factor encouraging adoption. These practices are made possible because of the nature of the mobile phone as a device. Angotia and Ramirez (2008) observe that this proportion of users make deliberate decisions that allow access to the benefits of mobile phones but at the lowest cost possible. Practices such as mobile phone sharing or gifting and beeping allow users to circumvent costs related to mobile phone use (see Donner 2006).

For example, based on call logs and caller identification, users are able to make intentional missed calls. This is what is referred to as 'beeping'. Donner (2007) sees beeping as a powerful technique of maximising the benefits while at the same time minimising the costs of mobile phone use. The missed call acts as a message itself or as a prompt for the recipient to call back. This way the cost of the telephone conversation is transferred to the other party. Even

though this transfered expenditure may sometimes lead to conflicts between the parties, in most cases the wealthier person is expected to incur the cost.

Another way of circumventing cost has been through the sharing of mobile phones. This has happened when small-scale investors establish and man mobile phones as public pay phones (Donner 2008). In other cases, the mobile phone has been made available to immediate and extended family members and friends. The are gifted the mobile phone or mobile phone line. This practice allows more people to benefit from the connectivity the mobile affords users, without all users having to invest in a handset. Based on many options in the market, users also make decisions about whether to buy or borrow mobile phones, what type to buy and whether to buy a new or a second-hand phone. These are cost-related decisions that are largely based on how much money users have at their disposal for purchasing a mobile phone.

3.2 Individual and social motivations to adopt

Beyond the role of market dynamics in defining affordability and practices that aid in controlling expenditure, research has also explored individual motivations leading to adoption and the role of one's social network in the adoption process (e.g. Silva & Ratnadiwakara 2011). As will be discussed further in chapter five, these discussions argue that the user's needs and their perception of the efficacy of the mobile phone to meet these needs contribute to adoption of the device. Stressful situations and the need for safety are among the most frequently highlighted motivations for the acquisition of mobile phones. As part of their study, Rakow and Navarro investigated the reasons why men bought mobile phones for their wives. They found that the primary motivation was that they wanted their wives to be able to get help in case of an emergency, a reason their spouses agreed with (1993). For some, it was just in case they needed some help while they were running routine errands such as picking up children, shopping etc. In Bell's (2006) study of

mobile technology in Asia, respondents talked about buying mobile phones for their children primarily for safety reasons. In this respect, the mobile phone is valued for its ability to provide a communication channel in case of emergency.

The user's social networks (family, friends and colleagues) are seen to influence and even enable adoption. Some receive their first mobile phone from a family member. The studies mentioned above (Rakow and Navarro 1993; Bell 2006) indicated that significant relatives (parent or husband) in the mobile phone user's life provided the mobile phones. For example, the women respondents in Rakow and Navarro's study indicated that they did not buy their mobile phones. Instead their husbands made the decision to get them a mobile phone and went ahead and acquired one for them (1993 p. 151). There are situations where phone owners give their older phones to their wives or children and then buy a new one for themselves. Others receive their mobile phones as gifts. These findings suggest the pressure that these social networks can exert on people to acquire a mobile phone. The need to fit into a desired social group or to present oneself in a desired way has contributed to people's decisions to buy mobile phones. Respondents indicate that they want to avoid being the only odd one out without a mobile phone.

3.3 Impact of mobile phone connectivity

The mobile phone's multiple applications have led to variance in the way it is being used and consequently in the way it is perceived (Katz & Aakhus 2002). The ever-increasing number of mobile phone applications has continued to see it move beyond a simple communication tool to become multi-functional. Originally developed to transmit voice messages, it later incorporated text messages. Today, the newer devices offer access to other communication platforms such as the internet, television, radio and

calculators. It allows the processing of content and information in the form of audio, video or graphics. Mobile phones can now be used to take photos and record and play videos. This multiplicity of functions has led scholars to argue that the mobile is no longer just a telephone, but a 'mobile device' (e.g. Westlund 2008 p. 444), a term seen to incorporate all the multimedia functions mobiles afford users. However, fundamental to the mobile phone remains its capacity to connect people immediately, personally and across almost any distance.

Following the widespread diffusion and multiplicity of functions in the contemporary mobile phone, research is increasing into investigating how the mobile phone is impacting on various dimensions of life. One of its undisputed effects is its role in redefining space and time (Ling 2004; Ling & Yttri 2002; Liccope 2004). Focusing on its unique dimensions of personal portability, wearability, the mobile phone is seen to blur the boundaries experienced by those physically removed from each other and to reduce the impact of time differences. In particular, portability and wearability give users increased flexibility about where and when they can be reached. Even though the landline telephone has long been known to connect people in different geographical locations, the mobile phone is seen to provide a higher level of connectedness between individuals. Glotz and Bertschi (2006) explored opinions across social and cultural groups and found that the most important effect the mobile phone has had on users has been 'connectivity and connection' (pg. 83). The mobile phone gives access to users anytime and anywhere (Ling 2004; Wong 2010).

3.3.1 Locational independence

The location independence created by the mobile phone's increased connectivity has broad implications for management of the demands of day-to-day life. Licoppe (2004) introduces the idea of connected management. He

argues that the mobile phone enables almost instant connectivity between the user and the various demands of their everyday activities, despite being physically removed from those activities. This instant connectivity allows the absent to become present, thus enabling users to synchronise their everyday activities while on the move. Turkle (2008) refers to the mobile phone as an 'always-on/always-on-you communication device' that gives users the sense that they 'can do more, be in more places and control more aspects of their lives' (p 129).

Similarly, and closely related to Licoppe's concept of connected management, Ling and Ytrri (2002) argue that the mobile phone allows users to micro-coordinate and hyper-coordinate their everyday activities. Micro-coordination is made possible by allowing midstream adjustment of plans or Ling and Ytrri call the 'softening' of schedules. People no longer need to agree on all the details of a meeting prior to the date or time of the meeting. Tentative plans are made. Details of when and where to meet are likely to be agreed on as the date draws closer. On hyper-coordination, Ling and Ytrri point out that people are able to engage in frequent brief conversations with one another or sustained interactions that touch on both serious in-depth topics and mundane casual small talk. In line with Ling and Donner's (2009) findings, these discussions highlight the ability of the user to interweave their communication needs across the flux of their everyday activities.

3.3.2 Private and public

Highly mobile and thus unattached to physical places, mobile phones have become a common feature in public spaces. This has generated academic discourse about how the mobile is likely to alter the dynamics of public spaces and their attendant behaviours. Campbell and Park (2008) likened the reception of mobile phone calls in public to the personal use of communal spaces. They view it as an attempt to personalise public spaces (pg. 377), an

act that may conflict with social norms defining propriety in public spaces (Palen et al 2001). This may include inattention to one's immediate company. While the mobile phone user is physically present, they are mentally and even socially absent, thus leaving the other party feeling alone. Public use of mobiles can create imaginary fences (Ling 1998). Research suggests that the lack of primacy given to those co-present resulting from this attention-sharing can create tension in the interactional context (Turkle 2008 p. 130). Mobile phones ringing in public spaces are also viewed as intrusive. The loud one-sided conversations that often result are in most cases unwelcome. Plant 2002 (cited in Wallis 2006 p. 29) gives insight into the reasons why people become irked by mobile phone conversations around them she says 'the mobile allows its users to believe that they are entering a private space shared only by the parties on the phone'. This gives them the illusion of intimacy, leading them to engage in conversations that may not be appropriate given the immediate social context.

3.3.3 Work and life

Research on the heightened connectivity the mobile phone creates between work and personal or home life has also highlighted the overlapping nature of the two worlds. Discussions about how the mobile phone blurs work/home boundaries are presented from two perspectives. Some have observed that the mobile phone allows employers and work colleagues to be continuously connected to one another. This creates the possibility for users to engage in work-related conversations during off-work time (Wajcman, Bittman & Brown 2008). While exploring the extent to which mobile phones undermine work/home boundaries, Wajcman and colleagues further found that almost half of their respondents carried their mobile phones on holidays for the purpose of talking to colleagues. Concerns have been raised about this practice. Glotz and Bertschi's study concluded that the use of mobile

phone is endangering the balance between work and home life. Based on the responses from their participants, Glotz and Bertschi acknowledged that participants increasingly faced the loss of leisure time due to the fact that they were always accessible to their employer (2006 p. 83). On the positive side, within the work environment, the mobile phone is seen to facilitate accomplishing the everyday demands of one's job. For example, Hislop and Axtell (2011) explored phone use patterns during working hours among office equipment service engineers whose work detaches them for much of their time from colleagues and the office. Hislop and Axtell observed that due to the nature of the engineers' work, the mobile phone was an invaluable tool in the execution of their duties while on the move.

On the reverse side, studies have also explored how the mobile phone facilitates an infiltration of one's personal life into the work environment. For example, in an article entitled 'Remote mothering', Rakow and Navarro (1993) indicate that the mobile phone enabled their female respondents to attend to their motherly responsibilities from a distance. This was particularly so for working mothers with paying jobs that required them to travel. The mobile phone allowed them to participate simultaneously in their work and domestic worlds. Rakow and Navarro conclude that these women are 'able to bring their private domestic responsibilities into their public work environment' (p. 155).

3.3.4 Literature challenging work and life overlaps

Balancing the literature on the perpetual 'contactability' created by mobile phone are studies that challenge the claim that the mobile phone is blurring the boundaries between work and home or life or public and private. Such studies instead highlight the role of human agency in controlling the intrusion of work into one's home life (e.g. Wajcman, Bittman & Brown 2008; Hislop & Axtell 2011). Enabled by various mobile phone functions, the user

can decide to switch off their phones and accept or decline making or receiving calls. In a study published in 2009, Bittman and colleagues concluded that concerns that the mobile phone extends the reach of work are exaggerated. They note that the mobile phone's usage for work-related engagements is fairly limited or infrequent (p. 689). They conclude that there seems to be a mutual respect between interested parties for these socially crafted boundaries between life and work. They argue, for example, that users are not likely to switch off their mobile phones at dinner-time because, more likely than not, no-one will call for work-related matters at that time. On the other hand, social or family-related calls are likely and acceptable at such times.

The attempt to demarcate the impact of the mobile phone on the boundary between work and leisure is also reflected by Bell's (2006) Indonesian study participants. Some respondents kept two mobile phones, one for work and the other for home or social life. Other respondents used ringtones to help them decide which calls to accept and which to ignore. This largely depended on the situation of the intended recipient at that point, who was calling and the probable reason for their call. White, Naomi and White's (2008) study examined how notions of perpetual contact (as advanced by Katz & Aakhus 2002) were managed by tourists in New Zealand. They observe that the need to stay connected co-existed with a desire to protect their physical separation by controlling the frequency and nature of contacts. Some respondents went to the extent of avoiding using their mobile phones altogether. Others used calling cards and public pay phones as a way to control contact and the frequency of calls (p. 202).

3.4 The mobile phone's impact on relationships and social and business networks

Research has also focused on the role of mobile phones on different aspects of relationships. The mobile is seen to play a critical role in the maintenance and quality of relationships. Here several factors are identified as coming into play. For example, as mentioned earlier, Ling and Yttri (2002) observe that the content of the brief and frequent interactions mobile phone users engage in ('hyper coordination', discussed earlier) is not as important as the role the simple act of connecting plays in maintaining or 'oiling' that relationship. According to Ling and Yttri, although some of these connections may seem undirected and meaningless, they are important for social fellowship, enhancing feelings of affiliation and a sense of belonging. Yet again, other phone use behaviours such as when to answer calls on behalf of the owner, who to share a mobile phone with, who to give access to one's mobile phone data and who to share a mobile phone number with are some of the practices that can influence or are influenced by the relationship between the parties. Khunou (2012) explores the mobile phone's impact on the establishment, maintenance and termination of relationships. She points out that the mobile enables the commencement of relationships without the initiator having to encounter the uncertainties of potential rejection. At the other end, she also notes that the mobile aids in the termination of relationships, again without requiring a face-to-face conversation and the hurt and frustration direct confrontation that characterise such incidents. Portus (2008) points out that mobile phones can be a threat to relationships because they offer the potential to trigger conflicts among couples that can eventually lead to violent confrontations and eventually to relationships breaking up. He observes that while 'it might be difficult to attribute marital problems to the mobile phone itself, the device does open new opportunities for problems to arise or be exacerbated' (p. 117).

3.4.1 Social networks

An interesting twist to the above discussion of relationships are arguments that people do not necessarily establish new relationships using mobile phones but instead use mobile phones primarily to strengthen already existing relationships. Höflich and Rössler (2002) point out that irrespective of its potential for making contacts, the telephone in general has been a medium for short-distance communication. People mostly call relatives, friends or acquaintances. Others have corroborated these observations by arguing that mobile communication is ritualistic in nature and thus mostly used to increase solidarity or strengthen in-group ties (Ling 2008). It is rarely used to establish new, unfamiliar relationships. Donner (2006) analysed his respondents' call logs. He particularly focused on who they talked to regularly, what they talked about and how long they had known one another. He found that 70 per cent of calls made or received were with either family or friends. He concluded that the phone users were not necessarily meeting new people but instead were contacting people with whom they already had an existing relationship.

In research focusing on interactive communication technology use and the location of social ties, Soorymoorthy, Miller and Shrum (2008) noted that there was no correlation between mobile phone use and the types and size of social ties. They keenly observed that this is contrary to prior literature that assumes that the primary use of mobile phones is to make contact with remote ties. This is a further indicator of users' continued connection with the relationships that are already part-and-parcel of their everyday engagements. This does not necessarily preclude already established significant ties such as siblings, parents and spouses that live far away.

Others have highlighted the value of connectedness, particularly the mobile phone's ability to enhance feelings of connectedness with family

members and close relations. In White and White's (2008) study mentioned earlier, the tourist respondents expressed the value of being able to communicate with those back at home as a demonstration of the significance of the relationship. They wanted to continue feeling socially and emotionally integrated with those at home even while in transit. The use of the mobile phone to fulfil the desires of both parties for each other's company further highlights the mobile phone's role in reinforcing already existing relationships.

Literature also points out that mobile phones are used primarily for social purposes. Although the impact of mobile phones on micro-economic activities cannot be ignored, as in Donner's study, it is surprising to note that the business-related calls did not compete with the frequency of calls connecting users to already existing social networks. Donner describes a case akin to the micro or hyper-coordination defined by Ling and Ytrri (2002). Donner says that the calls included couples calling each other to organise the time and method of transport home, updating family members of the wellbeing of other relatives etc. In a paper entitled 'Mobile phones and expanding human capabilities', Smith, Spence and Rashid (2011) observe that maintenance of family and social relationships is one of the most valued capabilities of mobile phone users. Women who participated in Rakow and Navarro's (1993) study indicated that they were more likely to use the mobile phone for family and personal reasons. Even for those who indicated that they used the mobile phone primarily for business said that family uses were more important to them (p. 151).

3.4.2 Businesses

As noted above, the influence of mobile phones on businesses cannot be ignored. The mobile is seen to reduce the cost of running a business. This is especially so for small-scale entrepreneurs and people who engage in various

forms of self-employment. Despite highlighting social uses as the most prevalent among their study participants, Smith, Spence and Rashid (2011) also highlight the critical role played by the mobile phones in business. They note that it is primarily reduces business -related travel costs and the time taken to deal with business demands. Businesses agreements can be made via mobile phones. Silva, Zainadeen and Ratnadiwakara (2008) note that the time saved through such transactions can be put towards other productive activities and that this inevitably impacts on profit margins. Donner (2006) further highlight economic benefits accrued by small-scale entrepreneurs in Kigali. He sees this as a direct result of the mobile phone's ability to enable the rapid exchange of business-related information. This may include but is not limited to spreading information about one's business and being able to contact and make relevant arrangements with clients. Because the mobile phone is carried almost everywhere one goes, the individual can wander away from their business premises without necessarily risking the loss of business opportunities. Potential clients can easily reach business owners to inform them of their arrival.

Of significant note here is the development of the mobile payment system in Kenya, popularly known as M-pesa. This term is directly translated as 'mobile money'. M-pesa has been applauded for various reasons, principally for enabling an easy, efficient and safe way of transferring money and for providing banking to the previously unbanked majority of those lower down the economic pyramid. It is a common feature in Kenyan market places to see people engaged in all manner of transactions using this system, for example to pay for goods and/or services, to deposit money in the bank for safe keeping or to send money to loved ones living at a distance.

3.5 Security

Mounting research has also highlighted the relationship between mobile phones and security. This research notes that the fact that connectivity enables instantaneous communication increases one's sense of security. Silva, Zainadeen and Ratnadiwakara (2008) noted that the ability to act quickly during emergencies (e.g. illness, death or accidents) was among the key benefits accrued from access to mobile phones. In a study among European mobile phone users, many stressed the importance of having a mobile phone 'just in case' they needed some help (Ling 2004). Ling's study participants' indicated that the mobile phone gave them an instant connection to help. Ling suggests the mobile became a kind of leash in that it provided instant connection (2004.).

The centrality of users' heightened sense of security is highlighted in events following emergency situations. Gordon (2007) discusses the role that mobile phones played in three emergency situations: the SARS outbreak in China in 2002 to 2003; the tsunami in Indonesia, Sri-Lanka and East Africa in 2004; and the London bombings in 2004. Gordon notes that the victims used mobile phones to call or text to assure significant others of their wellbeing. Mobiles were also used to locate survivors, to pass on information on how and where to seek help, and to give a first-hand account of the events (information that was invaluable to media outlets) to name but a few of its functions.

However, research also reminds us that the mobile phone is a two-edged device. Just as it is useful in offering aid to those in emergency situations, it can also be used to facilitate attacks. It was used by the 9/11 terrorists to organise the attack (Rice & Katz 2003). It is also seen to contribute to criminal activities in society to the extent that it can jeopardise the citizen's personal security. In research focusing on mobile phones among the urban poor,

Portus's informants described the mobile phone as a 'magnet for robbers' (2008 p. 117). It has become an attractive asset to own, and thus has a high resale value. However, many owners are unwilling to part with their mobile phones. They will often put up a spirited fight in the event of an attempted robbery and this may result in injury or even death. Similarly, respondents in Donner's (2006) study said that they had been victims of mobile phone thefts and that the options for recovering their phones were usually few.

3.6 Symbolism

In addition to connectivity, Katz and Aakhus (2002) list symbolism as one of the universal consistencies in the use and perceptions of the mobile phone. Campbell and Park (2008) point out that the mobile phone has significantly redefined the relationship between communication technologies and the human body (P. 373). They posit that as a portable and wearable device, it is typically not attached to any physical location. Instead, for the most part it is attached to one's body—more so whenever users are on the move.

Following McLuhan's (1964) assertion, others have described the mobile as an 'extension of the self' to capture its attachment to the human body (Fortunati 2002; Katz 2003). In introducing the book *Machines that become us*, Katz (2003) points out that the word 'become' in the title has three implications, one of which is the way that personal communication technologies become 'physically integrated with the user's clothes' (p. 1). This has led to studies of mobile phones and fashion (Fortunati 2002) In this regard, scholars have argued that the mobile is used to negotiate one's social identity and group affiliation (Haddon 2001; Ling & Yttri 2002; Kyen & Lemaire 2006; Ling & Donner 2009). Due to its personal nature, users can customise their phones using an assortment of adornments. Choices of model, size, colour and ringtone are all choreographed to reflect one's taste

and identity (Fortunati 2002; Robbin & Turner 2002; Ling 2004; Priest 2010), thus serving the function of symbolic representation.

3.6.1 Mobile phone placement

Closely related to these arguments and at the same time introducing a slightly different dimension to the personalisability and portability of the mobile phone, studies have also focused on mobile phone placement and styles of carrying. During the earlier days of conceptualising the process of the domestication of communication technologies, objectification of the devices within the physical environment was understood to take place within the home environment. With the introduction of technologies that are not necessarily used within the home environment and even others that are consumed while on the move, this has been revised to include settings other than the home environment (Haddon 2003).

With the definition of the mobile phone as a handheld as well as a wearable device (Ichikawa, Chipchase and Grignani 2005), emerging research has explored how the mobile phone is carried around and where it is placed when it is not in use (e.g. Patel et al 2006; Cui, Jan & Fumiko 2007). Research has pointed out that decisions about how to carry it are based on numerous factors. These range from those related to what is available to the user (e.g. whether clothing has pockets or not, whether one is carrying a bag) to contextual factors such as where users are (at home or at work, in the car) and the time of the day (Ichikawa, Chipchase and Grignani 2005 Patel et al 2006 Cui, Jan & Fumiko 2007).

3.6.2 Mobile phone use propriety

Closely related to uses of the mobile phone are the behavior patterns that users have developed to govern usage. Scholars have pointed out that people have an almost visceral reaction to inappropriate use of mobile phones (Ling 2004). His study participants had clearly formulated and well-rehearsed

responses towards unacceptable mobile phone use practices. Ling saw this as an indicator of a collective sense of what is right and wrong. He explores three areas of mobile phone use behaviour: social, intrusiveness and embarrassment.

First, social behaviour around mobile phone use relates to acceptable mobile phone behaviour in settings with high normative expectations. This includes in places like restaurants and theatres. Second, as noted earlier, the intrusive nature of the mobile requires balancing incoming phone calls and conversations with the presence of other people. Ling notes that the mobile disrupts the nuances that govern these settings. Third, there is the forced eavesdropping that can cause embarrassment. People found it uncomfortable to be involuntarily exposed to details of some else's life (Srivastava 2006 p. 11). This is especially so when one engages in a telephone conversation in a public setting. Those around become unintended audiences to otherwise intimate conversations. This has the potential to create awkward situations for those who cannot avoid over-hearing the conversation (Ling 2004 pg. 125). This finding is corroborated by Glotz and Bertschi's study, which found that intrusiveness was the most cited negative effect of mobile phones among their survey of international experts (2006). As is further discussed in chapter six, in response to these scenarios, different societies or institutions are beginning to formulate rules. To maintain social order, decisions are made about how and when to use the mobile phone. This helps create boundaries between what is acceptable and what is not acceptable with regard to mobile phone use. For example, whether to answer or make calls while in church or meetings, the proper hours to call, appropriate and inappropriate phone conversations while in public or in the presence of others. As many others point out, Ling notes that for the most part these rules are not set but are continually being formulated and negotiated.

3.7 Summary and conclusion

This chapter has reviewed literature on the mobile phone in users' everyday lives. The literature highlights the mobile phone's key characteristics of portability, personalisability, wearability and ability to permit higher connectivity among users. Published research has explored how this increased connectivity influences various dimensions of life: work, home or personal life, relationships, etiquettes and security. The review has also discussed literature that focuses particularly on the mobile phone's portability and wearability and the effects of these characteristics on the user's self-presentation (symbolism) and placement practices.

The literature reviewed in this chapter forms the springboard from which this study's data will generate further discussion. However, of special note to this study is the fact that studies related to mobile phones among the urban poor in Kenya and particularly in Kibera have primarily focused on its spread and impact on various dimensions of life. Non-deterministic studies questioning what the users—especially those at the lower echelons of the economic pyramid in Kenya—do with the mobile phone and the meanings they attach to it are scarce or non-existent. Of note as well is the fact that most research focuses on specific aspects of the mobile phone in the life of the user, for example its impact on distance, commerce, relationships or security. No studies published to date have attempted to trace the biography of the mobile phone in the life of the urban poor in Kenya, and particularly in Nairobi, as is the intention of this study. The following chapter explains how this 'biographical' study was carried out. ❖

Chapter 4

Research Design

This chapter presents the research approach used to investigate mobile phones in the lives of the residents of Kibera. The first section of this chapter justifies the choice of an interpretivist approach as the framework for the study. This is followed by a detailed description of each of the selected research methods and their relevance to the study: interviews, focus group discussions and photovoice. The chapter then addresses the ethical concerns relating to the research and describes the data analysis procedures. In the subsequent section I share my experience of entering the Kibera slum. This account is intended to give a snapshot of Kibera on a normal day. I conclude the chapter by introducing the study participants and outlining the structure of the research sessions.

4.1 An interpretivist research approach

To achieve the aim of any research, it is important to choose a research design that is best suited to the line of inquiry (Starks & Trinidad 2007). This study adopts an interpretivist approach. Croucher and Cronn-Mills notes that an interpretive approach 'focuses on the belief that reality is constructed through subjective perceptions and interpretations of reality' (2014. 51). From this viewpoint, it allows one to explore the social construction of meaning by analyzing one's intentions and motivation. Croucher and Cronn-Mills further note that the interpretivist models aims at understanding the study participant's experiences and their interpretation of those experiences within their social context. Here reality is seen not to be objective and uniform; it is

rather perceived as subjective and unique to each socio-cultural landscape. It is assumed that individuals act within a social climate that inevitably impacts on or shapes their experiences and their interpretation of those experiences. (Smith, Flowers & Larkin 2009). Bogdan & Taylor (1975) argue that those sharing the same position indicating a similarity of interpretation may develop shared definitions of a given phenomenon and thus the possibility of shared perspectives. This means that people within the same cultural context are more likely than not to have the same interpretation of the same experiences or events. The flipside of this is also true: those of different cultural contexts are more likely to interpret the same experience differently. This interpretivist approach therefore provided an effective framework for this study, which was concerned to uncover how Kibera residents are embedding the mobile phone into their everyday life. The study aimed to elicit Kibera residents' experiences with the mobile phone and to understand how they interpret those experiences within their unique context.

4.2 Data collection methods

An interpretivist approach employs data collection methods that require minimum structure but that allow for maximum depth in exploration of the phenomenon under study. The approach therefore requires qualitative research methods that allow participants to share their own experiences. More specifically, every study will differ in its data collection methods based on the nature of the phenomenon under study (Smith, Flowers & Larkin 2009), as each study adopts the methods that will obtain the most relevant data for the study (Johnson R. B & A. J. Anthony 2004). Haddon (2011) points out a domestication approach favours in-depth research approaches that allow the participants—users of technology—to tell their story using their own words. This method was regarded as ideal for eliciting the Kibera residents' stories. Choice of data collection methods for this study also

recognised the different aspects each of the research questions seeks to address. It is in light of this that I used interviews, focus group discussions and a participatory approach known as photovoice, all of which I briefly explain in the following sections.

4.2.1. Interviews

Denzin & Lincoln (2000) note that interviews are ideal for exploring people's experiences and interpretation of those experiences. Interviews are primarily used to solicit 'insiders' views of the phenomenon under study. They allow an in-depth analysis through skilled probing by the interviewer (Priest 2010). The first research question set out in chapter two ('What are the processes of mobile phone acquisition among Kibera residents?') attempts to capture aspects of appropriation by better understanding the process of technology acquisition (Haddon 2006). This includes an investigation into factors influencing acquisition and other information seeking behavior at the time of acquisition, such as residents consulting others about whether to get a mobile phone, where to buy it, which model etc. This study views these steps as communication behaviours that are exhibited at an individual level more often than not. In-depth interviews with selected individuals from Kibera were viewed as an ideal way to capture this process.

The second research question ('How are Kibera residents incorporating the mobile phone into their everyday life?') investigates how the mobile phone has been fitted into the lifestyles of Kibera residents. This question addresses the aspects of domestication that deal with incorporation, continued appropriation of the mobile phone, and social aspects of objectification. Answering this question involves exploring the uses of the mobile phone, rules governing use, how the mobile phone is used to symbolise status and to negotiate positions in social circles. As with the first research question, certain aspects of these practices are realised at an

individual level and thus can be most effectively explored in an interview format.

An interview guide covering the main themes implied by the first two research questions was developed and used to guide the interview. The questions were exploratory in nature, allowing respondents to share their experiences from the period before acquisition of the mobile phone up to the day of the interview. This enabled me to trace the 'biography' of the mobile phone in the 'life' of the respondent so far.

4.2.2 Focus group discussions

Focus group discussions allow the researcher to 'explore the thoughts of a group of people on a specific subject of interest' (Croucher & Cronn-Mills 2014 p. 174). In many cases even with the use of discussion guides, each meeting will evolve in a unique fashion as the participants begin to create a discourse around the topic. One advantage of focus group discussions is what has been referred to as 'group effects' (cited in Croucher & Cronn- Mills 2014 p. 175). This is where by new information is generated or emerges as members engage in a conversation around the topic of interest. This discursive nature of focus group discussions—participants reacted to one another's contributions (Priest 2010) —allowed me to gain a deeper understanding of the socio-cultural dynamics that come into play in the process of fitting the mobile phone into the everyday lives of Kibera residents. These discussions helped highlight nuances in the socially acceptable practices, rules, expectations and restraints that would not have been identified in the one-on-one interview. A focus group discussion guide addressing the sub-themes under the overarching themes of appropriation, incorporation and objectification was used to facilitate the discussions.

4.2.3 Photovoice

Photovoice is a participatory research method proposed by Wang and Burris (1994). In photovoice, research participants take photos that best communicate the different themes of the research. I used this method in this study to investigate aspects of physical placement and aesthetic dimensions of the phone implied in my third research question ('How are Kibera residents objectifying the mobile phone?'). Photovoice highlights the respondents' perspectives on the issues being studied. It facilitates an integration of local knowledge into the scientific inquires as it solicits the voice of the local people in the form of photographs and their interpretation of those photographs. Unlike conventional methods of research, photovoice makes the respondents partners in the research process. The respondents express themselves using photographs. It allows the researcher to listen and understand how the respondents make meanings out of both their physical and social environments (Wang & Burris 1997). The method is based on the claim that taking a photo of someone's everyday life aids the researcher to look at participants' social and physical environments objectively and think more clearly about its different dimensions and the implications of these (Wang & Burris 1994).

In preparing to implement photovoice in this project, I first briefed participants about the project as a whole. During the briefing I presented a list of themes guiding the photovoice part of the project, with a request that they modify the list as they felt appropriate. This was essential, given that I was an outsider to their context and so may not have captured all the dimensions of phone placement and adornment practiced by Kibera residents. This also allowed the participants to have a greater say in the research process. The list of themes included: how they carry the phone when it is not in use, where they place it when they are at work, home or at a favorite location such as a café and the various decorations with which they

adorn the phone. Residents then took photos of themselves and their phone placement and carrying practices. Although some researchers have previously argued that it is not the quality of the photographs that is important but only participants' interpretation of the photos (Johnson 2011), I felt it important to invite a professional cameraman to come along to the briefings to teach participants basic skills in camera use, such as lighting and framing. This professional input was designed to boost participants' confidence in taking photos. It also turned out to be an incentive—participants were excited at the idea of learning how to take better photos.

Although in the discussion above I have linked my use of each of the data collection methods to the need for data to answer particular research questions, it is important to stress that the methods were not used exclusively to investigate only one or other question. Employing multiple data collection methods allowed me to triangulate information from different data sets, increasing the chances of noting consistency and identifying themes across the data. The three approaches were conducted with limited structure, allowing for thick descriptions of events and experiences and their interpretations (Croucher & Cronn-Mills 2014).

4.3 Sampling

As a qualitative approach, an interpretivist research design aims at exploring the existence or presence of a phenomenon within the target population and does not attempt to investigate the reach or spread of the phenomenon (Bogdan & Taylor 1975; Englander 2012; Croucher & Cronn-Mills 2014). Since the emphasis is not on the quantity of the respondents or the frequency of recurrence of the phenomenon, this interpretivist approach operates with a very small sample, using a purposeful approach to determine the participants. To achieve this, the approach requires a homogeneous group of participants with similarities in a number of dimensions that define them

as members of the group or the general population of the study. Consequently, respondents are selected on the basis that they can offer insights into the phenomenon under study (Pringle, Hendry & McLafferty 2011; Croucher & Cronn-Mills 2014). In some cases, a 'snowballing' referral system is used to ensure the homogeneity of respondents and their relevance to the topic under investigation (Smith, Flowers and Larkin 2009; Pringle et al 2010; Englander 2012; Cilesiz 2011).

Bearing in mind the political climate in Kenya at the time of data collection, it was important for me to establish a high degree of trust with my respondents.[1] For that reason, I needed to find a guide who was familiar with the community. My guide, Mr Ochanda, has lived in Kibera for 30 years. With his help, I used a snowballing technique to identify a total of 40 respondents. Five of the respondents participated in the interviews, 30 took part in the focus group discussion and nine contributed to photovoice. Eight of the respondents who participated in the photovoice exercise had also participated in the interviews or focus group discussions. I ensured homogeneity among the respondents by inviting as participants only those who had lived in Kibera for two years or more and who were still living in Kibera at the time of the interviews. Only residents who owned a mobile phone participated in the study.

4.4 Ethics

During invitations to the focus group meetings and interviews, the participants were verbally briefed on the purpose of the research and what their contribution would be. They were reminded that they were free to opt

[1] During the political campaigns in the run-up to the general elections, most neighbourhoods can be very volatile. This is especially so in Kibera because it has historically been an opposition stronghold. Newcomers are treated with suspicion. They may even be suspected of being government representatives.

out of the research process at any time if they so wished. Additionally, they were informed that they were free not to respond to any question they were not comfortable with. The participants were informed that they were free to contact Dr Oladipo (Chair, Research Centre at Daystar University, Nairobi) if they needed to clarify anything about the study. With Dr Oladipo's permission, her contact details were provided to the participants. The Kenyan National Council for Science and Technology requires that every researcher doing data collection in Kenya should have a local affiliate research institution. Daystar University agreed to act as my affiliate research institution. Before commencing the data collection process, two requisite approvals were secured: one from the Human Research Ethics Committee at the University of Technology Sydney (approval reference 2012-437A). The other was a research permit secured from the National Council for Science and Technology, Kenya, as required by the Kenyan government for all research carried out within the country.

Discussions about the ethics of qualitative research have highlighted the importance of the anonymity and free participation of the study participants. Research ethics theorists have advocated for practices that ensure that the identity of the respondents remains unknown and that participants give written consent to participate in the research (Reinard 2007). This would also include methods of de-identifying any participants in photos included in research. From my own experience as a Kenyan and from my many years of doing research among various communities in Kenya, Kibera included, I argue that the value and appropriateness of these practices have to be understood and interpreted within the context of the study. As indicated in my application for the ethics approval, Kibera has a very informal ambience. There is a high level of trust among people. Requiring participants to sign consent papers would have introduced the feeling of a formal environment

that is most frequently associated with government bureaucracy. This would have made participants feel uneasy with the study process. It would certainly have interfered with the 'naturalness' of the data collection settings. I therefore opted for casual, verbal consent from the participants. As I was to discover during the first focus group meeting, Mr Ochanda (my local contact and guide) did not tell the study participants that they would receive a token of appreciation (300 Kenya shillings, the equivalent of a day's earnings for most of them). The fact that they agreed to participate without knowing of this honorarium spoke volumes in terms of their free will in participating in the study. I recognised that they had bestowed trust on me and that I had to be careful not to destroy this atmosphere of trust.

The use of photovoice among this group of people also posed a further dilemma with regard to de-identifying the study participants. Contrary to situations in which the researcher takes photos of the study participants, in photovoice the participants take photos of themselves. This gives them a sense of pride in the photos they take. In my study, this sense of pride was enhanced by the fact that I brought in a professional cameraman to teach them basic camera tricks. The participants were understandably happy with and proud of the photos they took. De-identifying these photos by blocking out their faces would have offended my study participants. It is from this viewpoint that this research has maintained as they are the names of the photovoice participants and their photos. This approach was also regarded as safe given the topic of this research. I considered that using the photos as provided posed minimal risks of defamation or of intrusion into private and sensitive issues.

4.5 Data analysis

4.5.1 Analysis of in-depth interviews and focus group data

In analysing data generated through the focus group discussions and interviews it was necessary to adopt a process to ensure that the analysis would stay as true as possible to the reality expressed by the participants. Qualitative data such as that generated in this study is typically organised or categorised into themes (Bogdan & Taylor 1975; Pingle et al 2011; Cilesiz 2011). Thematic analysis allows for an identification of themes as emerging strands of meaning that are key to the description of the phenomenon under study. Themes are identified through a process that requires a careful interaction with the data. The researcher repeatedly revisits both the audio and transcribed formats of the data, in an effort to increase familiarity with the data and to become aware of the various nuances of the participants' accounts.

To increase levels of interaction and familiarity with the data, I attended and co-facilitated all the focus group sections and interviews. I also personally transcribed all the audio recordings of the data. This helped me to notice and focus on what could conceivably be dismissed as trivial aspects of the conversations and yet which my analysis suggested were in fact 'all-important' to the ideas and experiences shared by the participants. Repeated visits to Kibera in 2012, 2013 and 2014 gave me further opportunities to interact with the study participants. During these visits I tested out ideas I was already coming across in the data through discussions with my participants. This helped me develop my understanding of their experiences as depicted in the data I was scrutinising.

To identify each idea or theme expressed under each conversation (i.e. each participant's response), I used a two-column table. The transcribed data was placed in the first column, with ideas extracted from each response

inserted directly opposite the conversation in the parallel column. This ensured that the ideas extracted stayed as close as possible to the information shared by the participants. Key ideas and themes and sub-themes were identified from this second column and documented separately. A triangulation of the focus group discussions and the in-depth interviews helped present what Aronson refers to as 'a comprehensive picture of [respondents'] collective experience' (1994. P. 2)

4.5.2 Analysing photovoice data

Johnson (2011) notes that photovoice is a two-step process. The first step involves taking photos; the second involves interpreting the photos. Even though folk knowledge has it that pictures speak a thousand words, Johnson (2011) maintains that it is not the images in the photographs that inform a research inquiry, but the meanings attached to those images by the respondents. Wang and Burris (1997) suggest a three-stage process of analyzing photovoice data. The first stage involves selecting photos that the participants think best reflects their most accurate response to the question. The second stage is to contextualise these photos by interpreting and thus attaching meanings to them. Finally, themes emerging from the interpretations are extracted using the same steps described above for the interview and focus group material. This study adopted this three-stage process.

4.6 Presentation of analysis

4.6.1 Vignettes

Decisions about data analysis and presentation were taken in light of the fact that this study uses an interpretive design to study the domestication of mobile phones. In other words, this study uniquely focuses on experiences of everyday life and on the interpretations of those experiences. Thus it was necessary to come up with a data presentation format that allowed the

unveiling of those experiences as expressed and interpreted by the research participants. Along with thematic presentations, I settled on vignettes and anecdotes as ideal formats through which to present the respondents' stories.

Ely et al (1997) point out that anecdotes are forms of narrative investigation that convey an interpretation of an individual's experience. Ely et al suggest that the vignette 'restructures the complex dimensions of its subject for the purpose of capturing, in a brief portrayal, what has been learned over a period of time' (p. 70). Although vignettes are primarily used to stimulate discussions around a desired topic among study participants, narratives of both types are also produced in collaboration with the participants. For example, Blodgett et al (2011) used anecdotes and vignettes to present the data or stories from their participants. They used in-depth interviews to capture the experiences of the study participants. They note that this approach 'facilitates a context in which the participants have a high degree of control over the story' (p 524). They further note that stories elicited through conversational interviews provide a deeper glimpse into the sequential events or experiences they recount.

Ely and colleagues further note that they used vignettes to 'introduce characters, foreshadow events and analysis to come' (p 70). Ely et al state describe moving vignettes as:

> characterised by a flow of events over time … used for creating portraits of people in order to describe their evolving experience. Moving vignettes have many parts that are interspersed with other discussions throughout a research report. (1997. 74)

Use of moving vignettes enabled me to present the data in a way that captured the 'biography' of the mobile phone in the lives of the interview participants. I present discrete vignettes in introducing the participants and also intersperse vignettes throughout the rest of the thesis.

In this study vignettes have been used to introduce the participants of the in-depth interviews. During the in-depth interviews, my line of questioning sought to elicit the experiences of the participants as mobile phone users from the first time they acquired a mobile phone up to the day of the interview. To develop the vignettes from these experiences, I transcribed the audio-recorded interviews and used the transcripts to generate each respondent's narrative. Each participant's narrative was used to develop the vignettes to illustrate ideas/themes discussed in the report. These vignettes were used along with anecdotes and data from the focus group discussions and photovoice data to form the basis of analysis as they relate to aspects of embedding the mobile phone into respondents' everyday lives.

4.7 Limitations of the study

Because this study used a small, non-representative sample, the findings of this study cannot be generalised to the larger population of Kibera. However, the study findings will illuminate the lived experiences of the respondents about ways in which the mobile phone has been embedded in their everyday lives (Kelliner 2005). Incorporating a focus group discussion allowed for a discussion that captures the social context of the phenomenon under study. It also allows a fair representation of ideas that to a high degree can be assumed to be the general feeling or thoughts of the wider society. This allows the findings to be applied, albeit cautiously, to a larger context beyond the boundaries of the focus group participants.

4.8 Entering Kibera

Within the modernity that characterises most cities of the world lies a world with a lifestyle that is a complete contrast. Although still within the vicinity of that modernity, the world of urban slums is a far cry from what the residents envisioned when they first moved from rural areas to the city in search of a better life.

Situated barely two kilometres from the serene ambiance of leafy Nairobi suburbs such as Woodley, Milimani and some parts of Langata, Kibera is a sharp contrast. It is a place abuzz with all kinds of activities as the residents seek alternative means of generating income in the face of ever-diminishing employment opportunities. Aside from the city council-run market, the area is dotted with small businesses all along the streets and footpaths. In addition to numerous business kiosks, one will find women with mostly vegetable merchandise spread on either side of the footpaths, hoping to sell to the passers-by. Men hang cloths from makeshift lines, calling out for customers to buy. One of Kenya's main railway lines servicing the city passes right through the middle of Kibera. Even the railway line is a beehive of activities. At any one point there are hundreds of people either crossing or walking along the railway line. More merchandise is displayed here in an attempt to get the attention of potential customers along the line.

A walk through Kibera requires careful navigation not only around the streets but also around the masses of people either doing businesses on the roadside or walking to different directions. This navigation is further complicated by the amount of litter building up beside the way, some even spilling into the middle of the road or onto walking paths. As you carefully make your way through Kibera, you must remain hawk-eyed, aware of the presence of many idle young men, who are often blamed for the insecurity in the area. Decisions about what to carry, how to carry it, where to pass through or what route to use are contingent on the perceived ease of navigation and security of the areas you hope to traverse in the course of the day. A high proportion of the population living in the Kibera slum are not in mainstream full-time employment. They rely on manual work in short-term contracts with meager pay, while others engage in small-scale businesses.

A keen glance at the environment and a scan of the faces of the people reveals a cycle of hopelessness. Joblessness and lack of income or at least lack of a decent income have dashed people's hopes for a better life. All this only serves to deepen the struggles this population faces. A day's toil could amount to about 300 Kenya shillings (approximately AUD$3.00)—just enough to buy basic cooking ingredients for the day. In most cases this will include a packet of maize flour to cook Kenya's staple food, *ugali*. A few more coins will buy a bunch of *sukuma wiki (*the Swahili word for kale, a local vegetable) as an accompaniment and a few other bare necessities such as cooking oil, sugar and milk. Very little of this money earned is saved towards other expenses such as the monthly house rent and associated bills. This meager pay is further stretched to cover other expenses such as children's education, transport and—God forbid—medical fees.

For my participants—and for Kibera residents generally—life is not about being extravagant; it is about surviving with the bare necessities. After meeting the basic needs, everything else comes in as a luxury. Items are bought with a lot of caution. Only that which is absolutely necessary is worth investing a little of the little money that residents come across. Yet in the midst of these strains, the mobile phone has become a very coveted device. As I discuss further in chapter five, the mobile phone is coveted simply because it offers desirable benefits.

It is within this context that my photovoice participants wake up every morning. With hopes of a better day, they set out on their daily activities. Handson makes his way to the water collection centre where he sells water. Khasakhala wakes up within the church compound which doubles as his home to attend to duties assigned to him. It is along these streets that Habil, who is currently unemployed, takes a stroll after finishing his house chores. Philip walks along the railway line across Kibera to Langata, where he is

currently building wardrobes in newly constructed flats. Among a host of other Kibera residents, a couple of my participants make their way to the market where they work as casuals. Very few of them own small businesses there. Others walk long distances, traversing the upmarket neighborhoods and the industrial area, in the hope of a casual work for a day.

4.8.1 Meeting focus group discussion participants.

Although I had first visited Mr Ochanda's house in Kibera in 2010, when I make my way there three years later, on a Saturday morning in January 2013, the path leading to his house does not look familiar. This experience takes me back to when I first worked in Kibera as a social worker in 1997. At that time all the alleys winding around the houses looked similar. All the houses looked alike too. I would use the same alley a couple of times with a guide before I finally recognised certain features that made me realise I had been down that alley before. Mr Ochanda, my local contact, has lived in Kibera for 30 years. On this morning in January 2013, participants of the first focus group discussion started arriving at his home at 9.30 am, half an hour before the meeting time. Once we had all taken our seats, I looked around and realised that every seat was occupied. It was a full house. There were nine people in total in attendance. I was excited that we were off to a good start. It was the first meeting, and the other two were to be held at the same venue.

It did not take long for me to realise that most of the participants knew one another. I found out during the introductions that a couple of them worked at the main market in Kibera. This meant that there was a high degree of homogeneity as required of participants in a focus group discussion. With no deliberate design on my part as the researcher, it turned out that this first group was composed of people of an older demographic than that of the groups that followed later. I estimated that participants were aged between 30 and 50 years old.

4.8.2 Second and third focus group discussion

Participants in the second and third focus group discussions similarly came to the meeting 30 minutes before the starting time. Each group had 10 participants. This kind of enthusiastic response overwhelmed me. However, it does not surprise me, given that this is an African context, where society is by tradition communal. An invitation by a friend into their homes to assist in any way is taken seriously and followed through. Initially, I thought Mr Ochanda had told participants that they were to receive some money as an incentive. To my surprise, as I found out later, he had not told them. So it was a pleasant surprise when at the end of the meeting we told them that they were all going to receive 300 Kenyan shillings as a token of appreciation. The fact that they came out of free will, not expecting anything in return, humbled me. Participants in the second group were younger than the first group. Again, a number of them worked as casual labourers in nearby upmarket homes or in nearby industries. Two of them ran their own businesses in Kibera.

The third focus group was composed of a much younger group of Kibera residents. In addition to age, something else was also strikingly different about this group: they brought their children. This group was mostly young mothers, and they brought one baby and two toddlers ranging between two and three years of age. From on the outset, the children were playing around the small crowded room. I must admit that this initially did concern me. I feared that the noise would interfere with the flow of the discussions and the recording quality as the children screamed or played around the tables on which I had placed the recording devices. I initially considered asking the parents to request the children to go outside to play. However, I realised that in this society it would be offensive to ask them to tell their children to leave the room. The presence of the children also depicted a part of the everyday life of young mothers in this kind of neighbourhood. Mothers would have the

children with them for most of the day. The children have to accompany their mothers wherever they go, whether it be to the chiefs' baraza, to the market or to visit. The scenario created was typical of any gathering of these mothers in any of their acquaintances' house. I had to let the environment be as natural as possible. Luckily, the noise did not interfere with the quality of the recording.

As I was later to note, the difference in the compositions of the groups accounted for the differences in the way the discussions flowed. Similarly, the kind of probing questions I asked differed as they were in direct response to how each group responded to the initial questions asked.

4.8.3 In-depth interview respondents

Jeremy Olukunga has lived in Kibera since 1994. That is about 19 years at the date of the interview. He refers to himself as a 'veteran of Kibera', meaning that he has lived in Kibera long enough to know it very well. His immediate family members live in Nairobi. However, he has members of his extended family living in the rural areas. He currently does not have a regular job. He depends on day-to-day contracts, especially at the construction sites. He got his first mobile phone about eight years ago. He is now up to his fifth mobile phone.

Although she did not provide the exact number of years she has lived in Kibera, Becky says that she has grown up in Kibera. She is currently working as a casual in a company not far from Kibera. Her immediate family members live in various parts of the city. Some live in Kibera just like her, while others live in Huruma and Kariobangi (both upper-low-income suburbs). She got her first mobile phone about six years ago. She is currently on her second mobile phone. She plans to buy another phone within a month of the day of the interview.

Joshua has recently graduated from a carpentry college. At the time of the interview he was not working. He tries to keep himself busy by playing football with a group of friends in the evenings. Maende got his first mobile phone about six years ago while he was still in high school. He is currently on his second phone.

Paul graduated from Saint Kizito vocational training institution in 2012. At the time of the interview he was not working. He got his first mobile phone about seven years ago, in 2005, while he was still at high school. He is married and his wife and children live in the rural areas. Although I was not able to establish how many phones he has had so far, as we progressed with the interview, I gathered that he has had at least three phones. He said his first phone was a Nokia, his second phone was a Nokia as well and he was quick to add that even the current phone is a Nokia.

Bernice has lived in Kibera for 20 years. She is currently running her own embroidery business in the main market in Kibera. She is a mother of five. Some of the children are from her first marriage and others from her second marriage. Her second husband is a brother of her late husband. She married him as is customary of a widowed woman among the Lugha community. She was expected to marry her late husband's brother. Her first husband bought her the first mobile phone she owned in 2006. She is currently on her second mobile phone.

4.8.4 Session structure

For each of the groups, the sessions began with my contact person introducing me as the researcher and Gilbert, my research assistant. Then all the participants introduced themselves. I then briefly introduced the purpose of the study and explained how the information collected would be used in future. While I used a discussion guide to focus the discussion, most of the talk was free-flowing, allowing each discussion to take its course according

to what the participants found it crucial to talk about on the general topic of mobile phones in their lives. For the photovoice sessions, the participants were asked to select the photos they wanted to talk about. Each participant first gave an interpretation of his or her photos. This was followed by free-flowing discussions around the issues raised by the respondent. I and Gilbert facilitated all the focus group discussions and interviews.

Having briefly introduced the participants and the study methods, in the next chapter I discuss my findings about my first research question, that of the appropriation of the mobile phone. ❖

Chapter 5

Appropriation of the mobile phone

To the casual eye, the acquisition of technology involves simply walking into a shop and later walking out with a technological gadget. However, behind the seemingly mundane routines of everyday life, scholars have argued that there are processes by which these technologies enter the lives of their users. As pointed out earlier, the domestication of technology theory posits that the process of acquisition begins long before the user physically takes the technology home. This is where they learn about and develop the desire to acquire it. The proponents of this theory describe the process by which the technology enters the life of the user as appropriation (Silverstone et al 1992). This process involves developing criteria about what to get, when to get it and where to get it. Consultation is also seen as a critical component of this process as the individual tries to draw boundaries between what is desirable and what is necessary (Stewart 2007; Lehtonen 2003). In this chapter I explore this process of appropriation by investigating my respondents' motivations to adopt a mobile phone, how they acquired one, the criteria they developed and the extent to which they consulted others in the process of acquisition.

Figure 5.1: 'My phone' (Source: Peninah, study participant)

5.1 Mobile phone uptake: Is the mobile acquiring ubiquitous status in Kibera?

> 'Must be a thief on the run' … not to have a mobile phone.
>
> (Becky, study participant)

In less than three decades, the mobile phone has gone from a brick-sized luxury to an essential tool for billions of people (Ling 2004). It is referred to as the most ubiquitous communication technology of this generation (Glotz, Bertchi & Locke 2006), to the extent that its presence is today taken for granted (Ling 2012). Kibera residents have not been exempt from this wave of mobile phone uptake. Asked whether there are people she knew within her immediate social, work or home circles who do not own a mobile phone, Becky responded:

> 'Let me say where I live the first contact people will ask you for is your number, they will say 'give me your number' … it is assumed that you should have a phone. If you do not, people will wonder if you are some thief on the run.'

All five other interviewees echoed Bambara's opinion. Bernice said that all the people at her workplace and all her extended family have a mobile phone. She and her husband even keep an extra mobile phone in the house for use by the children when they are on school holidays and by the lady who helps them with domestic chores. Where she lives in a church compound only two people do not have a mobile phone. John said everyone in his immediate neighbourhood has a mobile phone. After pointing out that those with mobile phones outnumber those without in his immediate circles, Moses made a general statement saying 'everyone in Kibera has a phone'. Josphat sounded very definite that 'those with mobile phones outnumber those without'.

The above comments underline the ubiquity of the mobile phone, suggesting that indeed owning one is now taken for granted. In fact, there seems to be a sympathetic attitude towards those who do not own mobile phones as alluded to by one focus group discussion respondent's comment:

> 'I think someone who does not have a phone is not their wish, it is because of lack, because everyone would like to have a phone so as to communicate easily.'

There are no available statistics of mobile phone uptake among Kibera residents. Although this study did not set out to establish the extent of mobile phone uptake among Kibera residents, the study participants provided information that indicated that it is almost (if not already) gaining ubiquitous status among them. Descriptions such as 'it is assumed you have a mobile phone', if one does not have a mobile phone, they might be 'a thief on the run', or 'everyone in Kibera has a phone' indicate that ownership of a mobile phone is no longer taken as unusual but is almost expected in the community. Although the residents' statements are generalisations, they reveal insiders' perceptions about the ownership of mobile phones in Kibera.

Given the financial constraints that the urban poor have to cope with, and the fact that communication technologies are not necessarily cheap, it is important to explore the reasons why so many Kibera residents are willing to invest in a mobile phone.

5.2 Motivations leading to uptake

In trying to contextualise one of the questions, Gilbert (my research assistant) stated that when he first desired a phone, it was just a desire. He was quickly interrupted by one of the focus group participants who said 'nowadays there is nothing like just desire'. Her remark accentuated the fact that the mobile phone had become essential for them, and indicated that there were carefully thought-out reasons motivating them to acquire one. Kaba, N'Da and Mbarika (2009) note that acceleration of mobile phone uptake has typically been attributed to macro-level factors. These have included infrastructure, the deregulation of telecommunication sectors and the accompanying result of lower operational costs. These benefits have led to lower prices for the user. However, along with others, Kaba, N'Da, Meso and Mbarika also argued that micro-level factors need to be considered as well. They argue that user characteristics also impede or facilitate the successful uptake of any innovation (Davis 1989; Kaba, Nda, Meso & Mbarika 2009). My study of Kibara residents poses more specific questions about micro-level factors influencing mobile phone uptake among the study participants.

Within the domestication framework appropriation is a process that begins long before the actual acquisition of the technology (Haddon 2003). Haddon further notes that this entails potential users imagining the potential role the technology is likely to play in their life. It includes the negotiations that can lead to either rejection or acceptance of the innovation (p. 46). Rogers (1995) and Davis (1989) provide theoretical constructs that shed further light

on the thinking processes or potential adopter's attitudes towards an innovation and the impact of these pre-appropriation processes on the final decision. Rogers defines relative advantage as the 'degree to which an innovation is perceived as better than the idea it supersedes' (2003, p. 15). Dearing (2009) notes that relative advantage focuses on the attributes of the innovation that make it more effective and more cost efficient relative to alternatives (506), thus determining the value of the innovation among other existing technologies. Compatibility is defined as the 'degree to which an innovation is perceived as being consistent with existing values, past experience and needs of the potential adopter' (Rogers 1995 p. 15). Both dimensions bring into question the functional and instrumental capabilities of the innovation. While relative advantage questions the extent to which it meets users' needs in more superior ways relative to pre-existing strategies, compatibility questions how the mobile phone aligns itself to the already existing problems or issues that users are dealing with. Both of these dimensions influence potential users' perceptions of the accrued benefits of adopting the innovation.

Davis (1989) highlights the importance of the potential consumer's perceptions of the innovation and the influence of these perceptions on acceptance or rejection of the technology. As indicated in chapter two, Davis points to two attitudes as being critical: perceived usefulness and perceived ease of use. Davis points out that people are primarily driven to adopt by the usefulness of the new idea and secondly by ease of use. This means that one would be willing to compromise on the complexity of the innovation if it promises desired gains (p. 333)

Vishwanath and Gerald (2003) linked the above claims by noting that the perceived benefits or usefulness of adoption parallel Rogers' notion of the relative advantages. Although the three constructs (relative advantage,

compatibility and perceived usefulness) originated from different theoretical frameworks, there are clear similarities between them. In all three, the potential adopter must envision congruence between the innovation and their already existing values, practices and norms. This imagining forms the basis for forming positive or negative attitudes towards use and perceptions of expected satisfaction from use of the innovation.

One of the first questions I asked the Kibera participants was their reason for acquiring a mobile phone. This generated discussions during which participants compared the present situation with the period before the introduction and high uptake of mobile phones. Participants revealed an array of potential benefits they hoped to reap from acquiring a mobile phone that were much better than the then already existing communication strategies such as letters, telegrams and the landline telephone. These comments were consistent with Rogers (1995) notion of relative advantage. Essentially, participants conceptualised the perceived usefulness of the mobile phone in terms of the relative advantage it had over earlier forms of communication.

5.2.1 Increased and convenient connectivity with family and friends

Against earlier communication modes (e.g. snail mail, telegrams), the introduction of telephony has generally been credited with providing users with easier and more convenient connectivity between individuals. The introduction of the landline telephone in the early 20th century was already celebrated for making users feel close to their significant others who were geographically distant (Keller 1977, Dimmick, Sikad and Patterson 1994). The mobile phone has taken this a notch higher. One of its undisputed contributions is the way it is redefining space and time. It is blurring the lines between those who are present and those who are physically absent (Ling 2004, Ling & Yttri 2002; Licoppe 2004). My study respondents said that they

bought their mobile phone because they wanted to be able to better connect with those at home.

Widely described by cultural anthropologists as a 'group oriented culture' (Samovar, McDaniel & Porter 2010), African cultures place a high value on relationships and members identify ways of cultivating and maintaining those relationships. This practice has led those living in the city to develop ways of staying connected with those they have left behind in rural homes. Respondents of my study frequently referred to 'home' or the 'the people at home' meaning the rural homes and their family members living there. Data reveals that they find it very important to keep in touch with those at 'home'. Prior to the mobile phone this was done by sending letters through the post office, sending a telegram or sending someone who was traveling to the rural areas to deliver messages to one's kinsfolk. At times people waited until they were able to make the long journey to the rural areas themselves. Study participants commented that these earlier modes were time consuming and financially costly. The level of trust in other travelers to deliver messages properly or promptly was also low. Implicit in these comments is the sense of the compatibility of the mobile phone. It fitted into their already existing practices.

One participant described the situation of writing a letter to her mother informing her of her impending visit to the rural areas. In the event that the participant changed her mind, it was impossible for her to send another message in good time to cancel the visit. This meant that her mother would go ahead and prepare a good meal in anticipation of her daughter's visit. The participant said that it was necessary to acquire a mobile phone so that she could make this communication about visits easier. Another participant gave an example of sending a message about a death in the family but the message not reaching the intended recipient in good time for them to attend the burial.

That meant the ceremony happened without their knowledge. She concluded by pointing out that it was necessary to get a mobile phone to avoid a replay of such scenarios.

The desire to be 'in the know' is also an important factor influencing acquisition. Some participants said they bought mobile phones in order to stay in touch with others and know what was happening in their immediate family and social circles. The mobile phone was envisioned as enabling the user to simply 'check on how people are doing'. One participant said 'I bought a mobile phone so that I could communicate with my mother'. Another one explained how she would repeatedly be out of the loop of what is happening within her circles of relationships simply because she did not have a phone. She bought a mobile phone so that she could stay informed of events taking place around her.

5.2.1 Privacy and inconvenience

The personal nature of the mobile phone allows the user to have direct contact to an individual. Users can create private spaces even when they are in open shared spaces. People have developed all manner of ways to create these spaces. This may include taking a few steps away, lowing their voice or even preferring to suspend a voice conversation until it is convenient to talk. My study participants said the public and impersonal nature of earlier modes of connecting with significant others living far away compromised privacy and were inconvenient. Sending someone else to deliver a message meant that the individual had to know what the message was about. Sending messages using public transport was risky. There was a possibility the message would not be delivered to the intended recipients. In some cases, it would not arrive at all. Use of public telephone booths, although seen to be a much easier option, was also frought with its challenges. One participant

comically re-enacted the use of the public pay phone and the challenges that users faced back then:

> 'We used to make a queue to get into the box booth???....ehhh. You had to have many one shilling coins full in your palm, so that once you are in, you know you do not have another chance for getting in, once in, you put that thing here (receiver? Yes), you drop in the first one, you hear it going down kokokokok!!! (Laughter in the background). Ahayaa!! Hallo!! You tell them a few things, then that shilling runs out, then you add another one and another one. In addition to that, there were no secrets. 'I am saying, we meet' [mimicking loud conversations] all the others on the queue are listening to you [loud laughter in the room—indicating familiarity], and again those on the queue are not happy because you have taken a long time and yet you want to exhaust the money you have already put into the booth.

The above recount captures several challenges:

- cost and time consumed queuing in wait to use a public pay phone
- the lack of privacy for one's conversations
- the possibility of irritating others on the queue if one stayed too long in the pay phone—an irritation that seemed unavoidable since callers had to stay until they had used up all the money they had already inserted into the pay phone.

5.2.3 Literacy

The oral nature of the mobile phone has been said to make it particularly appealing to cultures that are described as oral (Hahn & Kibora 2008, Brady, Dyson, Asela 2008). The challenges of using the postal services were further compounded by low literacy levels. They said that if you did not know how to write you had to dictate your message to the post office staff for them to write it. Again this compromised privacy. There was also the possibility that

you would write the wrong address on the envelope and the letter would end up at the wrong destination. The mobile phone is seen to offer a friendlier and easier way of executing the same activity. Its oral nature means that one can use it without having to write or read.

5.2.3 Money transfers

Participants said that they were also looking for an easier and more efficient way of sending money to loved ones.

One of the most universally acclaimed innovations of mobile phone use in Kenya is its functionality as a money transfer system through the system known as M-pesa (*M* for mobile, *pesa* for money, thus directly translated as mobile money). This application was introduced in 2007 by one of the leading mobile phone service providers in the country, Safaricom. It offers basic financial transaction services to what was previously a majority of unbanked Kenyans. Using the SMS function, the account holder can send or receive money, deposit money etc. One of my focus group participants, Moses, saw the relative advantage M-pesa offered in aiding him to send money to and receive money from family members living far off. This motivated him to get a mobile phone of his own. He said

> 'I was not able to communicate, so I thought I must buy a phone. In addition, I wanted to be able to send money home easier instead of using the post office or the public transport.'

Moses' perceptions were echoed by Maende, who was studying in the rural areas when he got his first mobile phone. He wanted to be able to talk to his relatives in the city and have what he saw as a convenient way of getting financial support from them through M-pesa. One woman described the traditional ways of sending money and the challenges experienced. She talked about sending money to one's mother living in the rural areas. She pointed out that a couple of people would be required to pass the message to

the mother, telling her where she should pick up the money. This meant that by the time the mother got the money, there were many other people in the village that knew that money had been sent and as she put it 'they would all start budgeting for the money'. By this she meant that they would plan to borrow some of the money the mother had received. She notes that the mother would find it difficult to deny them since they all knew that some money was sent and they probably knew how much as well. She said that it was important to get a mobile phone in order to avoid a repeat of such incidents.

5.2.4.Challenges of sharing mobile phones

Literature describing mobile phone use practices among the poor have pointed out various practices that this cohort of mobile phone users have developed to circumvent related costs. One of them has been the sharing of mobile phones (Donner 2008, James & Mila 2007). However, a more recent publication by Sey (2011) exploring the practice of mobile phone sharing in Ghana points out that most respondents preferred and were aspiring to own their own mobile phones. This was reflected in the responses of my study participants. They pointed out that a desire to stop borrowing other people's mobile phones led them to want to get their own mobile phones. Challenges of mobile phone sharing included inconveniencing the mobile phone owner and the borrower, lack of privacy and the risk of losing money. For instance, they wanted to overcome the inconveniences of borrowing other people's phones and the probability of being denied. One focus group participant said:

> 'I bought a phone so that I could communicate with my mother ... it becomes difficult to borrow from someone, some tell you that they do not have credit, when you suggest that you will buy the recharge, they tell you to wait a while and then they disappear.'

Her sentiments were immediately echoed by another respondent: '*Some* people do not like sharing their phones.' This comment was followed by sounds of agreement from the other participants in the room. They found it better to have their own mobile phones that they could use at their convenience. Another focus group participant said:

> 'Sometimes you borrow from someone a phone and they refuse to give it to you and that time you have something important you want to communicate using the phone and yet they deny you. So that contributes [to wanting to have one's own] so that you can use it whenever you need to.'

The sentiments expressed in the above statement are akin to those expressed by another focus group participant:

> 'You know you might go to borrow from someone and find that they have slept. You cannot knock at their door and wake them up … maybe you have something urgent, so if you find the person is asleep, what will you do? … you end up being determined and resolve that you will not be waking this person up to use their phone; it is better if I have mine. Even though it is just a 'kavodafone' [alluding to a cheap phone] at least that is better.'

The borrowing of other peoples' mobile phones was also seen to compromise privacy. When asked for more reasons that motivated them to acquire their mobile phones another participant said:

> 'There are many reasons, for example I might have something private to talk to you about and because I do not have a phone, I will go to borrow from this one [pointing at one of the participants]. The fact is that I will not go out with their phone and talk from afar. I will be forced to talk from right close to her. … at times they might require me to tell them what I want to communicate.'

As will be explained in detail in chapter six, lack of privacy was further compounded by the type of rules that those who owned phones developed

in a bid to control the loan of their mobile phones to others. They preferred that the borrower use the mobile phone in their presence. This made the borrower feel that the person was eavesdropping on their conversations. Others required that the borrower tell them what they wanted to talk about. This was done to determine the urgency of the situation and whether it warranted them allowing the individual to borrow their mobile phones. Others insisted that the borrower give them the phone number for them to dial for them to ascertain that they were speaking to the individual they claimed to want to talk to.

Risk of losing money

Another motivation Kibela participants mentioned for buying a phone of their own was that one risked losing money as a result of sharing others' mobile phones. Prior research points to the fact that sharing mobile phones among the poor in some cases constituted sharing the handset and not the credit (Donner 2006). This allows the borrower to buy credit and put it into the lender's SIM card. Participants in this research expressed fear that they would lose money and so they wanted to acquire their own mobile phones. They gave examples where they credited someone else' phone but did not use up all of the credit. This meant that the phone owner would benefit from it. This is captured in statements such as the one below by one of the focus group participants:

> 'Other times for example if I do not have a phone, I go to a neighbour or anybody else who is close by, they would help me with their phone, I put my money in there [recharge], and I have a reason as to why I borrowed the phone. Before I finish the conversation, or let's say the person I am calling tells me to give them five minutes and they will flash me so that I can let them know what I wanted. By the time they flash the owner of the phone might suddenly say that they want to go, and want their phone back … and

> you have to give it to them and they go their way, and that becomes strenuous between you and that person and your money goes just like that. So that makes me think I had better try my best, even though it is just for 500 shillings I get mine, so that I can rely on mine and not somebody else's.'

The same challenge influenced Beatrice's late husband to buy her a mobile phone. She was living in the rural areas at that time while her husband lived in the city. Whenever Beatrice wanted to talk to him, she credited her sister's mobile phone. She said that sometimes she talked very briefly before the sister-in-law would tell her that her credit was finished. This became a potential source of conflict between Beatrice and her sister-in-law. The husband bought her a mobile phone to avoid that happening again.

Risk of losing mobile phones

Based on the above observations, I sought to clarify with my focus group participants whether whether the practice of sharing mobile phones is reducing or dying out. One woman immediately burst out laughing. I enquired why she laughed and she said 'I laughed because of the issues of sharing phones, even me I do not like lending my phone to others'. There was a light moment in the room as everyone else laughed. I thought they laughed either because of her honesty or because they could identify with her views. She continued to explain that she had previously lost a phone by lending it to someone. The person pretended to simply step aside to speak on the phone and then they disappeared with it. This means that while those without mobile phones did not want to continue borrowing other people's phones, those who owned the phones did not want to continue sharing their phones as well. These practices will be explored in detail in chapter six when I discuss rules governing mobile phone use.

5.2.5 Conclusions

The perceived usefulness of the mobile phone in facilitating already existing practices among the study respondents was a motivation in its uptake. They primarily envisioned congruency between the mobile phone and their already existing practices, values and norms. For example, they value relationships and they engage in a host of activities that help nurture and maintain those relationships. That is why they bought the mobile phone: to enable them to keep in touch with those at home (i.e. family members living in the rural areas), to send money to them or to simply check on them. Thus it was perceived as compatible with practices that already existed.

The life of the poor is more often than not a delicate balance of daily survival. Their economically strained environment requires them to carefully think through their investment practices, only diving into those that promise immediate gain (Wong 2010b). As Prehalad and Hammond (2002) argue, potential adopters of innovations are willing to spend on things that promise to improve their lives. Although the mobile phone may seem expensive, participants envisioned it as offering immediate gains by providing a more efficient, reliable and affordable platform to execute their daily activities. It thus offered a relative advantage over the earlier platforms. The mobile phone is seen to offer a faster mode of communication than traditional snail mail. Numerous journeys between the city and the rural homes in a bid to deliver financial aid or other types of support could now be minimised. The associated costs could also be avoided by simply sending the money via M-pesa services. Letters and telegrams required some level of literacy. Participants said that literacy was no longer a barrier since the phone uses audio. In essence, the mobile phone was seen to overcome challenges that plagued the previous modes which were time consuming, costly and unreliable.

Although mobile phone sharing has been widely explored among poor communities, a unique dimension emerges from the current study. Previous research has presented phone sharing as a form of allowing access to the benefits of the mobile phone and as a mode of circumventing cost (Donner 2006; Rashid & Elder 2009; Sey 2011; Wong 2010a,b). However, for Kibera participants it seems that the desire to stop borrowing other people's mobile phones became a catalyst for many to acquire their own. A more recent study exploring mobile telephony among the poor in Ghana similarly pointed to the fact that participants desired to buy their own mobile phones and not share. More recent surveys in Kenya also corroborate the above conclusions. They indicate that there is less sharing of mobile phones among the poor than previously. In a World Bank publication, Demombynes and Aaron (2012) report a survey finding that 80 per cent of Kenyans adult were making calls from their own mobile phones. Only 10 per cent were calling from mobile phones owned by people within their household and the remaining 10 per cent used mobile phones of people not within their household. These findings points to the need for a further research on the extent to which mobile phone sharing is still practised among the urban poor today.

Wong (2010b) also notes that early phone use experience among the poor was typically not shaped by actual ownership but rather came from sharing other people's mobile phones (p 23). The Kibera focus group respondents reflected this as they shared their experiences of borrowing other people's mobile phones prior to acquiring their own. Given that communication technologies are expensive enough that users do not buy them on impulse, it is difficult to simply have a phone for trial purposes before purchase. Opportunities to share the phones of family, friends, colleagues or neighbours provided the primary opportunity for trialing the technology. Eventual purchasers perceived usefulness of the mobile phone was largely

anchored in these earlier experiences. They provided both a 'foretaste' of the benefits or usefulness of the phone and a practical experience of the relative advantage the mobile phone would have over the earlier communication platforms such as the landline telephone and telegraph. Thus sharing became a catalyst for an individual to desire to acquire their own mobile phone.

The fact that the desire to stop sharing mobile phones was a motivation to acquisition of a mobile phone is indicative of the fact that the respondents were not among the early adopters of mobile phones in Kibera (Rogers 1995). They pointed to the fact that there were people close to them (a neighbour, a friend, a family member) who already owned a mobile phone that they could borrow. This, coupled with the fact that a number of them acquired mobile phones six to eight years ago, at the time Kenya was experiencing almost a doubling-up of mobile phone uptake (ITU 2013), indicates that focus group participants were among the early and late majority adopters. Rogers defines this category as constituting the largest percentage among the five categories of adopters. These adopters keep many informal contacts and only adopt a innovation after they have observed its benefits from the early adopters and the innovators.

This section has shed light on the motivation behind mobile phone acquisition among the study participants. The above findings can be understood in the context of Diga (2008, p. 2) assertion that 'The mobile phone gives people a sense of opportunity … it offers the potential for dramatic immediate change'. The study participants seem to have envisioned the immediate benefits of having the mobile phone. It was to have a direct impact on how they attended to activities that were already part-and-parcel of their everyday lives. They were to achieve the same goals more conveniently, with higher efficiency and in a less costly and less time-consuming fashion. It was compatible with their routines and practices.

5.3 Process of acquisition.

'Kulingana na mfuko' (it depends on the pocket)

5.3.1 Ownership takes place

While the acquisition of older communication technologies such as the television has been portrayed more as a family decision, this seems to differ from the way that personal communication technologies such as the mobile phone are acquired. While some buy it themselves, others are gifted. For example, Bells (2006) study of young adults in Asia indicated that participants' parents bought their mobile phones for them. In Rakow and Navarro's (1993) study, the women said that their husbands bought them the mobile phones. In Hijazi-Omari and Ribak's (2008) study, young Palestinian teenagers in Israel said that their boyfriends bought the mobile phones for them.

In exploring the process by which the study participants acquired their mobile phones, I have already noted that most participants were onto their second or more mobile phone. This prompted me to investigate acquisition at two levels: acquisition of the first mobile phone and acquisition of the second and subsequent ones. The way they acquired the first mobile phone varied among the study respondents. They were either given the phone, or given money to buy the phone.

Paul was bought his first phone by his father. He says that it happened at a time when his father required him to travel to Mombasa (a coastal town in Kenya) to visit a sick relative. Paul's father bought him the phone so that he could update him on the person's condition upon arrival. Paul was not consulted on the type of phone he wanted. His father bought the phone and gave it to him. He says 'at that time, I could appreciate any thing' (meaning that he was happy with any type of phone). It was a second-hand phone.

Joshua is orphaned. He lost both of his parents when he was very young. Before moving to the city, he lived in the countryside while the rest of his family lived in Nairobi. He occasionally contacted his relatives for financial assistance. He did this by borrowing his friends' mobile phones to use. He described this as challenging and looked forward to having his own phone so that he could communicate more conveniently. His brother gave him money to buy his first mobile phone. He prides himself on the fact that he went to buy the phone himself in *Ingo* (a Luhga term for home, or home town). It was a new phone bought from a shop.

Becky was gifted her first mobile phone. A friend she previously lived with gave her the money to go and buy it. With a sense of pride just like Joshua, she says that the person gave her the money, but she went to the shop herself and decided on the model.

Bernice's first mobile phone was bought for her by her late husband. She was not consulted on the type of phone she wanted. She says 'he himself decided what phone to buy … I just found out he had bought me a phone'. It was a Motorola C113.

Jeremy was bought his first phone by his employer at that time. He worked as an office assistant. His job involved a lot of activities out of the office. His boss wanted him to be easily reachable in case he needed to be assigned other errands while he was already out of the office.

Mathew bought his first mobile phone second-hand from a friend of a friend. According to him, there were no choices with this first mobile phone.

Except for Mathew who bought his own phone and Becky who did not indicate the specific reasons that led her to acquiring a mobile phone, for the rest, specific events or desires to address certain circumstances seem to have compelled them or those that gifted them with mobile phones to do so. For

Paul it was because he was travelling to Mombasa to see a sick relative. Joshua's relatives found it to be the ideal way to send him money for his school fees and upkeep because he was living in the countryside by then. Bernice's husband wanted to bring to an end disputes between Bernice and his sister.

However, all the focus group participants bought their second and subsequent mobile phones. This indicated deliberate decisions and ownership of the process of acquisition.

Asked whether his current phone was the same phone he had been given by his father, Paul chuckled and said 'oh no … no … that phone got lost, so I had to look for another phone by myself … and because I had started catching up with the times'. Asked how he lost his phone, he said 'you know how it is in the 'hood?' referring to the Kibera slums neighbourhood. Unfortunately, he lost his phone when he was robbed one early evening in Kibera.

Mathew's second phone was second-hand as well. Again, he bought it from a friend's friend. Only two of the more recent phones that he has bought have been first-hand from the shop. He proudly clarifies that he has never been given a phone by anyone. He buys his own phones. Neither does he lose his phones. Usually he gives his family members the old phone and buys himself another one. He gave his first phone to his children and wife to share after it got spoilt. Other times he 'sees if they want a phone', and he gives them what he has and gets himself another one

When Bernice lost the first mobile phone, she felt that she must get another phone. She was already used to having a mobile phone. She found it crucial to get another phone immediately. She bought the second phone herself. She started saving towards a new one. She said that at one point she put aside her month's salary towards the purchase of another mobile phone.

Jeremy and Becky similarly bought their second and subsequent mobile phones after losing the first one.

5.3.2 Replacement of mobile phones

There is limited existing literature on mobile phone replacement. This is unexpected given among many populations, users are no longer on their first mobile phone devices they are on the second and some more than two. The little that there is heavily focuses on the environmental implications of mobile phone replacement and disposal. Strikingly obvious as well is the heavy focus on the adoption of the first device of an innovation (as demonstrated by studies on diffusion and consumption), with relatively little focus on subsequent acquisitions of the same device, or what are known as repeat acquisitions.

One of the few relevant studies with regard to phone replacement is Huang and Khai (2008). It refers to a 'disposable technology paradigm' to describe the current communication technology landscape whereby the newer interactive communication technology devices have a relatively short usage lifetime (p. 323). These technologies are bought with the hope of replacing them within a shorter period than most of the older technologies such as televisions, radios or cars. Available statistics indicate that the lifespan and length of usage of mobile phones differ from society to society. A US study of wireless mobile phone evaluation concluded that American consumers use their mobile phones for an average of 17.5 months (cited in Huang & Khai 2008, p. 323), while consumers in countries such as Brazil will retain their phones for as long as 80 months as documented by a 2010 survey (cited in Entner 2011 page 2).

Reasons for replacing mobile phones have been documented primarily as the need to upgrade from a previous model, attractive contract offers by service providers, lack of desired features or functionality in the old phone

(Huang & Khai 2008). According to Huang and Khai, very few phones are replaced due to loss or because they are damaged. Users will typically replace their phones by giving the old one away to others (mostly family members). Some will throw away the older one, while others sell theirs second-hand. These findings differed from those of Karjaluoto and colleagues (2005). In addition to exploring factors influence mobile phone acquisition, Karjaluoto et al also explored factors influencing changing mobile phones in Finland. Top on the list was technical problems. This was followed by the need for newer features. Interestingly Karjaluoto et al's research also noted that many preferred to stay with the same model. This was primarily due to the fact that they were familiar with the phone's user-interface (pg. 72).

It is apparent that reasons for replacement among Kibera residents differ significantly from the above assertions. In his study focusing on the urban poor, Portus's respondents described the mobile phone as a robbery magnet (2008, 117). As noted above, Paul, Becky Bernice and Jeremy all lost their mobile phones. They said that they were stolen, leading them to buy another one. Even participants who were onto their third and fourth device indicated that they had lost each of the earlier ones and so needed to buy another one. This was also frequently mentioned by the focus group participants. Only one participant said that they replaced the earlier devices because they wanted to upgrade. Paul's statement 'you know how the 'hood is' resonates with Portus's observation about the security threat mobile phone users face in the slums and the high probability of one's mobile phone being stolen because it is a valuable device.

5.3.3 Criteria

Technical devices are usually expensive and so users do not often buy them on impulse. Choices of new technologies such as mobile phones usually require well-defined criteria (Lehtonen 2003). The mobile market is

characterised by multiple players, each offering diverse options. Thus potential adopters are constantly faced with tough decisions, needing to choose between a wide range of options: models, sizes, service providers, colour, prices, phone interface, durability, and portability to name a few. All these factors have different degrees of influence on the decision-making process. Karjaluoto et al (2005) explored factors affecting consumer choices of mobile phones. They concluded that price is a key determining factor in choosing between different mobile phones particularly among lower income earners. The would-be-adopters set a price limit. This inevitably restricts their choices to fewer models (p. 68). The phone's interface—a dimension related to ease of use—was equally rated as a strong influence on the choices made. Karjaluoto et al noted a bias or preference for phones that have functions that were already familiar to users. Other factors influencing choice were the size and brand of the new mobile phone. Properties of the phone (e.g. new features) were rated as the factor of least influence.

With their first mobile phone Kibera participants expressed the need to have a mobile phone over and above any need for criteria such as colour or size in selecting the model of the mobile phone they wanted. Mathew said 'all that people wanted at that time was to get a phone'. Paul said 'at that time, I could appreciate anything.' When Jeremy acquired his first phone, the 'model was a non-issue'. He simply wanted a mobile phone. Participants also noted that when phones first entered the Kibera market, there were limited choices. Mathew pointed out:

> 'all the mobile phones were big, but that did not matter. It was still looking good because there was nothing else to compare with … at that time, one just wanted a phone … the size was not an issue, since the biggest need was met—that of communication and sending money via M-pesa.'

These sentiments were echoed by Becky, who said that at the time she got her first mobile phone, choices were limited. For example, according to her, all the phones were black and so there were no colour options to choose from.

Despite the fact that the mobile phone is the most accessible communication device among the poor, cost is a potential deterrent to adoption (Rashid & Elder 2009). Given the economic constraints the poor experience, it easy to see why the cost of the mobile phone would be a major criteria in acquisition. Among Kibera focus group participants, apart from simply the need to get a mobile phone, the most important criteria for choosing the phone was its cost. Participants repeatedly said that they would decide on what type of mobile phone they would buy *'kulingana na mfuko'* (depending on the pocket), which meant 'according to the money one had at one's disposal'. Bernice wanted to buy a phone that 'agrees with the pocket'. This was echoed unanimously in two of the focus group discussions. Participants said that the 'pocket' (meaning money available) was the main determinant of the type of phone they opted for.

Apart from wanting a Nokia, Paul's choice of the subsequent phones was determined by the money that he had at the time of purchase and the time he had to get another phone. He said he could not afford to have too much time elapse without a phone. At that time, 'if you did not have a phone, you did not have a job'. It was critical in his search for a job.

Becky had heard people talking about Nokia being a good mobile phone, so she bought a Nokia. Even though she was keen on specific features, the money that she had was the main determinant of the kind of phone she bought.

Colour, size or models were not a priority in choosing the kind of phone Bernice bought after the first one. The main criteria was to simply get a

mobile phone. However, she was cautious of her other financial obligations. She said 'a phone that first and foremost agrees with my pocket'. She explained, 'I cannot buy a phone costing 20,000 and I cannot afford it. How can I buy a phone of 20,000 and my children are home for lack of school fees?' She further explained that while it is good to have a phone with a radio, it is much better to get one that is pocket-friendly

However, Joshua was an exception to this. He bought a Nokia 1600. It was large and black. Asked about the criteria for buying that particular phone, his response was 'because the price was high'. Taken a little aback by the unexpected response, I inquired why he went for the expensive phone. He responded: 'It is better to buy a phone with a lot of money than one that is cheap and then it gets spoilt.' He bought a phone like his friend's, one that could withstand occasional falls and still remain firm and strong. He pointed out that the model of the phone he bought was good. However, he did not like its body. It was a very easy phone to use. He said, 'even someone who has never gone to school can use it easily.'

Respondents tended to develop more refined criteria with the subsequent phones they acquired, although these criteria were subservient or secondary to the cost of the phone and need for it.

Paul said 'but after sometime I started choosing the phone I wanted'. He explained further by saying this was because he 'had started catching up with the times'. His second phone got lost and so he is onto his third phone. This time around he wanted to get a phone that he could use to access Facebook, 'even though [internet reception] is not clear, it is better than not having access to the internet at all'. He did intimate that he plans to buy another phone because he has 'entered another life now', pointing to the fact that he is no longer a student and so he would like a phone that goes with his new status. He would like the next phone to have better internet reception.

Bernice lost her third mobile phone and at the time of the interview was onto her fourth mobile phone. This time around, she wanted a phone that was different from the other three that she had lost. Her husband told her that Nokia was a good phone as well. She wanted one that had longer battery life

For his second mobile phone, Jeremy preferred a smaller phone that was easy to walk around with. He bought an Erickson. This is because it was small enough to fit into his pockets. He jokingly said that the Motorola was regarded as older women's phones because they could carry it in their handbags. Jeremy explained the need for a small phone because the local thieves could be extremely forthright:

> 'because at that time if your pocket was bulging because of something, they would suspect that is a phone … and I will not lie to you. At that time, sometimes people would tell you to finish talking with the phone and then give it to them.'

Unlike the earlier ones, with the more recent mobile phones Jeremy has bought he has had more defined criteria informing the phone selection. He wanted a phone that could allow him to browse the internet. He wanted one with a camera and radio too. He wanted one with which he could take photos of his children and wife. He said that while travelling out of the city, he finds it important to have their photos with him. Whenever he misses them, he pulls out his phone and looks at them. That makes him feel better.

Mathew buys a different phone every time. He is careful to buy one that has good signal reception and long battery life. Similar criteria were expressed by Moses. After noting that he simply wanted a phone when he got his first phone, for his second phone Moses wanted what he described as 'a good phone'. To him, a good phone would have internet access, a camera, a radio and long battery life. He explained the importance of not having a

phone that one has to recharge frequently. He said, 'charging a mobile phone uses electricity and electricity is paid for. That has the potential to increase the monthly electricity bill.'

A further refinement of the criteria is likely to accompany participants' choices of the phones they desire to have in the future. Although colour was not a determining factor for Becky when she bought her first phone, today it would be one of the criteria she would use to decide on the type of phone she wants. Her current phone does not have access to a radio. She says that the next one (that she planned to buy within a month of the date of the interview) must have a radio. Paul said that he plans to get a phone with better internet reception. There are instances where some of the participants demonstrated reluctance to venture into new models, deciding to stay with the same model they previously or currently owned. Bernice and Paul went for the same phones they had previously: a Nokia 1300 and Nokia 2600 respectively. They found these phones easy to use.

Criteria for what to buy included not only the model but also where to buy it. Again, issues of trust were highlighted here as a couple of participants said that they couldn't buy their mobile phones in Kibera. They believed that they are likely to be conned. They prefer to travel to the city centre to buy their mobile phones. Once in the city, they further discriminated between the kinds of shop where they would buy their mobile phone. A couple of the participants indicated higher trust for the shops owned by telephone service providers such as Safaricom and Celtel.

After pointing out the fact that Kibera streets are lined with shops selling mobile phones, Paul said he does not buy his in Kibera. He opts to travel to the city centre to buy his phones. He said that one is likely to buy a fake phone in Kibera. Once in the city he does not buy from just any phone shop. He buys his phones from shops that are owned by the mobile phone service

providers such as Safaricom or Celtel. He believes that he is less likely to be conned in these shops.

Becky was emphatic that she only buys her phones in the city centre. She does not buy her phones from phonexpress (one of the mobile phone shops in Nairobi) for a couple of reasons. First, she finds them expensive. Second, they are not open to the buyer negotiating for a bargain. In contrast, she finds the sales assistants in the city centre more approachable. The products are labelled and prices tagged. This makes it easy to understand the different models on display. She particularly prefers the Safaricom dealership shops.

Mathew also does not buy his phone from Kibera. He buys them from the city centre. He decides the shop to buy from in town based on how friendly and trustworthy the sales assistants appear. He says 'you have to look around or you survey … because you might go to a shop and judge whether they are good people or not.'

Asked whether he buys his phones in Kibera, Jeremy was emphatic: 'N … no … no! I always go to town.' He likes purchasing his phones from a service provider's shop such as Safaricom. He believes that their products are genuine.

Before buying her second mobile phone, Bernice made numerous visits to the mobile phone shops in the city to window shop. This made her familiar with the type and cost of the phone she wanted to buy as she saved for it.

Bernice's explanation probably gives us a further clue as to why shopping in the city centre is preferred to shopping in Kibera. Her husband warned her that the phones in Kibera could be stolen goods and if she were caught with one, the police would charge her with handling stolen goods.

5.3.4 Consultation

Decisions about what, where and when to buy are often not made alone. Instead, they are often shared among one's social networks (e.g. Nafus & Tracey 2002; Stewart 2007). Scholarship in both adoption and consumer studies have highlighted the role played by one's social networks during the acquisition process. The influence of interpersonal communication in the process of adoption was highlighted in the very early works of Katz and Lazersfeld (1955). They noted that 'communication [of an idea or innovation] will be effective for an individual when it aids him in rising in the esteem accorded to them by his friends' (p. 27–28). In this case the perceptions of one's significant others influence the potential consumer's decision to adopt or not. Rogers (1995) presents a five-stage process of adoption and highlights the information seeking behaviour of the would-be adopters. He argues that after becoming aware of the existence of the innovation, the potential adopter deliberately searches for any related information in an effort to learn more about it. This information could range from the cost of the innovation to its potential benefits. Deliberate interactions with one's networks in a bid to gather as much information as possible are key in the final stages of deciding whether to adopt the innovation or not. Rogers argues that the values of one's significant others (members of the same social network) influence potential consumers' decisions to adopt or not.

These notions have continued to be explored by contemporary scholars. Lehtonen (2003) describes a slightly different process of acquisition, but still at its core are the same ideals that were articulated by Rogers as well as in the earlier works of Katz and Lazersfeld. All these scholars define pre-acquisition as a period characterised by recognition of need and information-seeking behaviour in an attempt to test the compatibility potential of the innovations, as well as to define criteria for selection. Lehtonen (2003) refers to these consultants as warm experts and highlights their role as helping the user fit

the innovation into their everyday life. Venkatesh et al (2003) similarly captures these notions. They point out that social influence is the degree to which people think that significant others want them to acquire something. In this case, ownership becomes a form of image or impression management. Bauwman et al (2012) argue that this social influence can affect people's intentions to use more advanced mobile phones and applications (p. 172), more so when users are replacing older models with newer ones. This is because they are concerned about how others are going to view them.

Scholars in consumer studies have similarly highlighted the process of the acquisition of products. These studies give particular insight into the reasons one's social networks become crucial during the acquisition process. Theorists argue that it is a process that is accompanied by some level of uncertainty. Would-be adopters experience anxiety as they select from among a wide array of options, trying to judge the value of the innovation, understand its usability and ponder its cost and affordability. Studies note that one of the ways potential consumers temper this uncertainty is by engaging in information seeking (Turnbill, Leek & Ying 2000; Leek & Chanasawatkit 2006; Stewart 2007). Having to deal with a highly commercialised mobile industry, a would-be user of mobile phones is obviously not exempt from this anxiety. The ever-evolving host of choices in terms of models, functions, sizes and colours present a more complex terrain for one to navigate, thus potential increasing one's uncertainty level.

My study respondents engaged in consultations in an attempt to draw boundaries between what to buy and what not to. Paul asked his friend to accompany him to the shops to buy his first mobile phone. His friend recommended that he buy a phone just like his, which Paul did.

Asked whether she had asked someone to accompany her to the shop to buy her mobile phone, Becky emphatically responded *'Yes!'* She asked a

friend. She chose him because *'boys are good with electronics'*. She said that this friend would have been able to alert her in the event that she was being conned. He was also able to give her advice on what to buy.

Bernice consulted her friend on the type of phone to buy. The friend recommended a Nokia C117 against the one she had just lost, a Nokia C113. Bernice's husband approved of this recommendation. As noted earlier, Bernice's husband gave further advice on where to buy the mobile phone, preferring the shops in the city over the ones in Kibera.

These practices were also reported by other focus group participants. Zynap asked her sister-in-law to go to the city and buy her a mobile phone. She notes that she asked her relative because she already owned a mobile phone. Based on that she believed that the sister-in-law knew a lot about phones and so she could trust her to make the right choice for her. Another participant asked her son to accompany her to the shop and advise her on the model of mobile phone to buy. A young focus group participant asked her uncle to accompany her to the shop to buy her phone. She considered that her uncle was very good with phones. In fact, he helps a lot of people with the process of buying their phones, in a way playing the role Stewart (2007) refers to as a 'local expert'.

Consultation was done directly or indirectly before purchasing or at the point of purchasing the mobile phone. Although Matthew does not explicitly state that he consulted when he was buying his first mobile phone, the fact that he bought it from a friend's friend indicates some level of consultation. Jeremy said that although he did not directly consult people while deciding what to buy, conversations he had previously had with his peers about the models, functions and capabilities of the various phone influenced the decisions he finally made. On the other hand, as noted above, Becky and Bernice engaged in direct consultations.

Who is consulted?

There is general consensus in literature that the list of those consulted typically includes those with both formal and or informal positions relative to the one seeking help, meaning that their expertise may arise from formal training in the relevant area or not. Those in formal positions include those in authority or experts; those in informal positions include friends, family members and neighbours. Someone's position in relation to others may bestow some level of authority and they may thus act as a consultant (e.g. parents, spouses). In other instances, it may be because the person acquired the technology earlier and so is deemed to be already astute with the functions of the technology. Over time, various terms have been used to describe these individuals: opinion leaders (Katz & Lazersfeld 1955) and change agents (Rogers 1995). In investigating this concept in the adoption of interactive communication technology, Stewart (2007) introduces the notion of local experts. He sees them as playing an important role in the sustenance of informal networks and in the process of integrating innovations into the the everyday lives of those in the network. Local experts do this by providing a range of information, by assisting in the actual personal adoption of the technology for those around them as well as by providing on-going support in the use and upgrade of the device.

Research points out that central to identifying who to consult and who not to consult is the relationship the potential adopter has with them and the level of trust they place in the individual. One places higher trust in individuals one already knows and in those who are perceived to be experts. In a study that partly explored the kind of support users seek in dealing with computer anxiety, Scull (1999) observed that respondents relied on their interpersonal relationships for help. In a study focusing on consumer confusion among mobile phone adopters in the UK, Turnbull, Leek and Ying (2000) noted that word of mouth, particularly from friends and family, was

considered the most credible advice. Thai, Leek and Chanasawakkit (2006) similarly observed that the opinion of family members and friends weighed more on the decision-making process in mobile phone choice among their participants in Thai, Leek and Chanasawatkit's research involved participants from a collectivist culture, similar to my study participants, According to Hofstede (2001), members of collectivist cultures are strongly integrated and loyal to cohesive groups that act as one's support system. In collectivist cultures shopping (like most activities) is seen as a group activity. The opinions and support of close family members and friends is easily sought as it is also easy to reach them because they are already part of one's everyday life (p. 530).

As can already be deduced from above discussions, similar to Leek and Chanasawatkit's (2006) and Turnbull, Leek and Ying (2000) studies, in my study a couple of the participants consulted family members (son, spouse, sister-in-law) and friends when acquiring their mobile phones. They asked these relatives to accompany them to the shop, asked them for advice on what to buy and where to buy it and inquired about the models family members owned etc.

The case of sales staff and manuals

As elaborated above, trust is a major criterion in determining who to consult and who not to consult. That is why it is not surprising that both Lehtonen (2003) and Stewart (2007) found that study participants did not consult sales people in shops. Participants did not trust them. Instead, the opinions of those with closer and informal relationships were sought. This resonates with Turnbull, Leek and Ying's (2000) findings, where sales people were rated lower as preferred sources of advice while making choices about purchasing mobile phones. Most technological innovations come with a users manual. Interestingly, the literature points out that a significant

number of people do not use manuals either. As Birman and Brian (2006) explain, salespeople and manuals are avoided as sources out of fear or intimidation. The jargon used in the manuals is specific to the field and can be complex for the lay-reader.

Some respondents indicated that they did not consult the sales staff at all, while others consulted them with hesitation or to a limited degree. Beckyconcedes that she might occasionally ask a few questions about the phone's functions, but she will not ask for their advice on what to buy or not.

However, as a rule, Becky does not consult the sales staff for advice on what to buy. She believes 'they are there to sell'. She adds:

> 'They will tell me anything to get me to buy. I might ask … what are the functions of this phone, but I will not ask for advice on what to buy. I have a feeling that they will say anything. They want their stock out.'

Asked whether he consults the sales staff before purchasing the phone, Mathew said 'if I saw you with a certain phone in the neighbourhood, I cannot go to town and not be able to identify it. I will simply say, I want that phone. By this Mathew means that by the time he goes to the shop, he already knows which phone he wants. He therefore does not need to rely entirely on the sales staff. Even so, he says one cannot *not* ask the salesperson a few questions. He will ask what he deems pertinent questions, such as if the phone has a warranty and if it does, of what duration. He also inquires if the phone has any special features that he needs to be aware of. In addition to that, he uses the manual to familiarise himself with the phone.

With reference to consulting the sales assistants, Jeremy said:

> 'I do not need their advice because … a marketer is a marketer … he will be interested in selling the product … so even when their phone is bad or

> maybe their product has stayed on the shelf for a long time, they need to go.' [meaning they want to sell the products]

He also pointed out that once the sales assistants sell the item to a client, 'they will lie to you with warranty and all … but my friend, once you have purchased and paid … and walked outside the shop and you go back with that phone … it is over'.

He relies strictly on his knowledge and on his friends' experiences to decide on the type of phone to buy. He said:

> 'So, I usually go knowing what I want … like this one, I bought it on the 24th of December … I knew this is what I wanted. I told them I want this phone. They [sales assistants] even tried to challenge me asking why I can't take a different one. I told them that I am interested in this one.'

The same sentiments about sales assistants were expressed in the focus groups. This again highlighted the importance of trust in deciding where to seek information before acquiring innovations. Participants tended to trust those within their immediate social networks more than a sales person they did not know or with whom they had no relationship of trust.

Even though this study did not employ a quantitative approach to prove the spread of certain behaviours across demographic variables such as gender, status, age, a few significant points emerge from the interviews and focus group discussions. For example, styles of consultation reflected existing power relations in Kenyan society. As noted above, the only two women who participated in in-depth interviews engaged in direct consultation. This was also reflected in the focus group discussion where a couple of women said that they asked questions before purchasing their phones. On the other hand, the men (as indicated above by Mathew and Jeremy) did engage in indirect consultation. Interesting to note as well is the fact that the women consulted 'men' for advice. Bernice was told by her husband what model to buy and

where to buy it. A woman in the focus group said that she asked her son to accompany her to the shop when she went to buy a mobile phone. Becky summed up the reason for this by saying 'boys are good with electronics'. That is why she chose a man-friend to accompany her to the shop. While the women displayed hesitation, the men exhibited a degree of confidence in making decisions during the process of acquisition although they sought affirmation before making the final decision. They consulted men counterparts in their networks.

A patron–client relationship akin to that described by cultural studies theorists (see Samovar, Porter & McDaniel 2010) is played out as well, in that those who were given mobile phones were not consulted by the giver. The giver tended to impose their will on the recipient. Among my participants, there seemed to be differences in the level and extent of consultation between those who were gifted the phones and those who personally acquired their own mobile phones. Paul was simply given the phone by his father. He was not consulted. Bernice said 'my husband bought the phone and gave it to me', indicating that she was not consulted about the type of phone she wanted. Similarly, Jeremy was not consulted by his employer about the type of phone he wanted. On the other hand, those who bought their own phones (this includes those given money to go and buy the phone) engaged in some level of consultation, as reflected in Becky's and Joshua's vignettes.

5.4 Conclusions

This section has explored how the study participants acquire mobile phones and what practices accompanied the acquisition process. It is fair to conclude that data investigating the process by which the participants acquired their mobile phones echoes assertions by Teng and Lu when they state that 'adoptions are not instantaneous events, rather they are an outcome of a decision process consisting of a sequence of actions and decisions' (2010 p. 4).

Participants in my study reflected deliberate practices of developing criteria and engaging in information-seeking behaviour.

In exploring the process by which the study participants acquired their mobile phones, it was noted that most of them were on their second or later mobile phone. This prompted me to investigate acquisition at two levels: acquisition of the first mobile phone and acquisition of second and subsequent ones. The way participants acquired the first mobile phone varied: some were given their first phone, others were given money to buy one and still others bought their own mobile phone. However, with the second and subsequent mobile phones, all participants said that they bought their own mobile phones. This points to a higher commitment to the innovation after the first use. Data investigating why they had to replace their first mobile phone returned findings different from previous literature that points to technical problems or the need to upgrade as the reason for replacement. Instead, like Portus's participants, most of the participants in my study lost their first mobile phone by misplacing it or having it stolen. Only one participants that they had changed because they simply wanted an upgrade.

The selection criteria for the first mobile phone were very simple. However, criteria were modified with acquisition of the subsequent devices. With the acquisition of the first mobile phone, participants seemed to have one simple criterion: they just wanted a mobile phone. The type or other features such as model, size or colour did not matter. At this stage, mere possession superseded other possible dimensions. Similar to other studies focusing on factors influencing acquisition (e.g. Karjaluoto et al 2005) cost was a major determinant. Affordability is a relative term that is defined by one's financial capability. Participants repeatedly said '*kulingana na mfuko*' (it depends on the pocket). This cost criterion superseded others. Even when

participants identified other features that they would want in the next phone they planned to buy, the overriding criterion was the affordability of the mobile phone.

Participants' selections became more refined with subsequent mobile phones as they expressed the need to have one with internet, radio, a torch etc. It is possible that the criteria will be refined further when participants acquire other phones in future. Some did indicate what they would like with the future mobile phone, often citing functions that their current or previous phones did not have. This study speculates that this finding has two implications. First, once participants began using their mobile phones, they became aware of other benefits beyond just communication that they could reap from the device and they came to desired those functions. Second, participants' responses also imply a prioritisation that favors connectivity over other uses. Bernice expressed this when she asked 'how can I buy a mobile phone costing 20,000 shillings while my children are out of school for to lack of fee?'

As noted earlier, in both adoption and consumption studies, decisions about what, where and when to buy are often shared among one's social networks (e.g. Nafus & Tracey 2002; Stewart 2007). Decision-making is seen as a process characterised by information-seeking behaviour (Hirsch, Eric & Silverstone 1992; Rogers 1995). Potential users will consult those that they deem to be 'experts' or at least better informed about the innovation (Birman & Brian 2006). These are people that one deems trustworthy. My study respondents engaged in consultations in an attempt to draw boundaries between what to buy and what not to. Similar to Leek and Chanswawatkit (2006) and Turnbull, Leek and Ying's (2000) studies, several of my study participants consulted family members (son, spouse, sister-in-law) and friends when acquiring their mobile phones. These people provided support

and information essential to reduce the uncertainty would-be purchasers could have been experiencing as a result of not knowing what was on the market, the different options available and the functions of different mobile phones.

As literature already points out, sales people are treated with suspicion and are rarely consulted (Lehtonen 2003; Stewart 2007). Doubts about their reliability to give genuine advice is captured in Becky's and Jeremy's statements. Becky said 'they are there to sell … they will tell me anything to get me to buy'. Jeremy said 'a marketer is a marketer … he will be interested in selling the product … so even when their product is bad or it has stayed on the shelf for a long time, they need it to go'. The study participants also perceived the user manuals to be full of jargon that they felt they were not likely to understand so they hardly used them. These statements reflect participants' suspicions that the sales staff's loyalties may lie more with the business and the designers than with potential buyers of the mobile phones. Thus sales staff were approached cautiously or avoided altogether

5.5 Summary: first steps in the process of embedding the mobile phone in daily life

This chapter has focused on appropriation as the initial point in the process of embedding the mobile phone into the everyday lives of the study participants. As noted in the literature, acquiring new technology is a process that begins long before actual purchase. My study participants envisioned the potential benefits they would reap from ownership of the mobile phone. They saw congruency between their existing practices of connecting to family members, particularly to those living in rural areas. They recognised that the mobile phone would ease that connectivity. The benefits were seen to be superior to the then existing traditional modes of snail mail, sending others, telegrams or traveling. These expectations were largely anchored in

experiences that participants already had from sharing other people's mobile phones, a practice which in itself became a catalyst for them to acquire one. The need for a mobile phone superseded the need for criteria about what kind of mobile phone one wanted. However, acquisition was also subservient to the cost of the mobile phone against the money participants had at their disposal. The need for refined criteria was projected more as a desire for future devices rather than an immediate concern. Criteria did not just include the type of mobile phone to buy but also where to buy it. Mobile phone shops in the city centre were preferred to those in Kibera. Trusted significant others provided support in the process of acquisition. Sales staff are largely avoided as a source of advice when buying a mobile phone. ❖

Chapter 6

Incorporating the mobile phone into daily life

Guided principally by the social constructivist approach of domestication theory, one of the thrusts of this research is to explore the context-specific ways in which Kibera residents have incorporated the mobile phone into their everyday lives. While deterministic approaches assumes that a technology's use is predictable, social constructivism assumes that there is a gradual development of 'usefulness' of the technology within the unique socio-cultural context of the user. Imbued in this school of thought is the assumption that the users of technologies do not always employ the technologies in the manner predicted by the designer (Ling 2004; Ito 2005). Also of interest to this study is Blumler and Katz' that assertion that people use media to meet certain gratifications. Thus choices about whether and how to use media are defined by one's needs, wants and expectations (1974). It is also evident that the process of adaptation goes beyond uses to include definitions of how and how *not* to use it. Discourses on mobile phones have similarly touched on the regulations that govern its use. To this end, the purpose of this chapter is three-fold:

- To explore the uses study participants make of their mobile phones.
- To explore the gratifications participants seek in using their phones in the way they do.
- To explore regulations governing mobile phone use.

Figure 6.1: Bernice giving money to a friend via her mobile phone

6.1 Uses of the mobile phone

To contextualise the data presented in this chapter, I briefly recap concepts introduced in chapter two that deal with the uses of communication technology. In domestication theory, appropriation entails not only the process of acquiring the technology, but also the consumption of the technology after adoption. Some have referred to this as 'continued appropriation' (Stewart 2007). Proponents of domestication theory also identify incorporation as the process by which the technology is integrated into the user's everyday routines. Incorporation assumes that the user is at liberty either to use the technology as envisioned by the designer or to reinvent his or her own uses for the device (Silverstone et al 1992; Haddon 2000 2005). This study of Kibera residents focuses not only on the purpose for which the user acquired mobile phones, but

also on any other uses they have developed for it that are specific to their unique context.

Discussions by various scholars offer further understanding of the process of appropriating communication technologies. Carroll et al (2002) defines it as 'the way users evaluate adopt, adapt and integrate technology into their everyday practices' (p. 2). It is during the adaptation process that a re-engineering of uses that are not necessarily consistent with those envisioned by the designer are invented or occur. In his study entitled 'We do things differently here', Sey (2011) points out that contrary to deterministic approaches such as diffusion of innovations, where innovativeness is defined by one's promptness to adopt an innovation (i.e. (how early one is to adopt), innovativeness in this non-deterministic perspective is the process by which the user incorporates the device into their everyday lives. This happens as they try to make it 'their own' (p.379). Sey further explains that the user's departure from the designer's intended uses is not indicative of the device's inability to meet needs. Instead, the inherently unpredictable nature of human–technology interaction makes it difficult to create a neat fit. Herold (2010) points out that users of information communication technologies often focus less on the affordances of new technologies and more on the integration of the technology into their pre-existing lifestyle and attendant habits and usages (243). The user's socio-cultural environment, characterised by unique practices, rituals, values and beliefs, plays a role in this process of determining the 'usefulness' of the device.

This study asks questions that go beyond the 'taming' practices participants apply to include the participants' reasons for taming their mobile phones and integrating them into their everyday lives. My study thus focuses on both uses and reasons for those uses. As highlighted in chapters two and three, research in

mobile telephony has highlighted various uses of the device and various gratifications users seek through it. Previous studies have particularly explored the social and psychological gratifications sought from the way people use the mobile phone. Some of the common themes have been the phone's role in helping coordinate everyday activities, increased accessibility, connectivity, security and identity (e.g. Wallis 2006; Tehunen 2008; Yeow, Yen Yuen & Connolly 2008). Others have further categorised these gratifications and argued that people use their phones to satisfy social, instrumental, surveillance and psychological needs. Phones may also be used as a diversion such as for entertainment, relaxation or escapism (e.g Okeefe & Salanowski 1995). These understandings form a background against which I investigate the gratifications Kibera residents seek in using their mobile phones in the way they do.

6.1.1 Communication

Asked why they acquired mobile phones and how they put used them, the study participants repeatedly said '*kuwasiliana*' (the Swahili term for communication). To state the obvious, communication would be the primary use of communication technologies. However, the iconic status the mobile phone has acquired has primarily been due to the its ability to take communication to a higher level by providing more efficient, reliable and almost constant connectivity between individuals, irrespective of distance and time (Ling 2004). This is its most valued attribute as illustrated by various populations (e.g. Glotz & Bertschi 2006).

Further exploration of the nature of the communication and the parties involved gives a glimpse into one one of the mobile phone's most appreciated functions. Research points to the fact that most calls are made within one's already existing network of relationships and not necessarily to form new

relationships (Höflich & Rösler 2002; Donner 2006). For the most part the mobile phone is used to maintain and nurture these relationships (Ling 2008). The nature of the communication may range from issues of urgency to simply catching up.

6.1.2 Emergencies and simply checking on others

Given my study participants' rather obvious response to my question about their use of mobile phones, it was important that I inquired a little further and investigated the kind of communication they engaged in, with whom and their preferred communication modes and platforms. Consistent with participants' assertion about the communication value of the mobile phone, its most valued function for my participants is the way it enables them to communicate with family members living far off, mostly in the rural areas. This was a major motivation for acquiring a phone and, once acquired, phones seems to have been put to that exact use. The list of those frequently contacted included parents, siblings or members of the extended family.

As with several other participants, for Bernice the most important use of her phone is communication, particularly communication with her mother who lives in the countryside. Bernice also treasures the fact that she is able to communicate with her husband and children who also live in the countryside.

This valued use of the mobile phone was also evident among the focus group participants, as they repeatedly talked about the importance of calling close relatives such as one's parents, siblings and close friends. As I will later note, although there are rules about who can call at odd hours, these close relatives and friends seem to be exceptions. Some participants noted that they do not accept incoming calls late at night unless it is from these close relatives or friends.

The type of conversations that characterised communication with family members gives a clue as to why it seemed very important for participants to communicate with them. These conversations revolved around resolving family matters, especially in emergency situations. I was initially surprised to find that discussions about mobile phones with my participants generated a lot of talk about sickness and death. From the start of the first focus group I facilitated to the last in-depth interview I conducted, participants talked about the importance of informing or being informed of urgent critical situations affecting the family.

Bernice points out that the phone has come in handy in emergency situations. She shared the experience of losing her first husband. She said 'he died with the phone'. When I asked what she meant by this, she said that since her husband died in the house at night, she used the phone to inform people and seek help. The mobile phone also came in handy in organising the different aspects of the funeral.

One focus group participant pointed out that it is easy to know what is happening far away. She said 'For example, I am living here in Nairobi and someone will call me from home and tell me that someone has died.' Participants noted that they were able to pass on messages about their colleagues' health far more easily and faster with a mobile phone. In the case of a soaring medical bill as a result of sickness, participants use the mobile phone to consult family and friends and contribute towards paying the bill, essentially saving money and time. Here the mobile phone is playing an instrumental role and at the same time providing reassurance during critical moments.

In every conversation in both the focus group discussions and the in-depth interviews, security was highlighted as a major concern among the residents of Kibera. The phone has come in handy in addressing some of the security threats

participants experience. A respondent in one of the focus groups shared an experience where there were 'suspicious-looking' people in her neighborhood. The neighbors called one another to make sure that all were alerted to the presence of these people. Another focus group discussant shared an experience where robbers came into her neighborhood:

> 'What saved us is the mobile phone. One of us called the other neighbors and we all called each other and so by the time the thugs were attempting to break-in through the gate, the neighborhood was aware and they got out to fight back … so I can say [the mobile phone] has helped in terms of security.'

It was also pointed out that one can now from a safe distance help a neighbor who is being attacked by robbers. One participant put it this way:

> 'You can help from the other side … by calling the police because they [the victim] cannot call, but since you are in the situation but you can see what is happening, you can call the police.'

This finding is consistent with literature describing the mobile phone as a lifeline (Ling 2004, Walsh et al 2009), primarily due to its reliability during emergencies. Just as in previous studies (e.g. Silva, Zainudeen & Ratnadiwakara 2008), for my participants the mobile phone is proving useful in communicating during such critical times.

In addition to its usefulness in emergency situations, the mobile phone is used to simply catch up. With mobile phones in their hands, many people today are making more contact with one another than was previously possible. It has been pointed out that sometimes the content of these connections—especially between close relatives and friends—may not be as important as the practice of simply connecting. As Ling and Ytrri (2002) point out, the frequency of

connectivity may be to simply 'oil' these relationships. The Kibera study participants said they use the mobile phone to simply check on family members.

As we continued with our conversation with Bernice she said that she calls her family members simply to check on them. Her husband lives in the countryside. Moments before she arrived for the interview, she had been on the phone to him. She was inquiring about the family's well-being given the unrest being experienced at that time in most parts of the country following political campaigns She had been told all was calm. She frequently calls her father-in-law as well to get updates on his well-being.

6.1.3 Coordination of everyday activities

The high connectivity the mobile phone offers as a result of its personal nature and portability allows it to redefine space and time. As noted in earlier chapters, this has led to what has been referred to as 'locational independence'. The mobile phone is altering the way people run their day-to-day activities, allowing an interlacing of activities while on the go (Licoppe 2004; Turkle 2008). Users can micro-coordinate and hyper-coordinate various activities simultaneously (Ling & Yttri 2002; Ling 2004). This coordinating role was evident within the various arenas of Kibera participants' lives: social, domestic, work and businesses.

6.1.4 Social and domestic uses

The mobile phone's coordinating role in the social and domestic arenas is clear. Study participants noted that one of the valued benefits of the mobile phone was the ability it gave them to attend to different things from remote locations. One focus group discussant said 'as I am here [at the meeting], I know what is happening at my business'. The mobile phone gave him a sense of connection with the activities of his business despite the fact that he was not physically

there. Others said that they had left their laundry out to dry before coming to the meeting. In the event that it started raining, they would not have to run home. They would simply call a neighbor and ask them to take the washing in for them. Other activities included organising various social activities.

By the time of the interview, Becky was in the process of organising a girls-only event for Valentines Day which was coming up soon. She and her friends were using their mobile phones to organise this event. Becky also said that her relatives met as a family on the first Sunday of every month. She pointed out that details of the meetings (such as the time, venue and distribution of responsibilities in running the meeting) were usually agreed on via the mobile phone as the day drew closer. That saved them from needing to travel to each other's houses in different parts of the city to iron out the details of the meeting.

A couple of the respondents also said that they were members of social self-help groups in Kibera. These self-help groups' objectives focused mainly on cooperatively raising money to address common problems among members or for investment purposes.

Jeremy is a member of at least three self-help projects. He says that he is either the chairperson or secretary of these groups. Most of these positions require a lot of coordinating efforts. Asked whether he uses his mobile phone to organise such events Jeremy responded:

> 'Oohh!!! That is quite common. Let me tell you, since the introduction of mobile phones, I can tell you for sure this world has really transformed. There is no need for me to hustle.'

He and his group members use the mobile phone to ensure that the necessary logistics to run the group effectively are in place.

Paul also pointed this out. He said that even on the very day of the interview he had earlier met some of the officials of the self-help group he is involved with. The purpose of the meeting was to decide on the amount of financial aid one of the group members was to receive from the group. However, this meeting was preceded by a host of phone calls between group officials in a bid to agree on some of the details before the face-to-face meeting.

Evidently, the mobile phone is also becoming handy in running everyday household errands. For example, one focus group participant said that there are times that she would be in the house and she is not in a position to leave the house and go to the shop to buy items necessary for cooking. She said 'you simply call the owner (of the shop) and tell them to prepare for you a kilo of meat and send it to your house. And because they know you, they will do that'.

Participants also frequently highlighted how the mobile phone was playing a crucial role in coordinating school-related activities. Focus group discussants emphasised how they use the mobile phone to contact the administration officials of the schools where their children are studying. Key among the purposes for which they contact the schools is settling of any financial debts owed to the school and checking on the well-being of the children. Another focus group participant said:

> 'The phone is very important to everybody, because as I sit here, I can receive a phone call saying that my child has been sent home from school because of fees … and I can go to the M-pesa and easily send them money. Once the teacher gets it, the child goes back to school.'

Similarly, Bernice said:

> 'Like now when the children are in school. I don't have to go to school. I can send the money owed to the school accountant via M-pesa. The child just goes to school and I send the money.

6.1.5 Uses related to finance and economics

The impact of the mobile phone in businesses and more so in small-scale businesses have similarly been documented (e.g. Smith, Spence & Rashid 2011; Silva, Zainadeen & Ratnadiwakara 2008). This is especially in the way it is reducing the financial and time costs of running businesses. As already discussed, M-pesa has been lauded as having a significant influence on the way businesses are run. This is because it allows cashless and remote payment, and offers options of having accounts where one can save. It has been described as a way of providing banking services to populations that were previously unbanked, especially to those in the lower economic cadre who were not catered for by the traditional banking institutions (Hughes & Lonie 2007). Respondents who said that they run small businesses also said that they use the M-pesa services for saving and banking as well. They said that if they kept the money in their houses at the end of every business day, they risked having it stolen or using it up for other purposes. Putting the money in an M-pesa account guarantees its safety and ensure that the money is saved for a worthy or intended course.

Financial transfers were evident in the running of businesses. A couple of the respondents said that they run small businesses in Kibera. They pointed out that they use the M-pesa services to pay for stock bought from the wholesale outlets and also to receive payment via M-pesa from clients who buy from them.

Bernice said that some of her customers pay via M-pesa, so that saves her time and transport costs that she would otherwise incur if she were to travel to collect dues owed to her.

Participants also said that they use the mobile phone to settle house bills through the M-pesa services. Asked whether she uses M-pesa, while laughing aloud, Becky said:

> 'Are you serious? That thing came to save lives. I mean sometimes, someone is in the hospital … or someone is in town and they do not have fare … they can call you and you send them money and you would have saved them …sometimes you are busy from Monday to Saturday and Sunday you are going to church and you are going to pay this bill. M-pesa does it for you.'

Her expression captured the sentiments of most of the participants with regard to the ease with each they are now able settle these bills. Khasakhala took the photo in figure 6.2. He is holding his mobile phone next to an electricity switch in his house. He used this photo to explain that he uses his mobile phone to pay his electricity bills.

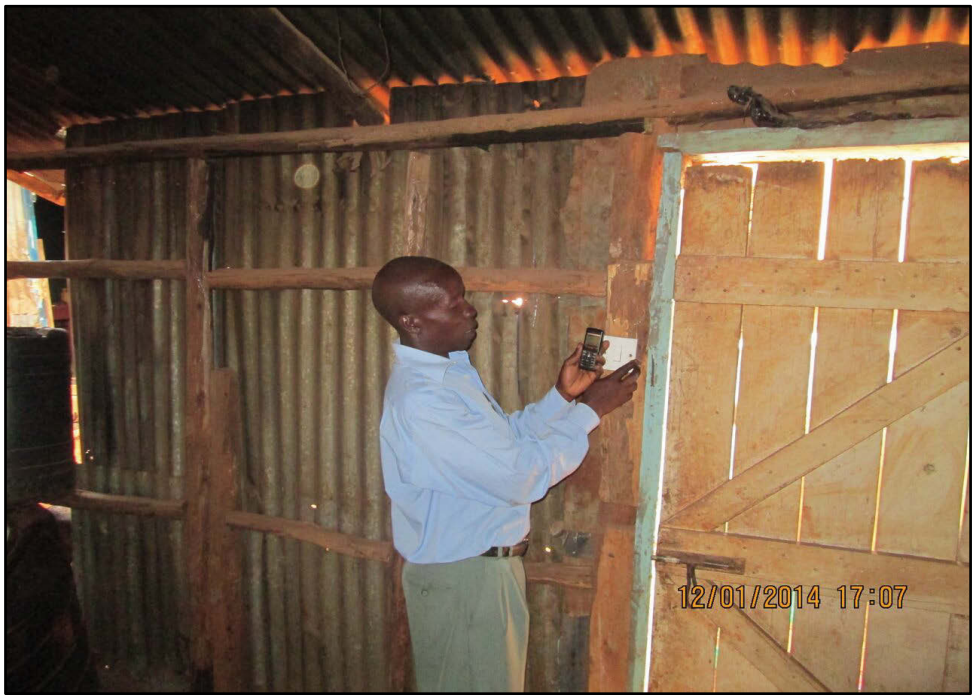

Figure 6.2: Khasakhala holding his mobile phone next to the electricity switch in his house

However, Mathew was an exemption to this. He does not use the phone to pay bills. According to him there is an associated cost accompanying the service. To avoid the cost, he prefers walking to the nearest pay station to pay his electricity bill. He does not think paying bills via M-pesa benefits him in any way. He says 'I will be using money that I do not have.'

As has been the tradition, those living in the city give financial support to their family members in villages. The mobile phone has provided a more efficient and quicker way to do this.

Jeremy regards sending money as the second most important use of his phone, after making and receiving calls. He uses his phone to send money to his family members in the countryside. The money may be for their own use, or to aid in running errands that he has requested them to attend to on his behalf. He also sends money to contribute to the costs of other events such as funerals. For

instance, on the day of the interview he had just sent money to his parents-in-law to help with the funeral arrangements of a family member who had died.

Participants were asked to take photos that represent how they use their mobile phones. Some took photos of themselves standing by an M-pesa shop, indicating that they were sending or depositing money in their M-pesa accounts. Others took photos of themselves holding produce at the market while at the same time holding their mobile phones (figures 6.3 and 6.4). Participants explained that they were going to pay for the goods using their mobile phones.

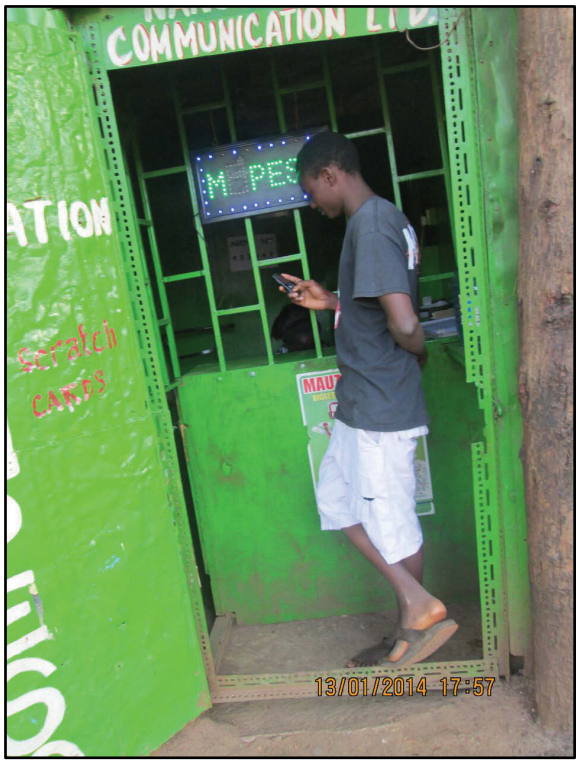

Figure 6.3: Habil at an M-pesa shop

Figure 6.4: Beatrice about to pay for produce at the market using her phone

In addition to money transfers mentioned earlier, the mobile phone is used to facilitate the various activities participants engage in in the process of running their businesses. They said that the mobile phone enables them to easily reach their clients. Their clients can also easily reach them for inquiries or to place orders. Bernice gives her customers her mobile phone number. This way they are able to reach her and place orders for her embroidery work. A participant in the first focus group also runs an embroidery shop in the main Kibera market. She said that many of her clients do not have to come physically to her shop. They send to her phone photos of the embroidery design they want. She makes the design and sends the goods to the customers by public transport. Another participant in the second focus group said she sells bananas. At times she runs out of stock and she is not able to go and collect more. She calls her supplier and places an order that is delivered to her place of operation. The role of the mobile

phone in expanding business contacts is evidenced by one focus group discussant who said:

> 'When I did not have a phone, not many people knew me [meaning knew about her business], but now I can talk to people in Umoja, Kisii and Busia—that is from all sides of the country—and it is all about my business.'

All the above practices were particularly appreciated because they offered participants some form of cashless transaction. Participants noted that they do not have to carry money around when going to the shops or markets or when traveling out of the city. It is a safer way of moving around without the risk of losing money.

6.1.6 Work-related uses

The mobile phone has also played a significant role in redefining the work environment. The mobile comes in handy in coordinating work within the workplace (e.g. Wajcman, Bittman & Brown 2008; Hislop & Axtell 2011). People can attend to work-related duties from remote locations, overall allowing them to work more efficiently and productively. It was evident that the respondents used the phone for work-related purposes. The type of uses differed according to participants' vocation. Some used it in the normal execution of their duties.

Becky points out that work is the reason she cannot leave the house without her phone. Her boss might call her while she is on the way to work and give her an assignment.

Paul works at a water selling centre. He says that they have different operational points. At times he needs to coordinate with colleagues manning the other stations. However, it is not always convenient to leave his station to go to another. In such instances, his mobile phone comes in handy.

Closely related to the above discussion is the use of the mobile phone to search for jobs. A couple of participants mentioned the crucial role played by the mobile phone in getting jobs. Some said that friends who knew that they were looking for a job could easily reach them if they came across opportunities. Potential employers are also able to reach them.

Paul made this point very directly: 'If you do not have a phone you do not have a job … it was important to have a phone so that I can search for a job.' Becky echoed this when she said that nowadays when you submit a job application, you are required to include a mobile phone number. This makes it easier for them to contact you. Without a mobile phone 'they might not bother to get in touch with you'.

Jeremy also said his phone provides an avenue through which potential employers can reach him. That is partly the reason why he has to have his phone on and charged at all times.

Paul points out that his phone is crucial in getting him contracts as a casual worker in the construction industry. Once he gets the job, the phone again comes in handy to find out the exact location of the job. He constantly contacts the potential employer for details of the location while on his way there (see figure 6.5).

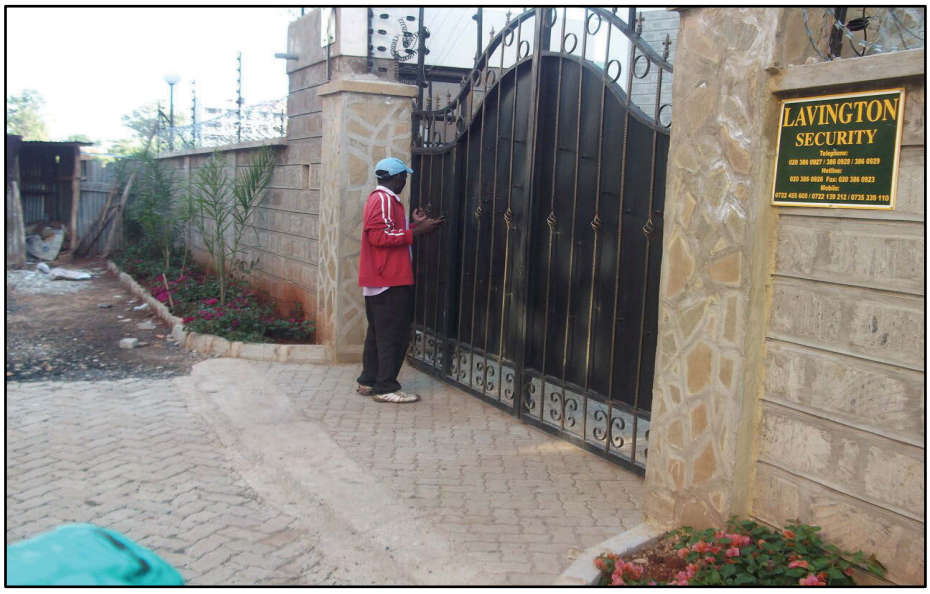

Figure 6.5: Philip uses his phone to ask for directions to one of the homes where he was building cabinets

A similar point was reflected in comments from among the focus group participants who run small businesses in the slum. They said that they use the mobile phone to place orders for produce they sell. They coordinate their business-related activities with the mobile phone. One participant even pointed out that since she got a mobile phone, she is now able to move away from her selling station without fear of losing customers. This is because either the customer or other sellers will call her.

Evidently, the mobile phone is playing a significant role in the way Kibera residents attend to their everyday activities. These activities range from domestic to social and business or work-related. The phone is proving useful in helping residents attend to these activities in a more efficient and reliable manner. They are able to describe explicit benefits derived from the use of the mobile phone. Before acquisition, participants envisioned its usefulness in exactly these areas with exactly these expected benefits. This can be explained by the fact that participants' experiences were not primarily based on product advertisements

by the designers, but rather on the experiences they already had from using other people's mobile phones before they acquired their own.

6.1.7 Selecting among options

In addition to the mobile being a telephone, enabling one-to-one conversations, today's mobile phones also assume characteristics of other communication technologies. This means that a mobile phone user has access to more than one communication platform (internet, radio, texting) and can use it in more ways than just communication. It affords the user other functions such as a calculator, clock and alarm, for some even a torch. As noted in chapter three, this has led to some referring to the mobile phone as a 'mobile device' (e.g. Westlund 2008 p. 444). People can use their mobile phones to send money, calculate, keep time and light their way. Consequently, they now have to make decisions that touch not only on how to use the mobile phone as a telephone but whether to use these other functions as well and how. This makes for a complex terrain that the user has to navigate in determining what to use and how to use it. For this study, particular attention was paid to use of the internet (particularly Facebook and email), the radio and other functions afforded by the mobile phone such as the video and the still camera.

The primary modes of communication among participants were calling, texting, beeping or 'please call me'. A number of factors influence the decisions to text or call. Some scholars have argued that the poor, especially in Africa, have developed ways of circumventing the costs associated with mobile phone usage. One of the ways of doing this is by flashing or beeping (Donner 2007; Wamala 2013). Here one phone user calls another but they quickly disconnect before the person answers the call. This appears as a missed call on the screen of the intended recipient. It is expected that the person will call back. The beep is

thus assumed to be a message requesting the other person to call the 'beeper' back. Based on this practice, mobile phone service providers have developed a service that enables the user to send a 'please call me' text to another user without incurring the cost of making such a request. Decisions about whether to text, call, beep or use the 'please call me' function are determined by a couple of factors. They include costs of the call, the relationship with the other party and reasons for calling. They indicated that if they do not have money, they will beep the other party to get them to call back. Calls are regarded as expensive and thus are only made when absolutely necessary. Beeping and 'please call me' functions are more often used among people one is familiar with.

For instance, although overall she prefers calling over texting, Bernice has a mutual agreement with her immediate family members about beeping. She beeps them a lot and occasionally sends them the 'please call me' text. Her family members also do the same on numerous occasions. She says that she has told her daughter that if she beeps Bernice three times and Bernice does not call back, her daughter should know that she does not have enough money to call back. She will call when she gets money.

Use of the internet

Even basic mobile phones offer a couple of platforms. However, the study participants did not use all the available functions. Usage was determined by other factors such as interest, financial implications and recharge availability. As a result, responses about usage of these functions varied. This was particularly evident with the usage of internet-based functions such as surfing, emailing and Facebook. Very few participants use the internet. As illustrated below, Paul uses the internet to market his carpentry skills. However, most participants demonstrated hesitation to using of the internet for different reasons. There are

those who do not use it because they do not know how to use it, have no interest in using it or they do not think it is beneficial to use it at all. Among this group are Mathew and Bernice.

Mathew does not use his phone to access the internet at all, as he explained:

> 'It is not that important … If I have listened to the radio before I leave the house and watched the TV, I don't see the reason why I should go to *chokora chokora* [fidget] other things and just use up money.

On her uses of various Internet platforms, Bernice said:

> 'I do not use Facebook, I do not even know how to use email, I do not even know Skype and my phone does not have that but I have seen people use it'

In addition to methods of circumventing the costs of mobile phone use mentioned earlier, participants try to circumvent costs related to listening to music online. They download their favorite songs into their phone's memory card. That way they do not have to consume their Internet bundles every time they listen to online music.

Jeremy says that though his phone has the function, he does not listen to online music directly. He prefers downloading his favorite music into his phone's memory and listening to it at his convenience. This way he can also avoid the cost of being online for extended amount of time.

Similarly, Becky downloads music for her own pleasure and also to learn new tunes. She has all the music she likes saved in her memory card.

Hesitation to use the internet and its various platforms was particularly evident among focus group participants. My first question about this was met with silence in the room. When I repeated the question a second or third time, I got a few responses but never the first time I asked. One participant 'yes, some

people use it', indicating that though they did not use it themselves, they had knowledge of others who use it. One woman said that someone at her business helps her search for new embroidery designs from the internet using that person's laptop computer. One said that she thinks 'internet is for children to play with'. Becky was an exception to the others. Asked whether her phone has internet, she responded: 'Yes, yes, that is … in this day and age, seriously you cannot afford not to have internet'. Becky is not sure if she calls more than she surfs the internet or vice versa. After a long pause she says 'I think I surf more, this is because I might make one or two calls per day but I will sign into internet about five to six times per day'. She uses the internet while traveling on public transport and during lunch breaks at work. She downloads online music into her phone.

Skype seemed the least used and little known internet application among the study participants. Bernice said she does not even know what it is. Only one participant has used it before. However, she did not use it from her mobile phone. She used it from a friend's laptop.

While the practice of reading news online was not explored among all the participants, the few that I engaged in this discussion indicated that the practice is present but not very common. Jeremy prefers reading the online version of the newspaper. This is because, according to him, it is cheaper than buying a hard copy. Becky will use her phone to read news only if there is absolutely important news breaking out. Otherwise she does not do it often.

Use of radio

The respondents said that they listen to the radio using their mobile phones. Habil and Philip, participants in the photovoice exercise, selected a photo of themselves using their phones to listen to the radio while washing clothes

(figures 6.6 and 6.7). They said that that they listen to the radio while attending to other duties or as a form of relaxation.

Figure 6.6: Habil relaxes outside his house listening to music using his mobile phone

The popularity of the radio was further highlighted in a later question that asked the study participants to choose between a list of three interactive communication technologies: radio, television and mobile phone. Participants unanimously said that they would choose the mobile phone. However, selection of the mobile phone was not always at the risk of missing out on the other two, but because they can also use the mobile phone to access the radio. Many of the participants said that although they listen to the radio using their mobile phones, they do it with a bit of caution. They deliberately limit the frequency with which they tune into the radio using their mobile phones. This was mainly because they believed that it leads to the battery running out quicker.

Figure 6.7: Philip relaxes outside his house listening to the radio using his mobile phone

Jeremy uses his phone to listen to the radio—but only when he is not at home. When he is in his own home, he uses the radio in the house. He listens to the radio using his phone especially when he is away for work, more particularly when he is bored during the lunch breaks. He is careful not to use up the battery in his phone while he is away from home. He wants to save it for what he sees as the most important use of the mobile phone: making and receiving calls. This point was reiterated by one focus group participant who said:

> 'Yes, I can (use the radio on the mobile phone), but it is going to run out of battery quickly … then I have to keep on recharging it.'

It was interesting to note that a few participants did admit that they do not use their mobile phones to access the radio at all. One focus group member said 'I do not even bother about that'. Her sentiments were echoed by Mathew, who

said that he does not tune in to the radio using his mobile phone at all. This is because 'first and foremost it uses power and power is usually paid for'.

This was a surprising find because in my experience of visiting Kibera and similar settlements in Nairobi it is common to see young men along the road listening to radios on their mobile phones. Images such as the ones provided above by Farah and Philip during the photovoice exercise are common. People who run businesses will have the radio playing loud music through their mobile phones. While it is important to appreciate the financial implications of listening to the radio via the mobile phone and thus the need to moderate its use, it is also important to note that the use could be more prevalent than reflected among the study participants.

Use of the video and still camera

In the focus group discussions, the participants said that they knew people who used the camera to take pictures as evidence in the event of an accident or if they happen to be at the scene of a crime. However, participants did not indicate that they have done this themselves. They said that such evidence is crucial if passed on to the police for investigation or to journalists for reporting. As alluded to earlier, some women said that they use their mobile phones to take and to send photos of designs for embroidery. The client makes a selection from the options provided. Others take photos using their mobile phones for other purposes such as work-related reasons or to enhance feelings of connectedness with family while one is away. During the photovoice exercise, Peninah, took a photo of herself using her phone camera (figure 6.8). She says that she loves taking photos of her children and uses them as screen savers on her phone.

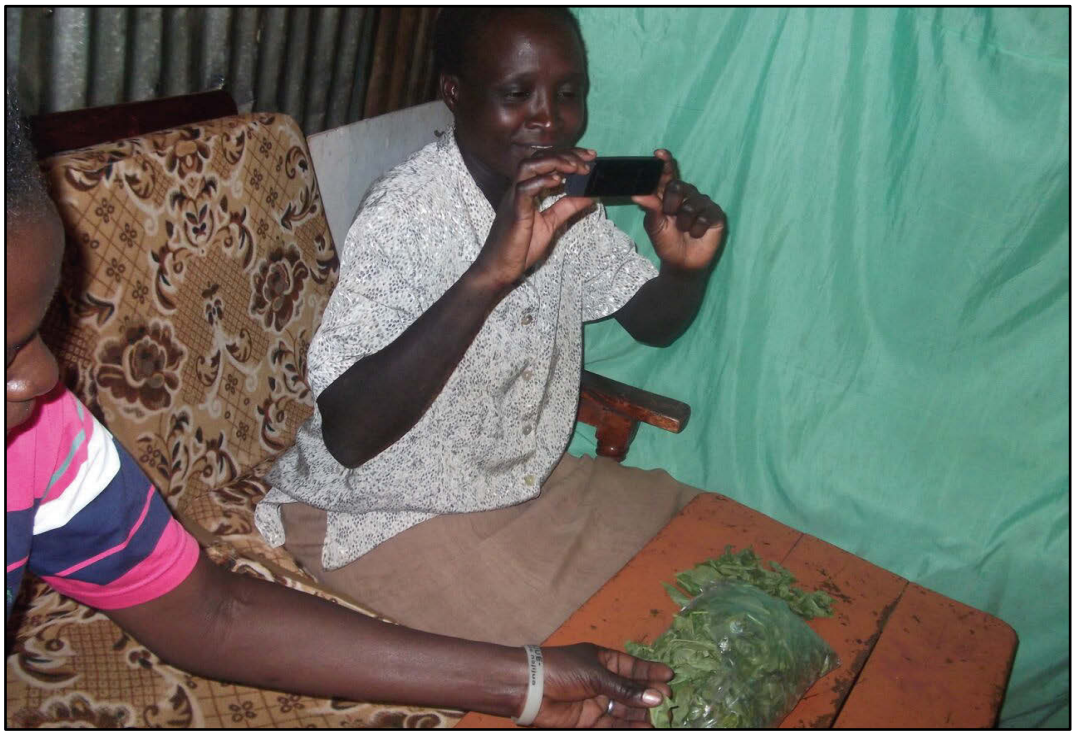

Figure 6.8: Peninah taking a photo using her mobile phone

Jeremy takes photos of his wife and children. He says this is helpful, especially when he is away from them either traveling for work or traveling to the countryside to visit extended family members. He says, 'You could feel you miss your wife or son and if you have their photo as a screen saver, you simply look at it.' Beatrice also takes photos of her children and uses them as a screen saver on her phone.

While the study participants are aware of the potential the mobile phone offers through its array of functions, they are making deliberate decisions about what to use and how to use it. These decisions are based on the gains the functions offer relative to their immediate needs and circumstances.

6.1.8 Analysis of gratifications sought

As discussed in chapter two, Dimmick, Sikad and Patterson (1994) classified task-oriented roles as instrumental, while reassurance involved the ability to

stay abreast of the well-being of close relationships. Here the mobile phone is being instrumental in fulfilling the practical activities of the participants' everyday living. For instance, one instrumental role concerns travel to rural areas. The mobile phone is becoming handy in reducing the frequency of such travel by fulfilling the needs or objectives previously met by the travel—i.e. to deliver financial support to those in the rural areas or check on the welfare of those living in the rural areas. Participants can now send financial support through the mobile phone service M-pesa. They can check on their family members by simply calling or texting, thus giving them the reassurance of the well-being of their family members.

More task-oriented uses are noted in the way participants use the mobile phone to run their businesses. The mobile phone is offering more efficient and effective ways of relating with ones' clients. Clients are able to call and place orders for goods or services without having to come physically to the business premises. This saves both the client and the business owner time and money. It also enables those running businesses to serve clients living afar off as one woman explained. More instrumental roles are evidenced by the fact that the mobile phone is offering payment options for services rendered or for goods purchased. It also offers banking and saving options that participants otherwise would not have had access to within the existing financial institutions. This allows them the keep money secure and save it for its intended purposes.

Areas of sociability defined by Dimmick, Sikad and Patterson (1994) are seen in the mobile phone's role in facilitating social gatherings and self-help groups. African societies have been described as relational in nature. Support systems are often established as a way to maintain and nourish these relationships. In addition to social groups, another common feature of these societies are self-help

groups. Self-help groups are created to mobilise resources to address common goals or in support of a needy member. This includes providing support for funeral arrangements in the event that a group member loses a loved one, raising financial support to offset hospital bills incurred if one is sick, making calls to comfort others in times of grief etc. The mobile phone is aiding in the running of these groups. In addition to the social gratification derived from these practices, such uses of the mobile phone also enhance feelings of reassurance in times of need.

Scholarship has already pointed out heightened sense of security as a by-product of mobile phone use (e.g. Ling 2004; Walsh et al 2009). This was clearly expressed by the Kibera participants. They have found the mobile phone useful in reporting crime in the neighborhoods. Participants stress that it is now easy to help from a safe distance someone who is under attack. Although having a mobile phone does not change the circumstances, it allows bystanders or observers to report the incident, call for assistance, inform family members of their experience and let them know how they are coping. Participants emphasised the feelings of reassurance this gives them, both as a victim and for others who may be concerned about their well-being.

It is important to highlight the point that when it came to uses other than calling, participants hesitated. There some reluctance about using other functions such as the radio and internet-based platforms (Facebook, Skype, online music). The radio was used mostly for news update and entertainment. Jeremy particularly looks out for breaking news. Becky and Mathew listen to the radio when on public transport traveling to work, walking to places and during lunch breaks at work. However, they also demonstrated slight restraint with regard to this practice. Mathew pointed out that he uses his phone to listen to the

radio only if he is away from home. If the battery is low he will not tune in to the radio; he would rather save the little amount remaining for what he considers the most important function of the mobile phone, which is to make and receive. Some participants used the internet sparingly while others did not use it at all. The mobile phone was also regarded as entertaining and was used for escapism, although some played down the possibility of deriving any form of satisfaction from it at all.

Some functions afforded by the mobile phone were also used primarily in an instrumental role, while other functions were more widely viewed as entertaining. Uses of the calculator and time keeping options were primarily instrumental. For example, the calculator came in handy especially for business people who have to calculate the cost of goods and profits. For those engaged in embroidery work, the calculator was used to calculate measurement. The internet and video and still camera were used to pass time, although the camera had the additional dimension of enhancing surveillance. Participants reported knowing that people use mobile phones to take photos or record events as they unfold to then hand that over to the police for investigations or to journalists to report on the incident.

6.1.9 Conclusions

The data explored in this part of the chapter reflects attempts by the study participants to integrate the mobile phone into their already established lifestyles. Participants are demonstrating some degree of innovativeness by adapting the phone into their unique socio-cultural environment and their attendant practices. To use Sey's words, they are making the mobile phone 'their own' (2011 p. 379). There is an obvious attempt by the study participants to integrate the mobile phone into their already existing way of life. The phone is

being fitted into longstanding practices. These practices include sending money to loved ones living in the countryside, checking the wellbeing of their loved ones, paying school fees for children who are at schools distant from home, facilitating businesses and related transactions of goods and services sold or provided, connecting with family and friends for the purpose of building and nurturing relationships.

The findings of this study also corroborate other studies that have already pointed out that calls are made more to close family and friends and not necessary to form new relationships (Hoflich & Rössler 2002; Ling 2008). Such conclusions are an indicator of the importance of these existing relationships to the individual and the value of the mobile phone in maintaining and nourishing them. Other uses that were highlighted by Kibera residents related to financial transfers and work. However, a close scrutiny of both reveals that these also relate closely to their family (or close networks) and to participants' immediate needs. The benefit of being able to send money to family living far off was the most cited. Money transfers within the work environment (mostly in small businesses), or in getting day-long employment contracts was also highlighted.

It is important to understand work and small businesses within this context. Most Kibera residents work as casual laborers. They are contracted on a daily basis. Few of them have extended contracts. Even so, it would be for a few months at the most. Very few Kibera residents have full time employment over an extended period. As a result, they need contracts on a daily basis to be able to cater for their basic daily needs. Small business owners in such an environment depend on the day's earning to meet their daily basic needs such as food, transport and housing. Participants indicated the importance of the mobile

phone in getting and performing jobs and in running small businesses That again points to the usefulness of the mobile phone to meet immediate needs.

The mobile phone is a device that is literally an assemblage of multiple functions. However, participants' responses indicated that acceptance and adoption of the mobile phone did not mean total adoption or acceptance of all its functions. For instance, some participants will not use the Internet for various reasons. Some said they are simply not interested in it. Others may not be well enough educated about the options and how the different platforms operate. For example, one participant said that he does not use the M-pesa system to pay bills in order to avoid the associated fees while in fact there is no additional cost. For others, it might be a case of technophobia. Some said that too much navigation around the mobile phone's functions might damage the phones. They might unknowingly touch something and damage it. Another factor inhibiting broader use may be because they see the behavior as socially unacceptable.

Overall, in line with Blumler and Katz's (1974) argument, the use of mobile phones among the study participants is selective. Kibera participants highlighted practices of prioritisation and selection about what to use and what not to use based on their needs and the resources (mostly financial) at their disposal. Communication by calling and receiving calls was given priority over other affordances of the mobile phone. Making and receiving calls are thus perceived as the primary uses of the phone, and other platforms afforded by the device are relegated to secondary position.

Activities performed to fulfill reassurance and sociability needs seem to be fluid. They overlap with each other and also with surveillance roles. This is because they all these roles have to do with being aware of and ensuring a sense of control over one's immediate social and physical environment, essentially

reducing feelings of uncertainty. Media studies have traditionally projected surveillance as the need to monitor and be aware of one's surroundings (McQuail 1974). This includes seeking information in order to better respond to situations. For the purposes of drawing conclusive remarks from the data presented, I will use the term surveillance to capture these three dimension (sociability, reassurance and surveillance). The term surveillance connotes practices that help participants monitor both their social and physical environment for the purpose of enhancing their sense of control over circumstances.

In conclusion, decisions about how to use the mobile phone are based on the importance of the task, the cost and the benefits derived from it. Uses that my study participants regarded as core and were highly prioritised were, firstly, those that helped them stay abreast of their surroundings (e.g. to call home, check on family, check on children while at school, monitor loved ones when they are sick, manage security). Also of high priority were instrumental uses that facilitated a more efficient management of their daily tasks (e.g. running businesses, work, addressing crises, paying school fees).

Gratifications that participants perceived as entertainment, relaxation and escapism were relegated to a secondary position. Overall, uses such as access to the internet, using Facebook and listening to the radio were rationalised as fun or ways of overcoming boredom to fill in time or while travelling. These practices are consistent with O'Keefe's and Salanowskis (1995) and McQuail's (2005) assertions that people will engage with communication for diversion or entertainment purposes. This was further reflected in various statements by participants, such as their claim of not listening to radio unless 'it is necessary' or 'using the radio only if bored' and comments such as 'internet is for children',

'I do not bother about [the internet]'. These statements indicated a playing-down of those practices among the study participants.

The mobile phone is finding particular relevance within participants' immediate and personal concerns and less in the social and political realm. Only one question need to be repeated three times in each of the focus group discussions. This was because there was no response at the first two attempts. This was odd given that the other questions had generated heated discussions among participants. This question related to their use of their mobile phones to call radio stations to voice their views about topical social issues in the country or in Kibera. One response was received at the third attempt in one of the groups: 'that does not concern me'. This response was met with sounds and nods of agreement from the rest of the group. In the other two focus groups, in response to the third repetition of the question participants said that they do not do this, although they know that people do it. Although this finding does not discount the fact that people call radio stations to voice their opinions on current issues, it further points to the use of the mobile phone within smaller networks of significant others about issues deemed to be of immediate concern and personal in nature. As will be explained in chapter eight, in this way participants are introducing new nuances into what it means for the mobile phone to be personal in nature.

Many studies have explored the practice of mobile phone sharing as a mechanism of allowing more people to benefit from its connectivity (James & Mila 2007; Aker & Mbiti 2010). However, this study goes further in exploring the practices surrounding this practice. As opposed to assumptions that the lender simply makes their mobile phone available to others, the Kibera study participants indicated that they determine who can borrow their phone, when

they can borrow it and how the borrower can use it. Participants mostly lend to close relations and friends. They are more willing to help someone if there is some kind of emergency. They will also expect them to talk from a position close to them. These regulations seem to have created tension and challenges for both the borrower and the lender. For example, these regulations potentially compromise callers' privacy. To resolve this tension or possible conflict the person without a mobile phone decides to acquire one of their own. The study participants indicated a willingness to make financial sacrifices to get a phone of their own. This finding may also indicate that mobile phone sharing might have been ideal only at the beginning of the diffusion process and that people's use behavior changed as the device became ubiquitous.

6.1.10 Summary: the process of embedding continues

From the onset of my data collection, I realised that talking about the mobile phone with the study participants translated literally into talking about their lives and the activities that are part-and-parcel of their lives. The conversations shed light on important practices, rituals, customs and beliefs that define their everyday lives. Practical activities participants highlighted include but were not limited to frequent trips to the village, money transfers for various reasons, organising events such as family gatherings, participating in social gatherings, being a member of self-help groups, addressing security issues, managing education matters and business engagements. The mobile phone is finding its 'usefulness' as it offers different gratifications in each of these engagements. Overall, deliberate choices in usage among the participants not only reflect selectivity based on gratifications sought; it is also indicative of the respondents' awareness of their own agency and opportunities to determine the 'usefulness' of the mobile phone in their everyday life. In other words, they are not only

aware of the full potential the mobile phone offers them; they are also aware of their power and independence to say 'I will do that with it' or 'I won't do that with it'. Participants seem to make these decisions with full awareness of their immediate circumstances and their ability to control these circumstances, one of which is their financial capability.

6.2 Rules and practices governing mobile phone use

Scholars argue that technology is not free from the regulations that govern the cultural context of the user (e.g. Ito 2005, Campbell 2008). New technological devices introduced into any society are subjected to an already established platform of what is acceptable and what is not acceptable. This happens as 'people map out their understanding of common social rules and dilemmas onto the new technology' (Humphreys 2005, p. 810). Consumption practices related to communication technologies involve developing rules that define propriety with regard to its usage.

Following the widespread uptake and use of mobile phones, discussions about mobile phone etiquette have emerged. Castell et al (2007 p. 94) defines mobile phone etiquette as the 'collection of rules that establish the public use of the mobile phones'. Scholars note that, just like other social rules, these rules are un-written, yet well understood and to a high degree adhered to by members of the society (Castell et al 2007; Donner 2008). Ling (1999) posits that the mobile phone has become an element for defining social propriety. He refers to the rules governing use as 'common manners', thus reflecting their informal but widely accepted nature.

Although widely assumed to be very fluid and to some extent still under construction (Castell 2007), some of the rules governing mobile phone use are already set and agreed upon (Lipscomb et al 2007). Castel and colleagues further

assert that the emergence of collective practices that have eventually become 'regularised and formalised' give rise to social norms that shape future development in the social uses of the technology (2006, 94). These emergent norms define propriety both in public and private arenas. While some of the practices are self-regulatory, others are institutionally developed and shaped. The institutions include but are not limited to interested stakeholders such as governments, mobile phone companies, religious groups and hospitals. For instance, it is not uncommon to find signs forbidding phone use at hospitals, and government-formulated directives about when one can use a mobile phone (e.g. while driving). The Kibera study described participants' attempt to observe these set rules such as in meetings, work places and in places of worship. Participants demonstrated efforts to comply with the already stipulated codes of conduct associated with such settings.

Propriety is culturally and situationally specific and so its definitions will differ from society to society and, to some extent, from individual to individual (Campbell 2008). Shuter and Chattopdhyay (2010) carried out a comparative study investigating emerging interpersonal norms that accompany texting between US Americans and Indians. They concluded that the social use and functions (texting in their case) are guided by socio-cultural forces deeply embedded in the society. For instance, while US American participants had more propensity to text while in public places, the Indians did not. To do so was seen as rude. While Indians perceive public spaces as belonging to all (and thus not appropriate places for conducting private activities such as calling), US Americans are able to create their own private moments or spaces within the public setting and thus consider it okay to text and call in public. In effect, Shuter

and Chattopdhyay concluded that the differences between the two groups are influenced by their cultural perceptions about public spaces.

In my study of Kibera residents, one context where these differences in practices were displayed was in the use of mobile phones in church. In all three focus groups the participants pointed out that one should not use a mobile phone in church. These responses were expressed as almost a matter-of-fact or common expectation. Asked when they would have their phones off, the in-depth interview respondents echoed the focus group participants' responses. One respondent said 'you know … a place like church, you know you cannot pick a phone call as the preacher is preaching. At church you should have it silent or put it off'. Another one said, 'it is not good to take phone calls while in church; in church we are expected to turn off our phones'.

While it is generally agreed that the phone should not be used in church, these rules do not seem very rigid. They accommodate unique situations as they arise. The study participants pointed out that in the event that someone wants to have the phone on in church, perhaps because they are expecting some urgent news, they can have it on silent or on vibration. That allows them to hear the incoming call and, without disturbing everyone else, they can tiptoe out as quietly as possible and attend to the call. One discussant said:

> 'If it is in a meeting or a church, if your phone must be on, then have it on vibration. For example you might be expecting an important call or you want a very important message to come through, it is better to have it on vibration so that it does not distract people … [the distraction] … is not good.'

Another focus group discussant said:

> 'If one is at church and someone calls you and you stand and talk loudly … you disturb others. One should at least talk in low volumes and maybe talk from outside and come back after you are finished. That would be better.'

This shows that participants esteem politeness and courtesy. They interpret the rules as not so much about controlling people but as ensuring that people observe a certain decorum that is respectful of the situation and the activities of the gatherings, such as during services of worship.

6.2.1 Balancing between the co-present and the absent

Others have explored the use of mobile phones in public spaces as specific contexts that define mobile phone use (e.g. Humphey 2005; Palen, Salzman & Youngs 2001). These researchers base their studies on the argument that the use of mobile phones allows one to exist in two separate spaces simultaneously: the immediate physical space and the virtual space. This presents possible clashes between the respective behavioral requirements of each space. An incoming call requires the recipient to make a conscious or unconscious decision on which context to attend to. The choice inevitably privileges one context and its attendant behaviour over the other, leading to a possible clash between the two. Engaging in the behavioural requirements of one (particularly those of the virtual world) maybe considered inappropriate by those present.

Among Kibera participants, this difference between spaces was particularly evident in regulations governing use of mobile phones at work. Just like the rules governing use of the mobile phone at church, these rules are well understood but negotiable depending on the situation at hand. The participants were asked how they would feel if they walked into a shop or an office and the person they wanted to speak to was on the mobile phone talking to someone else. They argued that although it would be polite to discontinue the

conversation and attend to the person who has just walked in, this should not always be the case. Whether to disconnect or not will depend on who the person is talking to and the nature of the conversation. If they were talking to their boss, it would be considered impolite to disconnect. With reference to the nature of the conversation, one focus group participant, who also runs a business in Kibera's open air, market said:

> 'If I was talking on the phone and a customer comes in, you see, I am the loser, if I don't attend to them, if they go to another shop, it is me that will lose and maybe what I was talking about is not as important as what I would have gotten … if it is something to do with some important information such as someone moving the boundaries of my land [ownership of land in Kenya is highly valued], I will listen to this message first … but if it is chit-chat, I will ask the other person to hold on while I attend to the client.'

Even though these scenarios were negotiable, they seemed to be underscored by the need for politeness and respect for others. In response to the same question above, another participant said:

> 'You really feel bad, you are embarrassed, because out of courtesy, you can tell the person on the line to hold and you might tell the other one to give you a minute … so you indicate to them that you have seen them and let them know that you are talking to someone … and you are coming back to them.'

The situational specificity of mobile phone propriety has to some extent depended on the degree of formality that defines the context and the expected behaviour. For example, loud talk may attract a more negative reaction in theatres than in a train station. Ling (1998) focused on mobile phone use in restaurants as a case of a public space. His respondents highlighted loud talk, ringing and widespread discourteous uses particularly annoying. His findings

were corroborated by a later study by Wei and Leung (1999). They found that use of phones in public spaces such as cafés, airports and train stations was annoying to their participants. Practices that were particularly annoying in these contexts were similar to those identified by Ling (2004): loud talk, ringing and practices that blur the line between private and public, practices that Ling describes as 'coerced eavesdropping'. Plant 2002 (cited in Wallis 2006 p. 29) gives insight into the reasons why people get irked by mobile phone conversations around them. He posits that 'the mobile allows its users to believe that they are entering a private space shared only by the parties on the phone' and that this gives them illusions of intimacy leading them to engage in conversations that may not be appropriate given the immediate social context.

In my study of Kibera residents, two focus group discussants gave examples where people were talking loudly on their mobile phones. They expressed their disapproval of such behavior, noting that it is better to talk in low tones. This includes the need to regulate the volume level of any music one is listening to using the mobile phone. They also said that it was inappropriate to talk loudly when on public transport. They said that not only did such behavior force others to listen to your conversation but it disturbed those around you.

Wei and Leung (1999) also asked the participants what they thought should be done to address annoying practices. Interestingly, most of their respondents (89.6 per cent) favored self-discipline. This included engaging in regulatory behavior such as switching off or putting the phone on vibration to minimise the intrusive noise from the ringing and lowering the volume while conversing on the phone. During our interview session Joseph's phone rang. He declined to pick it up. I took the opportunity to ask him why he did not pick it up. His answer was simple: 'Because I am in a meeting with you'. Barbra's phone too

rang during our interview and she quickly declined it. I told her that she could pick it up and respond to the pastor. I assumed it was the pastor because she had told me that she sings in the church choir and she had decided to come for the interview before proceeding to the church. She responded by saying 'no that is alright, he knows I am in a meeting with you'. Participants' responses reflected an awareness of their own agency to control the device and reduce potential conflicts or awkward situations.

6.2.2 Personal regulations

Beyond the assumption and widely acceptable understanding that regulations govern public etiquette, this study also examined practices that are developed to regulate mobile phone use at an individual level. These practices help highlight an individual's sense of control over the device. Limited research has explored this dimension. Licoppe and Heurtin (2001) investigated how mobile phone users manage availability. They noted that there are different ways that people filter accessibility: by deciding who to give their phone number to, whether to or not to answer an incoming call, when to have the mobile phone on or off. Licoppe and Heurtin see these as forms that signals one's availability or will to 'decommunicate' (p 103). Palen, Salzman and Youngs (2001) similarly examined how 19 first-time mobile phone users integrated the phone into their everyday lives. They also pointed out that users developed strategies of managing accessibility. While some developed strategies to ensure maximum accessibility, others wanted to minimise it. They took advantage of the caller identity traditionally displayed on the mobile phone screen to determine the importance of the call. They also limited who they gave their phone numbers to.

Regulations on calling and receiving calls

During the in-depth interviews and focus group sessions with Kibera residents, participants engaged in interesting discussions about self-regulatory rules on calling and receiving calls. All the participants in the in-depth interviews said that except for Sundays they do not switch their phones off at all. However, this did not mean that they were accessible to everyone at any time. They determined what calls to make and when to make them depending on the relationship they had with the caller or intended recipient. Some said that they would answer all incoming calls despite the hour, even calls in late at night, while others said that to answer or not to answer a late night call depended on the relationship they had with the caller. Becky can call her father at any time, but she will not call her superior at work or anyone with whom she does not have a close rapport at any time. She says that she likes setting boundaries. This is so that she is 'not misunderstood' and she does 'not misunderstand someone'. That is why she would not appreciate a male colleague from work calling her after hours, particularly after 6:30 pm. Despite that, she will answer any incoming call, whatever time of the day. This is because 'it might be someone in need … it might be a distress call'.

Bernice expressed the same sentiments. She has her phone on throughout, except when in church. For the same reasons as Becky she will pick up any incoming call at whatever hour of the day or night. The caller could be seeking help. However, she will not call anyone late into the night. Just like Becky, Joseph will answer an incoming call late at night because the person might be in some dire situation and needing help. By contrast, although Paul will also have his phone on throughout, he will not answer every incoming call. To answer or

not to answer a late night call will depend on who the caller is and the relationship he has with them.

Calling back rules

Returning missed calls was regarded as polite and expected. However, this was also governed by a set of unwritten rules. The respondents were asked to envision a scenario whereby they had left their mobile phone at home. On returning home, they find a couple of missed calls on their phones. Would they return the calls? Would they call back all of them? One participant said that she would scroll down the numbers, categorise the callers and then decide in order of priority who to respond to first and how to respond to them. This categorisation would be according to the relationship or how she knew the callers. She would call some back to hear what they had to say while she would flash/beep others in order for them to call her back. The flashing in this case would mean 'I am now available, you can call me'. This can also be achieved by sending the caller a 'please call me message', as discussed earlier.

It was generally observed by the rest of the participants that it was proper to try to get back to the caller in one way or another. One discussant said that if she did not have enough recharge in her phone, she would beep the caller so that they can call her back. She was quick to add that she would apologise to them for beeping. She noted that it is better to beep them than not to respond to their missed calls at all. Just as in the earlier focus group, in this focus group, who to call back or who to beep and the order in which to respond to missed calls would depend firstly on the relationship one has with the caller. One participant said:

> 'It will depend on the people that would have called. If it is my husband, I will call him first. I will check on what he wanted to tell me before I go to the others.'

Who to flash or not is also dependent on the other person's financial capability. While agreeing with the principles above mentioned by others, one lady said 'maybe that other person is able'. By this they meant that the person was financially stable. This comment gained immediate agreement from the rest of the group, with members nodding and giving affirmative responses almost in unison.

Among participants in Palen and colleagues' (2001) study, when a call came in from a number that was not in the recipients' directory, they struggled to decide whether to take the call or not. Some felt more compelled to respond because it was difficult to access the importance of the call. Albeit with caution, my participants displayed the same concern about returning missed calls to strange numbers. It was noted that it is good to call back to find out what someone wanted. Even when the caller ID is not known, it just might be someone known to them using a different phone number. The caller could also be in trouble and needing some help.

'Hanging up'

A practice that is also prevalent among the Kibera participants is 'hanging up' as a way of managing accessibility. This is when one decides to abruptly end a phone conversation. Many times this is done without warning the person on the other end of the conversation. Bernice has in the past hung up on someone. This is because she did not like what they were saying. Moses and Philip as well will hang up on a caller if they do not like the conversation or if the person annoys them. For Becky, if she is avoiding someone, she goes an extra mile and lets him

or her know. According to her this helps them understand why she is not picking up their calls or why she is likely to 'hang up' on them. So as a rule, participants said they would not continue with conversations that they are not happy with.

While the mobile phone is credited with increased connectivity and easy access, the above practices indicate that this does not translate to anytime uninhibited access to the mobile phone user. Participants develop practices that filter and manage access. They do this by deciding which calls to answer, when to answer, who to call and when to continue or discontinue with a conversation

Rules on beeping

An interesting dimension of mobile calling activities is the practice of beeping. Beeping, also known as flashing, is where a caller intentionally makes a missed calls. The missed call is supposed either to prompt the recipient to call back or to pass on an already negotiated message, such as 'I have arrived'. As Donner (2007) notes, these beeps are pre-negotiated prior to the beep between the beeper and the recipient. However, in most cases beeps are used when the beeper needs to communicate with the recipient of the beep but is not able to call (mostly for financial reasons). So the beep becomes a request for the recipient to call them back. Oksman and Turtiana. (2004) investigated the same practice among Finish teenagers. They refer to it as a 'bomb shell'. However, in this case they found that 'bomb shells are made for fun, to get attention and to communicate without incurring any cost'. While much has been said about beeping, there has been little research investigating rules governing the practice (see Donner 2007).

All the respondents said that at one time or another they had beeped someone. As noted above, many will beep as a way to respond to a missed call.

In this case the beep becomes an alert, letting the recipient know that they are available to take their calls. The practice seems to observe certain underlying assumptions. One is that the more financially able person is beeped in the hope that they will return the call and bear the cost of the conversation. As noted earlier, one focus group participants said that she will decide whether to return a missed call or to beep depending on the financial capability of the caller. The other assumption is that to beep or not beep someone will depend on one's relationship with the person. Many talked about beeping close family members such as their spouses or their children, and many allowed their children to beep them.

As noted in literature some users already have pre-negotiated messages as a way to decode the beeping or the responses to the beep. Bernice has such an agreement with the woman who helps her with farm work back in the rural areas. Bernice has told this woman that if she (the farm help) beeps Bernice three times without a response, she should know that Bernice does not have money to call her back at that time but she would call her as soon as she got some. However, participants noted that at times they would decide to beep under the assumption that since the individual wanted to communicate, they should bear the cost of the call. In other words, they will avoid bearing the cost of the beep because they are not the one who needs to get in touch with the other party.

This practice of beeping is described not without some caution. Becky and Joseph warned against beeping too much. They said that it diminishes the importance of beeping. If one beeps too frequently, the beeper will not be taken seriously. It is like crying wolf—it can jeopardise the beeper's chances of getting help in the event of an emergency.

6.2.3 Mobile phone sharing

Similar to beeping, mobile phone sharing has been presented as largely a cost saving strategy unique to users in the lower economic sector (James & Mila 2007; Aker & Mbiti 2010; Wesolowski & Eagle 2012). Although among my study participants the practice is now playing a reverse role of motivating mobile phone acquisition, it was still prevalent among the study participants at the time of my data collection. This practice is also governed by a set of rules that are meant to safeguard the privacy of the mobile phone owner and the safety of the mobile phone.

A couple of the respondents said they do not allow the mobile phone borrower to walk out of their sight while using their mobile phone. This is because in the past people have lost their phones after the borrower walked a little further away, pretending to position themselves for better signal reception. Those who share their phones insist that the person uses the phone in their presence. They also reserve the right to know the reason for borrowing the mobile phone before they can lend it. This helps them determine the urgency of the situation and decide whether it warrants lending the mobile phone or not.

More phone sharing practices were extensively explored during the in-depth interviews.

For Becky, whether or not to share her mobile phone depends on who it is and what they want. She will share her mobile phone with her immediate family members such as brothers, sisters and a few friends. She was quick to stress that not every friend can borrow her mobile phone. For those she allows to use her phone, she has some rules. They should not scroll through her phone or use it to access the internet. The reason is that 'what does not belong to you does not belong to you'. An unwritten rule among her family members is that they do not

pick up each other's incoming calls unless it is simply to tell the caller that the person they want to speak to is unavailable and that they should call back after a specified amount of time. Becky is keen to point out that although she has nothing to hide, 'it is just respectful not to pick other people's phones, use them or scroll through them'.

Pressed as to whether there are times she has refused to share her mobile phone at all, Becky said: 'No' (in a low tone that communicated concern) 'unless that person in the past has really shown me that they cannot be trusted, which is a very rare case'.

Several others noted that it is inappropriate to scroll through someone else's mobile phone. They said if they were to lend someone their mobile phone to use, they would rather dial the number for them. This reduces the chances of this person scrolling through their phone. Data stored in the phone is regarded as private and so should not be interfered with. A couple of other respondents expressed the same sentiments.

Joseph says that though it is not something he likes, he is willing to share his mobile phone, based on the urgency of the borrower's needs. He, too, has some rules the borrower has to adhere to. For example, he does not allow anyone to open up his phone. He observes that some people open it up to switch the SIM cards. He only shares with those he trusts. He observes that the borrower might use his phone inappropriately and that might get him into trouble with the authorities. However, he said that he allows his wife to pick up his incoming calls. This is because he believes that she is able to receive messages on his behalf.

For Moses, friends and neighbours can borrow his mobile phone but they should not make it a habit. They should borrow it only if it is very important for them to use it. He allows them to move a little bit further away with his phone if they want some privacy. But not too far. They might disappear with his mobile phone.

Philip will similarly share his phone depending on the reason for which the person is borrowing it. However, there are some people that he will not share his mobile phone with at all, especially those who he thinks want to spy on him. He allows his wife to pick up his incoming calls on his phone.

Bernice said that she allows her spouse to use her phone. She and her husband frequently exchange their mobile phones. It is not unusual for her husband to pick up her phone and go out with it leaving his behind. They even have their phone calls diverted to each other's mobile phones.

In contrast to Becky, Moses does not allow even his family members to answer incoming calls on his behalf. He says 'if I leave my phone there, let me find it there'. In the event that his phone rings in his absence, he would rather that no-one answers it. He 'never knows' how the person will answer and more so 'if it is someone calling with news of a potential job'.

As noted in chapter five, these rules played a part in some of the participants wanting to acquire their own mobile phones. As borrowers, they felt that the rules compromised their privacy, especially when they had to speak in the presence of the mobile phone owner or when they were first asked what they wanted to talk about as a way of screening their need to use the mobile phone. They felt that they were continuously at the mercy of the mobile phone owner to

access and benefit from mobile telephony. They reasoned that the only way to resolve this the dilemma was to get their own mobile phones.

6.2.4 Use of mobile phone accessories

In addition to the multiple functions afforded by the mobile phone, today's devices also come with an assortment of accessories that either make use easier (e.g. earphones) or protect the mobile phone (e.g. mobile phone covers). Although I did not have any plan to include discussions about the use of mobile phone accessories, the focus group participants themselves highlighted practices associated with the use of earphones. To use or not to use an earphone is an age-specific question. In other words, the appropriateness of its usage depended on one's age bracket. Participants in the three focus groups emphasised that it was okay for younger people to use earphones but not appropriate for older people to use them. One focus group discussant said:

> 'Even now with the mobile phones, there are some with earphones. According to me, earphones are for the dotcom' (a slang reference to young people). 'Finding an older lady like me with them on, listening … there is nothing like that.' (meaning that such a practice would be unacceptable)

The perception of age specificity in the use of earphones was further highlighted by a younger focus group discussant who said 'Yes, I do use them depending on time … I can sit down with friends or by myself and listen to music'. On the other hand, in response to being asked what she would think if she found her mother with earphones listening to music, the same woman said:

> 'You know first and foremost I will get shocked, because it is not normal for me to see a lady of her age doing something like that, so I must get a little shocked. I must wonder why she is behaving like this, her age does not allow her to use them … again when she gets used to it. She will now start going out with them

> and your friends will wonder what is wrong with your mother and they will make fun of you or ridicule you … I will wonder if it is me or her to use the earphones.'

Three middle-aged women strongly dismissed the use of earphones with reference to their age bracket. One said:

> 'I am saying … if someone like me takes these things [referring to earphones] and puts them in my ears and my son is seated next to me, I don't know how they will take me, I don't know how I will feel as well. Putting those things in my ears … listening to music using the earphone … that does not go with my age.'

The same sentiment was expressed by a discussant in a different focus group. She said 'at my age, I will not like that, I cannot put that thing in my ears'. Another participant said:

> 'To me, I think it is a waste of time … I cannot use them. Even when I buy a phone and it has them, I just put them aside. They have no use for me.'

Despite these strong expressions about the impropriety of older people, particularly women, using earphones, participants did mention exemptions to this rule. Surprisingly, the same women who regarded themselves as too old to use the earphones expressed these exemptions. One said that if she had some work to attend to with a very tight deadline and at the same time received a very urgent phone call, then she would consider using the earphones. This would allow her to work and still attend to the call. This indicated a willingness to negotiate around rules depending on prevailing circumstances. Participants' openness to negotiate around these expectations again indicates their willingness to adapt the practice and judgment of the practice according to specific contexts.

On the flipside, as alluded to in some of the above statements, use of earphones is highly acceptable and almost expected among younger people. Participants repeatedly said that earphones are for the 'dotcom' generation. Again, as noted above, one of the women considered use of earphones as appropriate for her age, but not for her mother. Young people would use them primarily to listen to music for entertainment. This was later emphasised in the photovoice project as indicated below. Here Habil says that he uses earphones to listen to music using his phone when working (figures 6.9 and 6.10).

Figure 6.9: Habil uses earphones to listen to music as he does chores

Figure 6.10: Habil uses earphones to listen to music as he relaxes

There was another underlying value governing use of earphones even among the younger populations: safety. They say the use of earphones can be distracting and even dangerous. One participant pointed out that if you called her while she has the earphones on, she would not hear your call and as she put it 'I could have saved you'. By this she means she would have come to whatever aid the caller required. Another participant stated:

> 'If you are on the road, you know you will be absent-minded as you listen to the music and at the same time you want to cross the road, even when the vehicles hoots at you, you will not hear, all your attention is on the song … so the vehicle will hit you.'

The above perceptions also indicated an attempt to adhere to social expectations of age. They feared being socially ostracised for behaving in a manner that is not expected of their age. However, this did not mean that they did not know or appreciate the value of accessories.

6.3 Conclusions

Consistent with Campbell's (2008) assertions, there are already established institutionalised and individual regulations governing the use of the mobile phone among the study participants in Kibera. The institutionally imposed regulations have been developed and observed within the institutionalised structures of the society. However, these institutionally imposed regulations are individually executed, based on the person's choice or willingness to comply with them. These rules are negotiable depending on one's situation or circumstances. Although it is polite to have the phone off while one is at church, certain emergencies lead participants to negotiate around the rule. For example, they will leave the mobile phone on vibration and attend to the call by moving to an appropriate distance so as not to disturb others.

The above demonstrates the fact that although the mobile phone operates within the larger socio-cultural context with its rules and guiding practices for use, the personal nature of the mobile phone allows a further negotiation of these rules. Similar to Humphrey's (2006) argument, in Kibera this happens as the individual attempts to embed the mobile phone within their everyday practices, values, beliefs and obligations. Thus, the individual's relationship to the caller, the time of the call and the importance of the message require a micro-level negotiation of the rules to govern responses.

The mobile phone has become an element that defines social propriety (Palen, Salzman & Youngs 2001; Ling 2004). Ling refers to these rules as 'common manners', thus reflecting their informal but widely accepted nature. My study participants reflected this in the way they implied that one should take a commonsense or matter-of-fact attitude towards some of the practices. This was evident in their tone and reaction by other group members while talking

about practices such as engaging in loud conversations when in *matatus* (Kenyan public transport) and when responding to or making phones calls while at church.

The rules were meant to maintain courtesy, respect and a desire to observe socially acceptable behaviours. Becky pointed out that although she has nothing to hide, it is respectful not to scroll through someone else's phone. This was also emphasised when one focus group discussant pointed out the importance of politeness in handling a telephone conversation in the presence of someone else physically present and waiting for your attention. This observation concurs with Ling & Donner's (2009) assertion that 'rules of etiquette often privilege those that are physically co-present' (23). Rules on whether to use or not to use earphones similarly reflected an attempt to behave in accordance with the socially acceptable standards. Socially acceptable standards are also reflected in the attempt to excuse oneself in the event that one has to carry on with a phone conversation in the presence of someone who is physically present. Thus participants find ways to manage the co-present relationships in the phone conversation.

Other practices are designed to protect mobile phones and the privacy of the owner. This is particularly played out with rules governing mobile phone sharing. Rules such as who an owner will lend their mobile phone to or not are based on trust. Some participants said that only their spouses can answer their calls if they are not available or can borrow their mobile phones. Others said they would not allow someone to walk out of their sight while using their borrowed mobile phone. Still other participants also insist on dialling the number the caller want to contact.

6.4 Summary: the process of embedding so far

The type of rules crafted and the way participants negotiate around the rules further demonstrates Kibera residents' awareness of their own agency in determining the use and place of the mobile phone in their everyday life. The fact that the users displayed an attempt to develop their individual rules even as they operated within the larger social expectations for mobile phone use is indicative of one's values and of an attempt to exert self-control against the backdrop of individual commitments, routines and general demands on one's time. Both rules and self-control impact on when to pick up calls, when to switch the mobile phone off and whether or not to use the other affordances the phone offers. Together the social and individual regulations contribute to complex practices that shape the individual's consumption of the mobile phone.❖

Chapter 7

Objectification and conversion: negotiating space

Objectification as part of the consumption patterns of communication technologies is typically expressed in the physical dispensation of the technology (Silverstone et al 1992 p. 22). As Green (2001) points out, it involves the user making 'space' for the technology. This dimension heralds new dynamics in both the physical environment and the social space of the user. Related early research focused on the placement of early communication technologies within the home environment. This reference was ideal for the then interactive communication technologies that were primarily fixed devices that were consumed within the home environment. With the entry of communication technologies that are not necessary consumed within the home environment, the term domestication has been revised to include spaces outside the boundaries of home (Haddon 2003; Bakardjieva 2006). With that comes a revised understanding of practices of placement. Due to its portability and wearability, objectification of the mobile phone include how people carry it and where they place it when it is not in use. According to Silverstone et al (1992), conversion involves the use of the communication technology to negotiate one's social standing. Just like objectification, it includes displays choreographed to project the user as a consumer of the device. By extension, these consumption behaviors are also indicative of the values and meanings users bestow on the technology. In this chapter I explore Kibera participants' (1) placement practices of the mobile

phone; (2) carrying practices; and (3) any attachments and meanings bestowed on the mobile phone. These dimensions were primarily investigated through photovoice.

Figure 7.1: Khasakhala holds his mobile phone while preparing the charcoal burner for cooking

7.1 Negotiating Physical and Social Space

7.1.1 Carrying Practices

As Ichikawa, Chipchase and Grignani (2005) point out, technology can be in the form of handheld devices or wearable devices. They say that while wearable devices are attached to one's clothes, handheld gadgets have a greater tendency to roam. They classify the mobile phone as both a handheld and a wearable device. They posit that these two qualities allows users to place them on various surfaces and places as well as to pass them over from hand to hand. Based on this description, Ichikawa and colleagues explored where people keep their mobile phones while on the move and the reasons for the preference. They concluded that users do not place their mobile phones wherever is available. Convenience, tolerance for multiple postures, risks of theft, comfort or appearance were considered in deciding how to carry or place the phone (p. 1). Among their respondents, minimising the

risk of theft and convenience had a greater influence than did the appearance of carrying the mobile phone. Modes of carrying included carrying the phone in trouser pockets, upper body pockets, backpacks, belt enhancements and shoulder bags. The most popular location was the trouser pockets (34 per cent), followed by shoulder bags (33 per cent).

Although many of Ichikawa et al's respondents indicated consistency in how they carried their mobile phones, there were instances where this could be changed. This variance from what would have been considered the typical location in which they placed their mobile phones was influenced by factors such as a change of clothes. For instance, some of the respondents who said they regularly carry their mobile phones in their trouser pockets, said that they would opt for other alternatives in the event that they were not putting on trousers with pockets. Location would also change if the user was expecting an incoming call. In this case they would attempt to locate their phone in places that they can hear incoming alerts and easily retrieve it. For instance, they would prefer to put the phone in their front pocket instead of in a bag where it might be difficult to hear the alert and cause delays in retrieving it. Location was also altered if one wanted to minimise intrusion. For example, during a church service or a meeting users would not want an incoming call to interfere with the proceedings. In this case they would use more discreet methods.

Using the same data set as Ichikawa, Chipchase and Grignani (2005), Cui, Chipchase and Ichikawa (2007) further classified factors influencing choices about how to carry the mobile phone into three categories: instrumental factors, non-instrumental fators and contextual restrictions. Instrumental factors include those that were practical in nature. Ease of retrieval and ease of noticing incoming communication (calls or texts) were classified as instrumental determining factors. Other factors considered under this were

placements that ensured security of the phone, minimising the risk of it dropping out or being stolen. Non-instrumental factors are based on personal preferences. They include attempts to display fashion and being discrete. Contextual constraints were those factors that restricted options available to the mobile phone user. Choices were based on the best option available, or there were just no other available places. For example, users could not put their phone in a bag if they did not have one. They would have to manage with what they have. The size of the phone was a contributing factor as well. People put their phones only in places where they fit. Cui and colleagues posit that these factors can change with time (p. 487).

Extending on the above notion of 'mobile essentials' by Cui and his colleagues, Jan et al (2005) argue that due to the greater tendency for users to move around with their portable mobile phones it is important that users remember to carry them along wherever they go. Jan et al further point out that transition moments are critical in triggering reminders for the user to carry their phones to the next context. They observed that people either consciously or unconsciously position these items in a way to ensure that they remember to carry them. The way they are embedding the mobile phone into their everyday life demonstrates their agency in shaping its usefulness within their context. They are doing this by deciding what the most appropriate uses are and the most appropriate ways to use it. To make these decisions, they are taking into account their immediate needs for connectivity, their social-economic status and immediate environmental factors. Based on this, the study concludes that while the mobile phone is providing Kibera residents with the coveted better connectivity, an interplay of other factors (primarily cost, rules, security) play out to meet their immediate needs, while at the same time limiting their ability to exploit the full potential that the mobile phone affords them as users.

Patel et al (2006) took a slightly different approach on the placement of mobile phones and investigated users proximity to their mobile phones. Using lanyards with Bluetooth signals, they monitored the distance of the mobile phone from the owner at different times of the day over a period of several weeks. They found that 58 per cent of the time the phone was within the owner's arm's reach. They note that there was a significant increase in the percentage of time it was within arm's reach when the participants were away from home. Patel et al followed these observations with weekly interviews to determine factors affecting the proximity of the mobile phone to the user. Their conclusions resemble those of Ichikawa and colleagues (2005) discussed above. For example, the environment determined where users placed their phones. Reachability also played a role. If users anticipated needing to use the phone to make or receive a call, then the mobile phone was placed closer. The opposite was also true. If no use was anticipated, then there was a likelihood of the mobile phone being placed a little further away.

The foregoing literature provided the lens through which I explored carrying and placement practices among the Kibera study participants. Data presented in this section of the study explored how participants carried the mobile phone when not in use. These practices were initially highlighted during the in-depth interviews and focus group discussions but were covered more extensively during the photovoice exercise. The study respondents were invited to contribute to an initial list of themes to guide the photo taking. Their contributions were used to modify the guide. Participants were given cameras for a week during which they took photos to respond to the questions in the course of their everyday activities over the week. Data presented in this chapter is drawn from their interpretation of the photos.

Safety: concealment of the mobile phone

My study participants considered a number of factors in the way they carried their mobile phone. In particular, they considered security and the need to minimise possibilities of it getting stolen or losing it. Participants said the even when they may seem to be holding their phones casually in their hands, they were constantly alert to the possibility of losing it. In the photo below, Habil is 'not just holding the mobile phone phone' (figure 7.2). He points out that although in the photo he seems to have the phone casually hanging in his hand, in fact he has a tight grip on it. That makes it difficult for someone to snatch it. While contributing to Habil's interpretation of his photo, the other participants warned that if one does not have a tight grip on the phone, potential thieves are likely to hit you on the elbow and the unexpected jolt will send the mobile phone flying out of you hand. This allows the thief to jump and catch it mid-air and run off with it.

Figure 7.2: Habil keeps a firm grip on his phone, despite his casual posture

To ensure safety, participants engaged in carrying practices that would conceal the mobile phone. These ranged from the obvious ways of carrying

phones in their handbags or pockets (figures 7.3 and 7.4) to the less conventional methods of tucking it into one's socks.

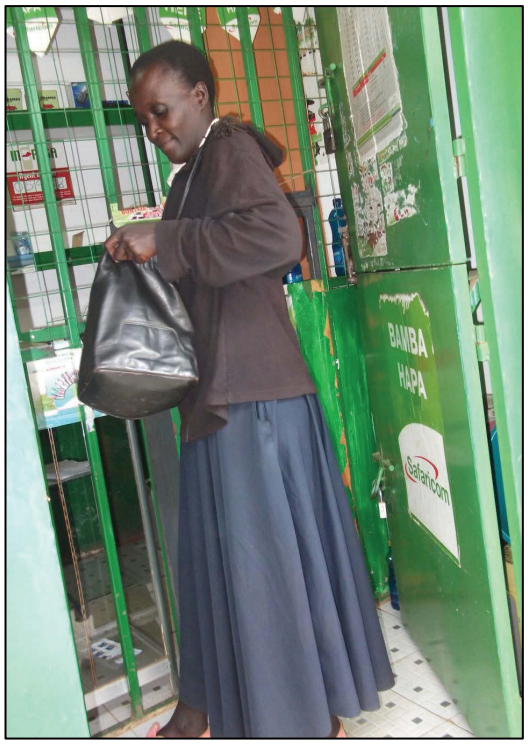

Figure 7.3: Peninah carries her phone in her handbag

Figure 7.4: Khasakhala holding his phone tightly in his pocket

Carrying the mobile phone was subject to the places one expected to pass or visit and the time of day. More concealing practices were deployed if the place was considered unsafe or if it was late at night. In the photo below (figure 7.5), Stephen expects to be walking through a crime prone zone in

Kibera. He is preparing for the journey before he leaves his house by tucking the mobile phone into his socks. During the focus group discussion, the importance of turning the phone off before hiding it in one's socks was highlighted. They said that if a phone call comes in while you are passing through the unsafe areas, the thieves would hear it ring and this would inadvertently defeat the purpose of hiding it. Philip, just like a couple of other study participants, changes the way he carries his phone according to the perceived level of security in the neighborhood he is in. He describes his journey to and from work. He has to traverse insecure parts of the Kibera slum and walk through the affluent Langata suburb. In figure 7.6 he is leaving his workplace. This stretch is perceived as safe. He puts his phone in his shirt pocket. However, as he approaches Kibera, he changes the position of his phone. He inserts it into his socks (figure 7.7).

Figure 7.5: Stephen tucking his mobile phone into his socks

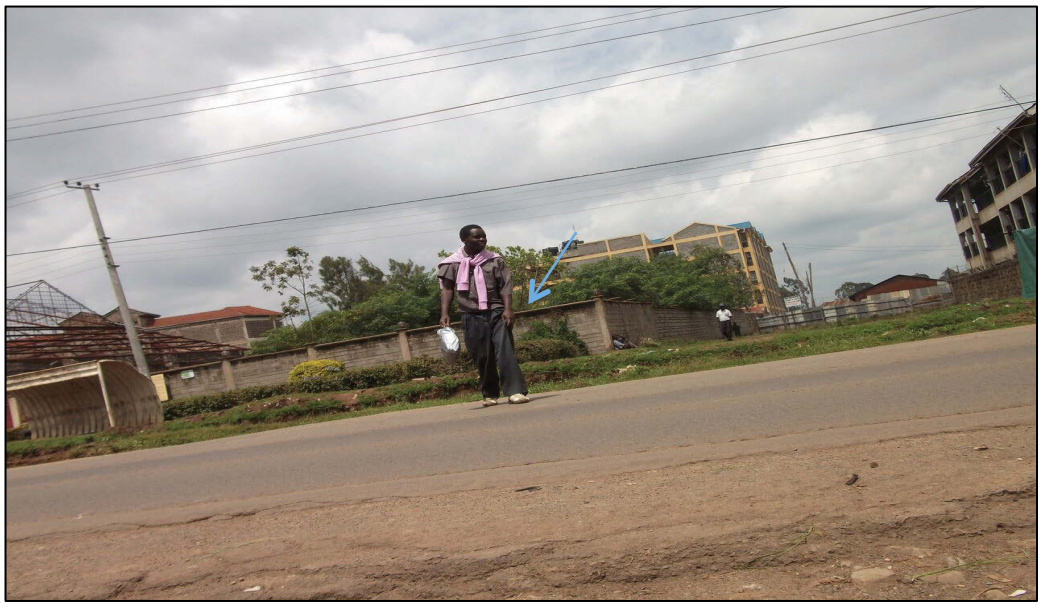

Figure 7.6: Philip is carrying his phone in his pocket

Figure 7.7: Philip tucking his phone into his socks

At times participants even disguised the probability of having a mobile phone with them, by carrying the phone in the most unlikely places. At times Peninah and Beatrice considered it risky to carry their mobile phones in a handbag. Beatrice and Peninah chose to discuss photos where they were holding plastic bags while walking in the slums. They pointed out that they sometimes carried their mobile phones in these bags (figures 7.8 and 7.9). This was to enhance concealment. They said that the plastic bag attracts less

attention than the usual handbag. People do not expect someone to carry something of value in a plastic bag, while carrying a handbag gives the impression that someone is carrying something of value. In the event that the bag is snatched, they will not loose their mobile phones. This response was met with affirmation as the other participants explained to me the importance of opting for less conventional ways to carry their mobile phones. Although this was not reflected in the photos, participants also said that they do 'nap the baby' with the mobile phone. When I asked what that meant, they explained they wrap the mobile phone within the nappies the baby wears. In the event of a robbery, the thieves would not suspect that there is anything of value beneath the baby's nappy. They will not think to undress the baby to look for a mobile phone. They will do this mostly when they are on a long journey. As mentioned above, participants explained that the high risk of having one's mobile phone stolen while walking around Kibera led them to hide it. Women said that they would carry the phone in their bags. They said that if they were going to the market or traveling they would put their phones in their bags. Only men mentioned tucking it into their socks.

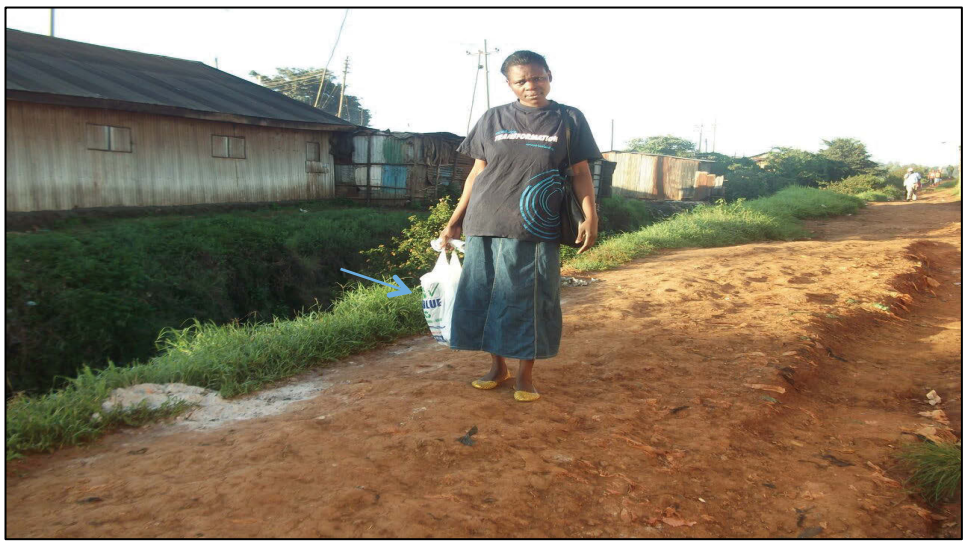

Figure 7.8: Peninah carrying her mobile phone in a plastic bag

Figure 7.9: Beatrice inserts her phone into a plastic bag

Positioning: Safeguarding the phone from falling or slipping out

It may sound obvious that owners would carry their mobile phones in their pockets. However, the photovoice participants highlighted a different dimension to this practice. The tightness of the trouser, the position of the trouser pocket and the depth of the pocket were considered in how one was going to carry their mobile phone using the pockets. Barbara and Faith selected the photographs in figures 7.10 and 7.11 respectively for discussion in the focus group. In these photos they said that they are putting on tight jeans. They are inserting the mobile phone into the pockets. They explained that it is very difficult for anyone to slip their hand into the pockets of tight jeans and take off with the mobile phone unnoticed. Barbara considers the walk across or along the railway line insecure. She inserts her phone in her tight pair of jeans. She says she will 'feel as the person is taking the phone'. It was also noted that when wearing loose jeans or trousers the phone could easily slide or fall out depending on one's sitting position.

Figure 7.10: Faith inserts her phone into the pocket of tight jeans

Figure 7.11: Barbara inserts her phone into the pocket of her tight jeans

An interesting twist highlighted among the participants is how they positioned the phone in the pocket and in which pockets they placed it. Respondents pointed out that whenever they put their mobile phones into their trouser pocket, they would slide it inwards. This makes it harder for it to be detected from afar. Additionally, it cannot easily be snatched or slide out of the pocket. One participant said that he buys or tailors trousers that have lower pockets that are slightly inwards for the purpose of carrying his mobile phone. This makes it difficult to casually detect the phone in his pocket (see figure 7.12).

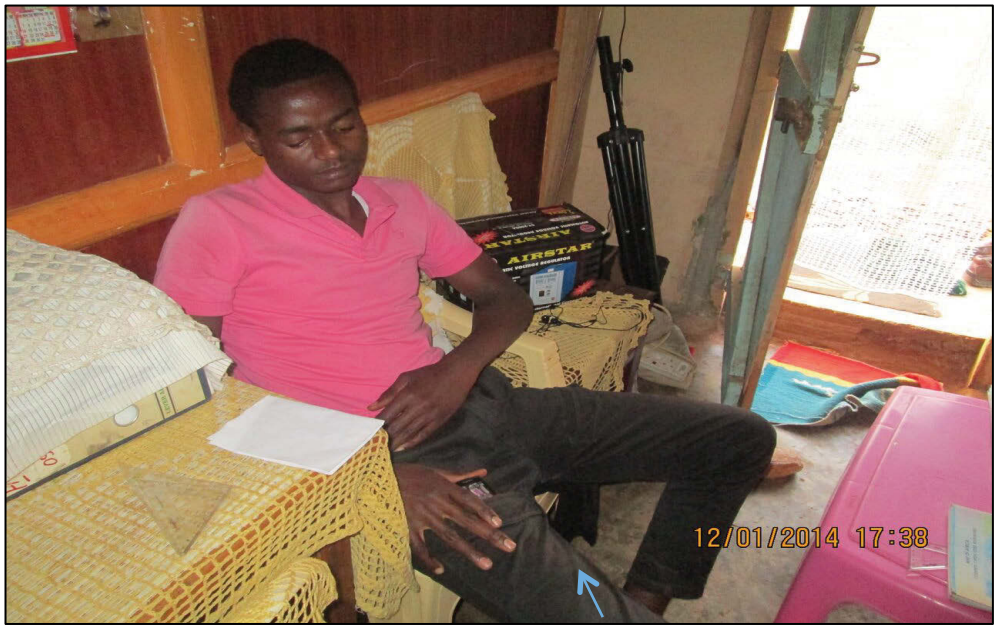

Figure: 7.12: Habil inserts his phone is a pocket that is inwards to disguise that he has it

Variations in the positioning of the mobile phone

Although many of the participants in Ichikawa, Chipchase and Grignani's (2005) study indicated consistency in how they carried their mobile phones, there were instances where this could change. This variance from what would have been considered the typical location in which they placed their mobile phones was influenced by factors such as a change of clothes. My study participants also did not have consistent places where they carried

their mobile phones while out and about. As mentioned earlier, the more risky the area was perceived to be, the more participants engaged in concealment of the mobile phone.

7.1.2 Placement Practices

Within reach

The photo voice exercise also explored where respondents placed the mobile phone when they were at home, at work or at church. Responses revealed that phones are mostly placed within reach. This was so that they would not miss any incoming calls or text messages. Again, the value of receiving incoming calls was to save the recipient from incurring the cost of returning the missed call. In figure 7.13, Philip has placed his phone next to him as he relaxes at home. In figure 7.14 Khasakhala says that he has his phone right next to him whenever he is in his house.

Figure 7.13: Philip will have his phone on the armrest if relaxing at home

Figure 7.14: Khasakhala will have his phone next to him while at home

The same reasons influenced where they placed it while at work. Placement at work differed according to the work environment and the demands of the job. However, in all situations, participants emphasised the need to place the phone within reach and in a safe place. A couple of women said that they are involved in embroidery or tailoring work at the Kibera market. They said that they would place the mobile phone either on their laps while they are working or on one corner of the sewing or embroidery machine (figure 7.15). In figure 7.16 Beatrice is seen mixing up dye at the tailoring shop where she works. She has placed her phone on the table right next to her.

Figure 7.15: Peninah keeps her phone next to her sewing machine

Figure 7.16: Beatrice has her phone next to her while mixing dye at her workplace

In the same room

While at home, if they are not holding it or needing to use it immediately, participants prefer to have the mobile phone in the same room with them. If they are in the kitchen, they prefer to have their phone in the kitchen (see figure 7.17 and 7.18). If they are in the bedroom, they prefer to have the phone there as illustrated in figure 7.19. They place their mobile phones under their pillows or right next to them when they are sleeping. This is again to ensure that they remember where it is when they wake up but more

importantly that they will not miss an incoming call or text alerts. This was also highlighted among the focus group participants. They said that many times they will move from one room to the next with their mobile phones, especially if they were going to spend a considerable amount of time in the next room.

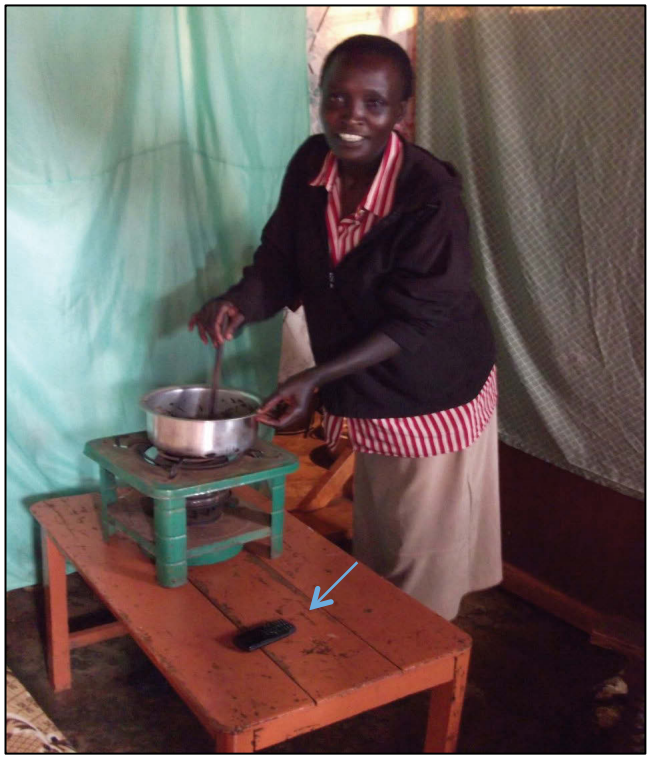

Figure 7.17: If in the kitchen, Peninah will have her phone right next to the stove

Figure 7.18: If she is in the kitchen, Faith will have her phone with her

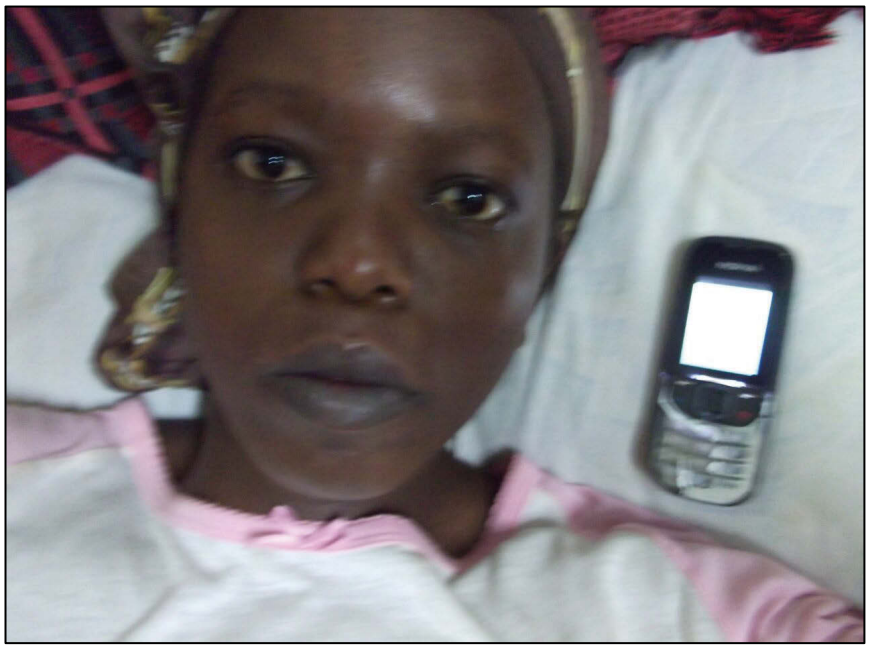

Figure 7.19: Sometimes Barbara has her phone right beside her pillow when she is resting

Next to other electronic gadgets in the house

It also emerged that sometimes the mobile phone is placed right next to other electronic appliances such as the radio or television. Faith and Barbara took the photos below (figures 7.20 and 7.21 respectively) to show where they place the mobile phone if they are at home but engaged in household chores that require them to move from one part of the house to another. The phone is intentionally placed next to or on top of a radio that is playing loud music. This is done with the hope that an incoming call or text will disrupt the radio signal. This would draw their attention to an incoming call that they might otherwise have missed. Others in the focus groups said that they have done the same, including placing the phone next to a television that is turned on to achieve the same purpose.

Figure 7.20: Faith places her phone next to a DVD player

Figure 7.21: Barbara places her phone next to the television

Security

As in in the carrying practices, of paramount importance in the decision about where to place the mobile phone was security. Participants emphasised the importance of keeping the phone out of children's reach. However, they still ensured that they would hear calls by keeping the phone within the vicinity wherever possible. In some cases, Peninah and Beatrice intentionally leave their mobile phones in the house if they are going to

church or they think they could be coming home too late at the night and thus might risk loosing the phone. Beatrice hangs her bag on the pole in the middle of her house (figure 7.22). She hangs it up high enough so that her children cannot not reach it. Peninah hangs her bag on a hook on the wall (figure 7.23), again high enough to be out of reach of the children. As depicted in figure 7.24, Stephen places his mobile phone on top of the wall cabinet. He says that this is so that children will not reach for it and play with it.

Figure 7.22: Sometimes Beatrice leaves her phone in a basket hanging off a pole in her house

Figure 7.23: Sometimes Peninah leaves her phone hidden in a bag hanging off her wall

Figure 7.24: Stephen places his phone on a high surface away from children's reach

There are times when participants did not take their mobile phones with them when leaving the house. This was primarily due to the place where they expected to visit and the perceived security of the area. They demonstrated attempts to place the phone in the safest place possible while they are away. One woman said that if she needs to leave the house in the evening, she wraps her phone in a piece of plastic and throws it under her bed. This way, her children or other people from the neighborhood will not take it. She does the same if she is going out to fetch water. Habil puts his phone the zipper side pocket of a big traveling bag. He then pushes the bag against the wall with the zipper facing the wall (see figure 7.25). He explains that this way, if someone breaks into the house, it is not easy for them to detect where the phone is. Stephen said that he sometimes leaves his phone in the pockets of a jacket hanging off his bedroom wall (figure 7.26)

Figure 7.25: Habil places his phone in the zipped pocket of a bag and pushes it against the wall

Figure 7.26: Stephen places his phone in the pocket of a jacket hanging off his wall

Away from potential damage

Philip works at construction sites. He mostly helps with building and fixing of bedroom wardrobes and kitchen cabinets. In figure 7.27 he shows how he wraps his mobile phone in plastic and puts it in one of the completed sets of bedroom wardrobes in one of the rooms that is not being worked on that day. This way the phone is protected from the dust that is generated from

ongoing construction work. Putting it there also reduces the risk of it falling into the piles of construction materials and getting damaged in the process.

Figure 7.27: Philip wraps his phone in a plastic bag and places it in a completed wardrobe

Handson is employed at a water collection centre. His duties include selling water. He says wrapping the mobile phone in a clear plastic bag protects it from possible water spills (see figure 7.28). The fact that the paper is clear makes it possible for him to receive incoming calls without having to retrieve the phone from the paper with wet hands.

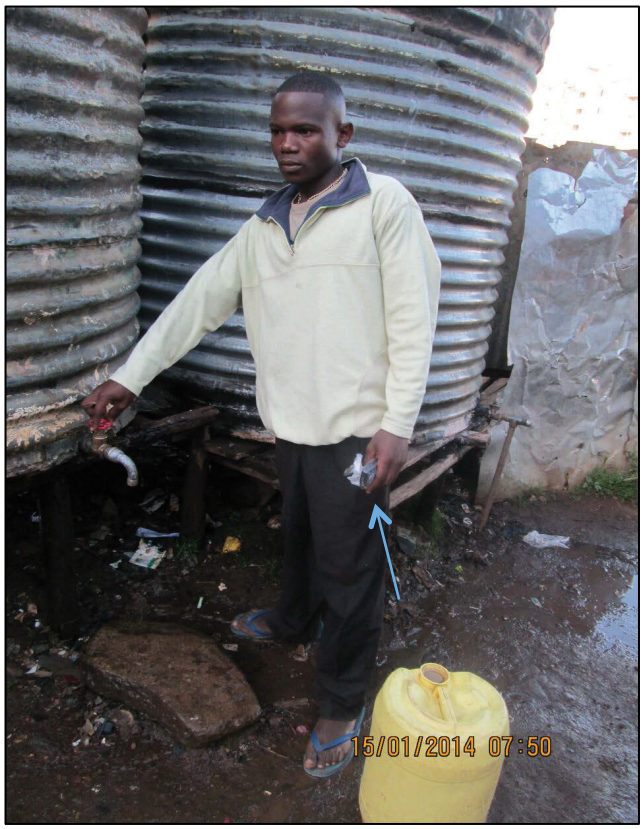

Figure 7.28: Handson wraps his phone in a plastic bag while at work at the water selling point

When in transit

Participants also mentioned incidents where they placed their mobile phones in places so that they would remember to take their photos with them. In figure 7.29 Khasakhala is at the barber's having a haircut. He says that he places his phone right in front of him. That way he will not forget it on his way out. He says that he will not put it in his pocket while seated because it may slide out of his pocket and fall without him noticing. Apart from ensuring that one hears incoming alerts, the act of placing the phone next to the electronic gadgets in the house also functioned as a strategy to remind participants where they had placed it on the way out of the house (figure 7.30).

Figure 7.29: Khasakhala places his mobile phone right in front of him at the barber's

Figure 7.30: Khasakhala places his phone next to other electronic devices at home so that he remembers to pick it up

7.1.3 Conversion: symbolism

The concept of conversion also deals with public display of consumption of the object. In this stage, the meaning that the user has attached to the artifact is converted and made part of the public meaning. Owners make their ownership and consumption public (Hynes & Rommes 2006, p. 128). Here the object is used as a currency in the public sphere (Pierson 2006, p. 211). Its use is seen as a symbol of status. Carrying and placement practices are sometimes part of attempts to display consumption of technologies and such practices thus function symbolically to negotiate one's social identity and group affiliation (Haddon 2001, Kyen & Lemaire 2006). This dimension of domestication seems to play out in a different way among the study participants. As can already be deduced from the review of carrying practices, the emphasis on concealment and the need to ensure the security of the mobile phone limit the extent to which Kibera phone owners can engage in public display of the mobile phone. Displays are only evident in closed spaces such as at home or at one's workplace.

Use of the mobile phone to negotiate self-image in society was not strongly highlighted in the Kibera context. In a later question participants were asked what they would opt for and why if given the choice of a radio, television or mobile phone. Only one participant said that the model of the mobile phone would determine whether he would choose it or not. He said that if it was a good one and one of the latest models, he would take it from among the rest. But if it was like any other phone on the streets, he would not take it. He would consider one of the two other options (television or radio). A few other participants alluded to symbolism as a criterion that informs what they would pick as illustrated below:

> 'You know with this one, you can save music in the memory card … so when you go somewhere and your phone rings … for example in public

> transport … people will wonder whose phone is that with such nice ringtone … you even feel good about it … so that is why we like the phone.'

Other practices that relate to personalisation of the mobile phone as an identity marker were noted in the photovoice discussions. However, participants do not seem to personalise their phones for the purpose of negotiating status in their social circles but rather for their own direct benefit and satisfaction. Philip has a photo of himself as a screen saver (figure 7.31). He says that he usually has his phone recharged at a shop at a cost. He says that the photo helps him to identify his phone among others that are charging from the same power outlet. Habil downloads photos of famous people into his mobile phone and uses them as screen savers. However, he says that he does so because he wants to look at famous people every time he pulls out his mobile phone. This means that it is for his enjoyment and not necessarily to display his taste to others around him.

Figure 7.31: Philip has his photo as a screen saver

Barbara uses thematic wallpapers as screen savers for her mobile phone to make it look good. For example, in showing me the photo below she explains that she had Christmas colours on her phone to correspond with the Christmas season that had just passed (figure 7.32). She does not have any decorations on her phone, but if she were to put any, she would put beads. A few others said that they have as screen savers images they like. Just like Habil, this is for aesthetic purpose for their own consumption and not necessary for display to negotiate public self-image

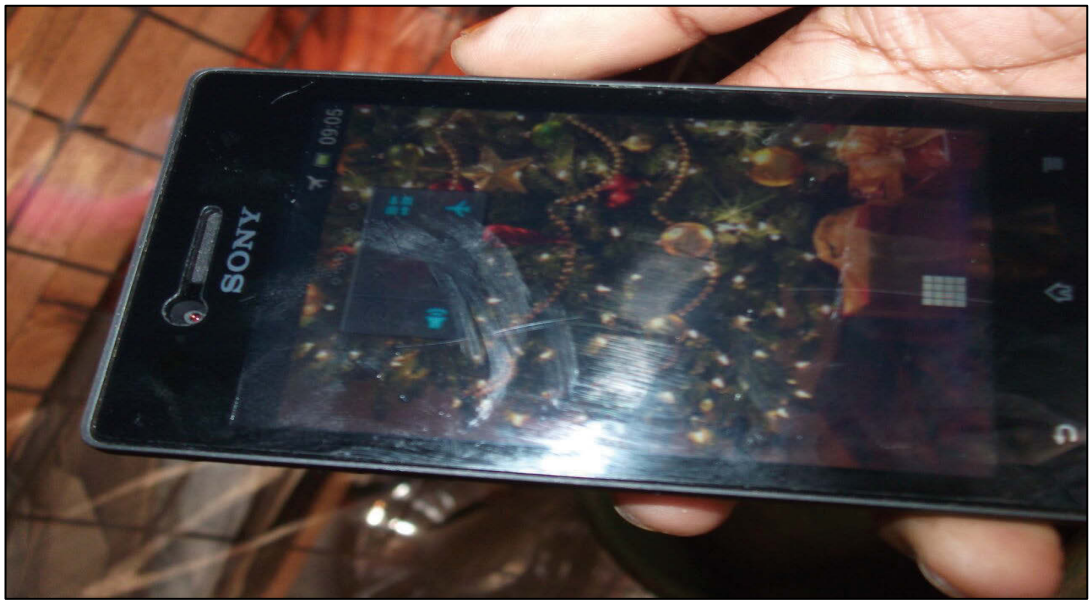

Figure 7.32: During December, Barbara has Christmas themes as her mobile phone's screen saver

Do participants use the mobile phone in public at all?

The above discussions do not mean that Kibera participants do not use their mobile phones in public spaces at all. While in public they constantly evaluate their immediate environment to determine whether or not to use the mobile phone. If a place is deemed as safe, they will use their mobile phone in public. If it is not, they will delay use until they get to a place they think it is safe. Handson explains that sometimes he uses his mobile phone in public. However, he has to scout around for a place with less human traffic

in which to use the phone. In figure 7.33 he is seen standing at a corner just before he heads on to a place he deems as too risky to use his mobile phone.

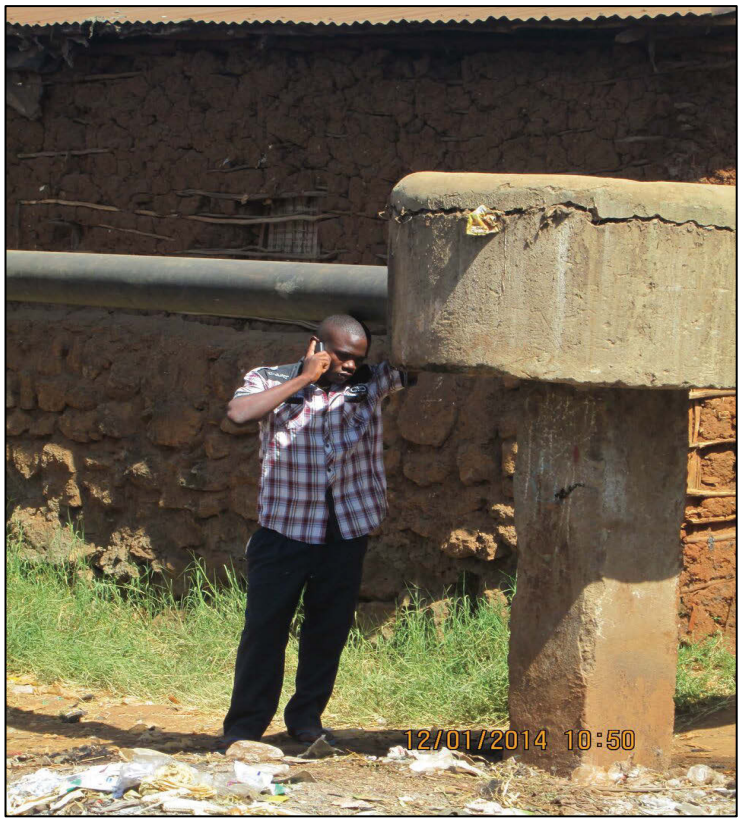

Figure 7.33: Handson considers this corner to be safe to use his mobile phone

Participants also said that even when they use their mobile phones in spaces deemed to be safe, they consider it wise to hold the mobile phone tightly, or to cover the model of the mobile phone. This is in a bid to further reduce the risk of attracting potential thieves. They said that better models have a higher chance of being stolen. In figure 7.34, Handson is seen using his mobile phone in public; however, he has covered it with his palm so that the model is not revealed. In figure 7.35, he decided to use his mobile phone by the wall of the house, away from the crowds and at a distance where he would be able to see any one coming towards him.

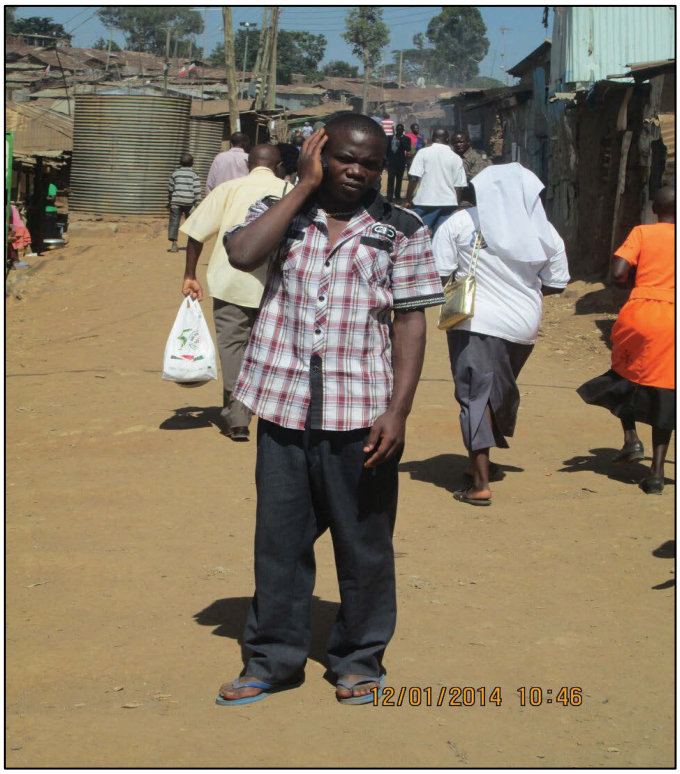

Figure 7.34: Handson covering his mobile phone when using it in public

Philip and Barbara also provided photos illustrating how they use the mobile phone in public (figures 7.36, 7.37 and 7.38). Just like Handson, they look for spots with less traffic and cover the phone so that passers-by do not see the model. Covering the phone also reduces the chances of it been stolen. It communicates to would-be thieves that the user is alert.

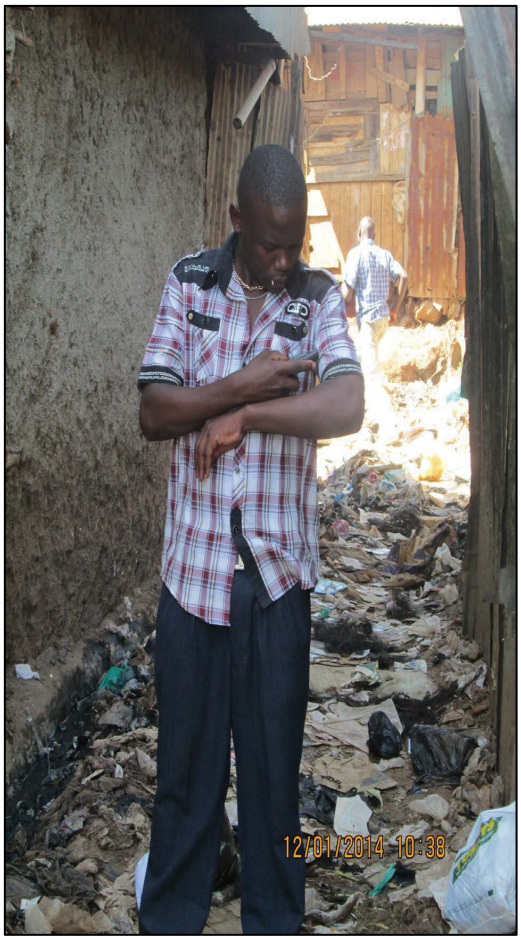

Figure 7.35: Handson using his mobile phone in a quiet alley

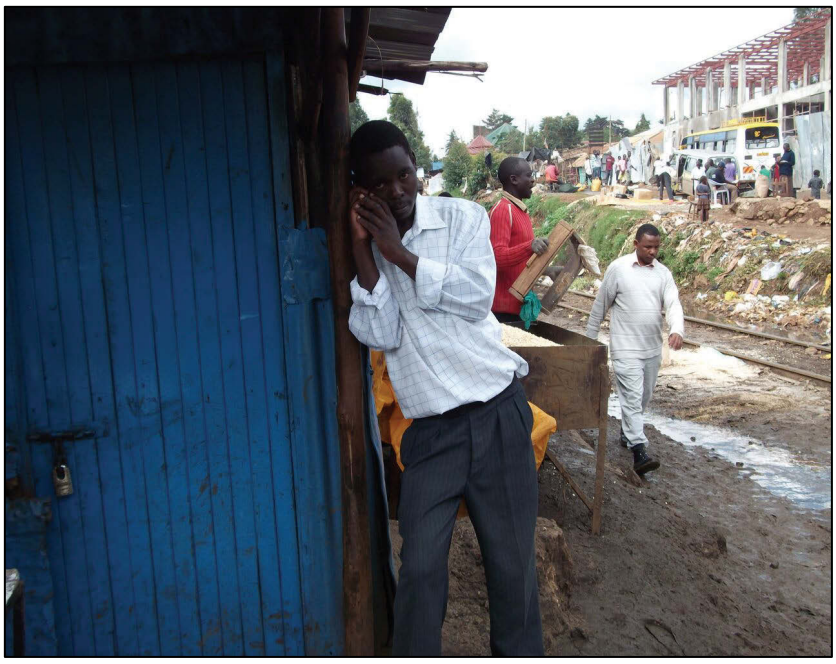

Figure 7.36: Philip using his mobile phone while leaning against a wall so that he is away from high traffic

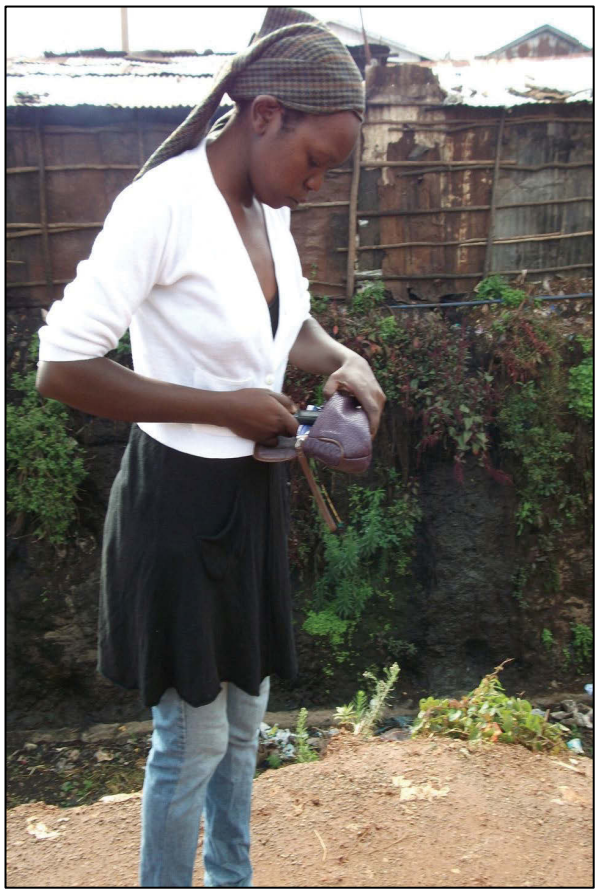

Figure 7.37: Barbara using her mobile phone while it is partly covered in her purse

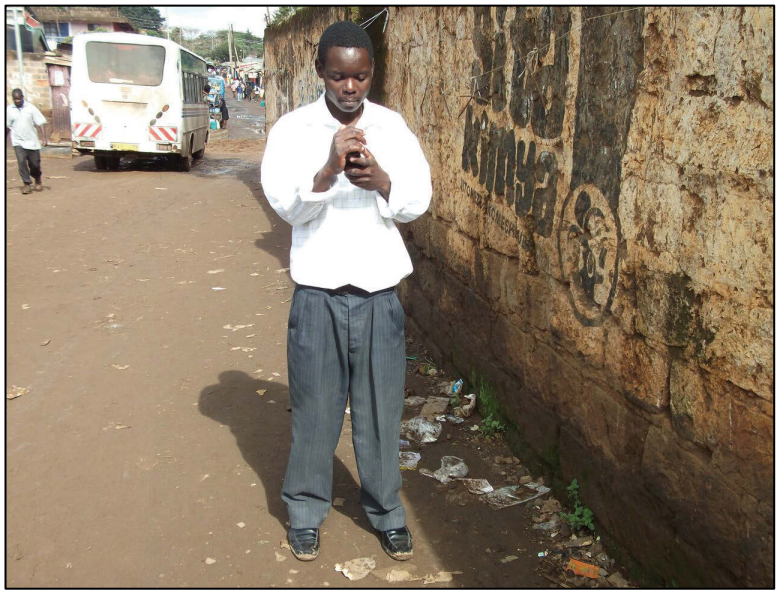

Figure 7.38: Philip using his mobile phone while covering it with one hand

In conclusion, for Kibera mobile phone owners the risk they constantly face of having their phones stolen limits their attempt to display and negotiate

social standing using the mobile phone. Unlike situations where the phone is worn to coordinate and complement one's clothing, among the Kibera study participants the phone is tucked away into one's clothing to disguise its presence.

7.1.4 Conclusions

Consistent with Ichikawa, Chipchase and Grignani's (2005) findings, the Kibera study participants did not simply place their mobile phones in whatever space was available. The security and safety of the mobile phone was paramount. This is consistent with other studies exploring practices accompanying mobile phone use among the poor (e.g. Portus 2008). How owners carried their mobile phones was largely determined by the security of the place they were in or hoped to visit in the course of the day. Aware that the phone is a highly valued and sought-after device, the Kibera participants engage in practices that ensure their phones do not attract attention. As a result, there was a higher emphasis on concealment than on public display of the mobile phone. This involved practices such as tucking the mobile phone into one's socks, positioning it in pockets in a way that it is not visible to a casual glance, wrapping it in a baby's nappy and holding it tightly. Portability and wearability in this context, then, take on a whole different dimension. Rather than the phone being integrated with the body as an extension of self and a display of social class as noted among other populations (e.g. Fortunati 2005), in Kibera it is integrated with clothing to conceal it. Other accessories such as handbags and plastic bags are also used to conceal the mobile.

The need to hear incoming calls or text alerts and the need to keep the phone away from harm were key determinants in where the mobile phone was placed while not in use. In line with Patel et al's (2006) findings, it was mostly kept within arms' reach or at least in the same room one was in. This

was to ensure that the owner could easily hear and respond to incoming alerts. Answering the call the first time saves one the dilemma of deciding whether to return the call, text the caller or beep them, all of which have a cost attached to them. This was further demonstrated by the interesting practice of placing the mobile phone next to other electronic gadgets in the house. Participants explained that, in addition to allowing them to hear incoming alerts, they preferred to have all the electronic gadgets close to each other. This made it easier to remember where they had placed the phone in time to use it. Participants also placed it on high surfaces or tucked away in a bag or under the bed to minimise the possibilities of children playing with it or of it being stolen from the house.

Placement and how participants carried their mobile phones were not constant. As can be deduced from earlier discussions, participants changed where they placed their mobile phones according to their physical location and what they were doing. Again, the choice to change the phone's position or to have it remain in the same position was influenced by the security of the place they were in or hoped to pass through over the course of their activities. Participants did not seem to use the mobile phone as a symbol through which to negotiate their public image. Participants attach almost no decorations to their mobile phones. This may be explained by the fact that use of their mobile phone in public is limited due to the perceived insecurity of their neighborhoods.

7.1.5 Summary: the process of embedding so far

The carrying and placement practices reviewed in this chapter are unique to Kibera residents' environments and experiences. Overall, environmental factors (primarily perceived security) influence carrying practices while instrumental factors (primarily the need to hear incoming calls) influence placement practices. Participants' awareness of the security of their

immediate environment corroborates earlier discussions of why participants replace their earlier mobile phones. They pointed out that they had their earlier phones stolen, leading them to buying others. Their subsequent concealment efforts seem to be a response to these earlier experiences. They explain the need to be constantly aware of their immediate environment and continuously making decisions on use, non-use, displays or concealments as deemed appropriate.

Ensuring the security of the mobile phone seem to supersede both the need to be reachable while one is on the move and the desire to use the phone to negotiate one's social standing as a user in public spaces. The fact that participants will have the phone off while in public spaces and will engage in practices that disguise its presence, or even leave it at home so as not to risk losing it, all seem to impact on the extent to which the phone can be used as a social currency especially through public displays. Placement at arm's length is important so that one can hear incoming calls, but by extension it also has cost implications that can be avoided by responding to incoming calls

7.2 Exploring the value of the mobile phone

'No, never, no way, that cannot happen!'

'I cannot leave the house without it.' Such statements have been used to reflect the centrality of mobile phones in contemporary society. Published research indicates that the mobile phone is regarded as one of the three main objects that most people will take with them when leaving their homes. The other two are keys and money (Jan et al 2005). Jan and colleagues posit that, at the very least, these items are regarded as essential for survival in the modern world. In a later study Cui, Jan and Fumiko noted that the mobile phone is the first thing most users will interact with in the morning and the last before they retire to bed. It is also given that the mobile phone will be

used for or during almost every other activity in the period in-between (2007).

Explanations for these practices are diverse. Researchers point to the affordances of mobile phones, particularly its ability to provide constant connectivity because of its portability. Saggins and Flood (2013) investigated people's dependence on mobile phones and more particularly their willingness to be separated from them. They noted that out of those approached to participate in the study, 60 per cent declined the invitation. Twenty-six per cent of those who declined did so on the basis of their need to be contacted all the time. Kolsaker and Drakatos's (2009) study that partly focused on emotional attachments to mobile devices corroborated Saggins and Flood's assertions. They noted that two aspects were key to the value of the mobile phone among their study participants. The first is the ability to stay connected to family and friends, and the second is the phones role in organising the user's daily activities. These observations validate Vincent's (2006) assertions that the mobile phone is no longer viewed as an appendage but as an essential and integral part of the user's everyday activities.

Other studies have further explained the above practices and the reasoning behind them. Bhatia (2008) points out that prior dependency on space, time and social relations is now replaced by dependence on mobile phones. The personal, portable and interactive nature of the mobile phone allows the user to feel constantly connected to those who are important to them; and their mobile phones make it easier for them to achieve daily tasks (Licoppe 2004). Its interactive nature privileges the users to engage in both synchronous and asynchronous communication (Cui, Chipchase & Ichikawa 2007). This allows users to interlace various communication needs and activities into the fabric of their everyday interactions almost in a seamless web (Ling & Donner 2009 p. 135).

In a study focusing on emotions towards mobile phones, Vincent (2006) noted that the participants experienced panic if they were separated from their mobile phones. She concluded that the mobile phone acts as a conduit for the user's sentient activities with those with whom they already have some relationship, so that 'unplanned absence from the device was tantamount to the wrenching away of the relationships it enabled and perhaps the comfort that constant contact with the mobile phone provides' (Vincent, n.d). This claim echoes what Licoppe refers to as the 'connected' management of relationships (2004, p. 135). The mobile phone renders the physically absent parties present by allowing phone users' feelings of connection to the people and the activities that are of concern to them yet physically distanced from them.

In more extreme terms, recent studies have described attachments to mobile phones as 'nomophobia'. A term that originated in the United Kingdom, the nomophobia is a compound abbreviation for 'no mobile phone phobia'. It is defined as the anxiety one experiences as a result of not having their mobile phone with them. Situations leading to nomophobia are akin to Vincent's (2006) observations. For example, situations that arise when one loses one's mobile phone, when the phone battery runs flat or when one is un-contactable due to lack of or poor network coverage. Keeping in touch with family and friends is cited as one of the main reasons that users want be constantly contactable via mobile phones (Kathrine et al 2010).

Kolsaker & Nikolaos (2009 p. 267) also point out that the user's attachment to mobile phones is attributable to a large degree to views of the device as an 'essential part of life with a value that goes beyond simple communication'. Vincent further observed that the mobile phone affords the user feelings of being 'chilled out' and 'tuned into the mobile culture' (2006, p. 40), feelings derived from the need to identify with a desired social group

and have a positive representation of self. However, as many have previously pointed out, just having a mobile phone is not sufficient for effective negotiation or representation of oneself. With a multitude of options afforded to the users including choices of model, colour, size, ringtone and adornment, the user's choices are deliberately choreographed to represent one in the social settings (Haddon 2001; Robbins & Turner 2002; Ling 2004).

The critical role played by the mobile phone in running the user's everyday activities, coupled with the phone's functions in negotiating one's standing in social circles, have led some to use tenets of Marshall McLuhan's (1964) theory to argue that the mobile phone has become an extension of self. Some of Vincent's respondents indicated that they couldn't imagine life without it. In *Machines that become us* Katz capture these ideas. He notes that the word 'become' here is used in three ways. It refers to firstly the way that people use these machines (e.g. mobile phones) to broaden their ability to communicate and represent themselves. Secondly, it refers to the way the technologies become integrated into the user's clothing and body. Finally, it refers to how these machines are used as fashion statements (Katz 2003, p.1). The book title thus captures notions of connectivity, coordination and the representation of self as dimension of the extension of self.

In addition to uses of the mobile phone and the behaviour patterns associated with mobile phone use, my study of Kibera residents also explored the extent to which the study participants were attached to their mobile phones. Four specific questions were explored:

- Do participants ever leave the house without their mobile phones?
- What would they do in the event that they forgot their phone at home or anywhere else?
- How did they define their relationship with the mobile phone?

- Does the mobile phone play a role in negotiating their social status?

To further gauge the importance of the mobile phone among participants, I also explored its positioning in relation to other communication technologies such as the television and radio. To this end, I asked which device participants would choose from a list of radio, television and mobile phone and the reasons for the choice.

7.2.1 Do you ever leave your mobile phone in the house or anywhere else?

To use Jan and colleague's words, the mobile phone has become a 'mobile essential' (2005) among the study participants. Statements such as 'no, never', 'that cannot happen' characterised responses to this first question. Participants indicated that the mobile phone is one of the things they must carry when leaving their homes. One said that he habitually checks whether his phone is in his pocket just before he clicks shut the lock of his house every morning. That way, he is not likely to take one step away from his doorstep without his phone. The vehement assertions (such as 'never, cannot happen') with regard to possibility of leaving the mobile phone at home are indicative of the way participants perceive the device as central to their day-to-day routines. Some said that whenever they wander slightly out of the house they must have it. In discussing figures 7.39 and 7.40, participants said that even when they are simply attending to something right outside the house, they carry their mobile phones with them. Stephen also prefers to step outside with his mobile phone if he is attending to anything outside his house (figure 7.41). Similarly, if Khasakhala has some work to attend to outside the house, he will carry his mobile phone and have it right next to him (figure 7.42).

Figure 7.39: Faith has her phone in her right hand as she hangs clothes on the line

Figure 7.40: Peninah has her phone in her left hand as she checks on her Kitchen garden

Figure 7.41: Stephen is holding his mobile phone while fetching water outside his house

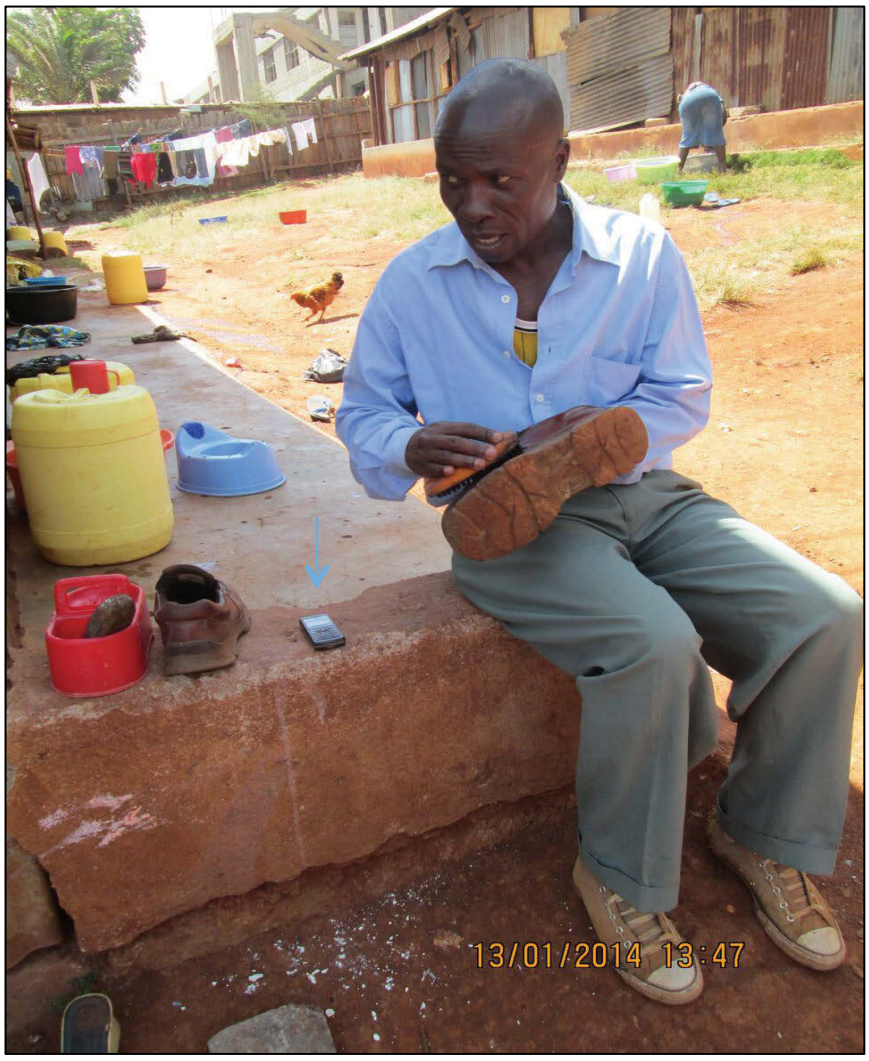

Figure 7.42: Khasakhala has his phone right next to him as he polishes his shoes

So engrained is the practice of making sure that they carry their mobile phones with them that many participants would not stray even a few steps away from their door-step before realising they did not have it. To Barbara, the habit of picking up her phone before leaving the house is so engrained that she does 'not know how it gets into the bag, but it is usually there'. She explained that there are times when she has thought she is there be in her bag. This means that she must have picked it up unconsciously. She later said 'it is almost an instinct, I will know that I do not have my phone by the time I get to the gate.' She would rather forget her bus fare than her phone. Beatrice (figure 7.43) said that she would usually have her phone in her

hands while she is locking her door. Habil says he will usually check whether he has his mobile phone with him before locking the gate to his residence (figure 7.44).

Figure 7.43: Beatrice holds her phone in her hand as she locks her door

Figure 7.44: Habil checks whether he has his mobile phone before locking his gate

How participants carried their mobile phones and where they placed them followed habits that were highly memorable to participants. One focus group participant said 'me and my phone are one … I always have it in my hands'. That way, she is sure wherever she goes, she has it with her. The only time she puts it down is when she is using the bathroom. As demonstrated earlier in figure 7.29, Khasakhala places his phone right in front of him while he is at the barbers. Asked whether he ever forgets his phone after getting a haircut, he responded emphatically 'No, no! I would not forget it at all!' He stands up and demonstrates how once the barber finishes trimming his hair, he first bends forward, picks up the phone, puts it in one pocket and then removes his money from the other pocket to pay for the services. He says that the habit of picking the mobile phone first before paying ensures that he does not leave the barbershop without it. The constant awareness of the presence or location of the mobile phone despite what they are doing ensures that participants have it wherever they are. As Stephen pointed out 'as I take tea, as I take tea' (he repeated), 'I know where my phone is'. For Zynap, she and her phone are 'one'. She always has it in her hands. This makes it difficult for her to forget it and walk away without it.

7.2.2 What if you forget your mobile phone?

This question was treated as almost 'unthinkable'. All the respondents said that they would go back for it. Barbara said that no matter how far from home she might be by the time she realises she has forgotten her phone, she will go back for it. Another participant said that if she leaves the house without her phone, she will break into a sweat at the idea of not having it. She too will go back for it. Khasakhala points out that he would rather incur extra transport costs going back for the phone than proceed on with his journey without it.

Intrigued by the fact the participants will not leave their mobile phones at all and if they do, that they will go back for them, I considered it important to ask why they must have their phones with them all the time. Participants' reasons for going back to get it give further insight into the essential role-played by the mobile phone in their lives. One focus group discussant said that she feels sick when she does not have her mobile phone with her. Beatrice said 'me and my phone we do not leave each other'. She had previously lost her mobile phone. She said that she felt sick, as though she was missing something. She explained: 'I felt incomplete … but as soon as I got my salary that month I bought another mobile phone.' Moses was emphatic that he cannot not have his phone with him even for five minutes. It feels like not having cloths on. The same description was used by another focus group participant who said that not having a mobile phone makes him feel 'naked'. According to Stephen, someone looks 'unreal' if they do not have their mobile phone with them.

More practical reasons were also highlighted. Philip said that he would feel incapacitated at the workplace if he did not have his mobile phone. His work at the water selling point requires him to coordinate with colleagues stationed at different points around the premises. On numerous occasions Khasakhala experiences unexpected situations while attending to his duties as a caretaker at the church compound which doubles as his home. The phone comes in handy in informing concerned parties or asking for help in addressing various situations. Barbara said that since she hardly leaves the house without her mobile phone, if she does, she will be 'totally disarranged'. She will not be able to attend to the day's activities without it. On the rare occasion that she has forgotten it, she will certainly go back for her phone because her boss might call her on the way to work to re-assign her duties for the day. In the event that she is running late for a scheduled appointment

with friends, the mobile phone comes in handy because she can call and inform the other party that she is still on the way. Beatrice will not leave her phone because a potential client might call her to place orders with her tailoring business. Others noted that people with important news might fail to reach them. Similarly, another focus group participant explained that she likes to walk with her phone because she is a businessperson and she never knows who will be looking for her at any point. Another one said 'it has to be near me because it is my access point to my friends and other people around me'.

7.2.3 Television, mobile phone or radio? The mobile phone please!

Silverstone et al (1992) note that consumption of individual technologies 'does not take place, nor can it be understood, in isolation', but must be seen within the environment it enters that already has other technologies in place. To take the example of a television, it is situated within a context that includes perhaps a vase, paintings and furniture, all of which are part of the whole that reveals coherence and at the same time contradictions. Similarly, the mobile phone is introduced into a communication environment with other artifacts that make up the ecology of communication technologies, for example the radio, the television. Of interest to this study as well is the positioning of the mobile phone in relation to these earlier forms of communication.

To further gauge the value of the mobile phone among the participants, they were asked what they would take if they were given the option of choosing one item from among a radio, a mobile phone or a television. In all the three focus groups, participants responded unanimously that the choice would be the mobile phone. Four out of the five in-depth interviewees also indicated that they would choose the mobile phone. The reasons were primarily the advantages they see the mobile phone offering over the other

two communication technologies. Their responses indicated their appreciation of the convergent nature of the mobile phone, its portability and the level of control and privacy that it affords.

Participants were well aware of the fact that the mobile phone today has evolved to be a convergence of multiple communication platforms. They said that the mobile phone was an encapsulation of all the three offered on the list. They said that 'apart from it being a phone, it is also a radio and some even a television'. One participant argued that by choosing the mobile phone 'I will have the others in there as well'. In addition to accessing the other communication platforms, they said that the mobile phone comes in handy in a myriad of other activities they engage in on a day-to-day basis. It is multi-functional. Those who run small businesses said that the mobile phone comes in handy as a calculator. Other participants said that they use it to keep time. It is used as an alarm to wake them up in the morning. In the case of power outages, it comes in handy in lighting their environment. All these extra benefits not afforded by the other devices make the mobile phone the preferred choice from the list.

Participants said that the portability of the mobile phone also makes it more attractive. As one participant humorously pointed out 'you cannot carry this thing around' (pointing at the television in the house we were meeting in), 'while you can carry the phone around'. This makes it convenient to use. Participants noted that one has to create time to sit in front of a television and watch it, while one can use the mobile phone on the go. They emphasised that this was critical in view of the increasingly busy schedules that are characteristic of today's contemporary society, even in Kibera. The portability of the mobile phone equips participants with a platform that assures constant connectivity. This allows participants to engage in both synchronous and asynchronous communication. As Ling and

Donner (2009) observe, the mobile phone offers users the overall benefit of conveniently interlacing various communication activities into the fabric of their everyday interactions in an almost seamless web.

The mobile phone is also preferred for the two-way communication platforms it offers, as opposed to the television and radio that are perceived to offer only a one-way platform. The fact participants can engage in two-way communication gives them a sense of control over the mobile phone device. One noted that the 'television tells you what they want to tell you … it just speaks to you … you do not tell it anything'. By contrast, participants can use the mobile phone to say what they want. This point was reiterated by another participant who said 'if I want to talk to my mother at home [in the countryside], I will use the phone and not this one' (pointing at the television). She continues: 'This one just tells me things, but I cannot use it to say anything … so the phone is helpful to me.' In addition to facilitating their own communication activities, the few participants who use radio and internet said that it allows them to stay abreast of events around them while still on the move.

The personal nature of the mobile phone also gave it the edge over the others. Participants said that the mobile phone offers privacy while the television and radio do not. Participants noted that one has to share the television and the radio while mobile phones are personal. Philip said that for as long as he is alone in the city (without his wife and children), he would take the mobile phone. He does not need to share it with anybody and it would serve him satisfactorily. Furthermore, he will need it to stay in touch with his family as they live in the countryside. However, if they were living with him in the city, he would take the television. This is because he would be able to share the television with them, while he cannot share the mobile phone.

7.2.4 Money or the phone?

In an attempt to further gauge the value the participants place on the mobile phone, I presented to them a scenario where they were accosted by a thief who asked them to give up one thing: either whatever money they had on them or their mobile phone. They all said that they would give up the money and keep the mobile phone, even when the money was more than the cost of the phone. They reasoned that with the phone they could seek assistance after the ordeal. They said the money might not be as helpful in that instance. They also argued that the data in the phone is valuable and it might not be possible to reconstruct it as exactly as it was. They stressed that what they are able to do with the phone is more valuable and not easily replaceable. On the contrary, as one participant pointed out, 'a few day's work will get you back the money'.

7.2.5 What is the mobile phone to you?

At the end of every interview and focus group session, I asked the participants to describe their relationships to the mobile phone using one or two words. One of the women participants said that she is 'inseparable from the phone'. She emphasised that she and the phone cannot part ways at all. Another participant said that the mobile phone is everything to him. He repeated his claim with emphasis: 'It is *everything* to me'. He further explained that the mobile phone makes his life easier. Asked in what ways, he said: 'Even though I am here [at the focus group meeting], and I have other things to attend to, I can call and find out what is happening.' Another participant used the same expression. Just like his colleague, he said that the phone is everything to him because people can easily reach him wherever he is. He additionally pointed out that 'without the phone, most things cannot take place'. Another participant simply said 'the phone is a special instrument to me'.

Other participants used emotionally laden terms to describe their relationship with their mobile phones. One woman said her mobile phone is like her first-born to her. It is very important and special. It is key to her business, home activities and family. Philip said the phone is like his father and his mother. He explained that he lives far from his parents. His mobile phone connects him with his father and his mother. He said that the mobile phone makes him feel as though they are nearby. Barbara said that her phone is her best friend. She described herself as reserved in face-to face-interactions. She is able to get out of that cocoon through her mobile phone interactions. She went on to say that whenever she wants some help, she turns to her mobile phone. To Josphat, the phone is like his baby. It is treasured and should be taken care of. Another participant said 'it is like my second wife, it is very important to me'.

7.2.6 Conclusion

To use Jan and colleague's expression, the mobile phone has become a 'mobile essential' (2005) among the Kibera study participants. It is unimaginable for them not to have their mobile phone with them. They said that they always carried it wherever they went. In the event that they accidentally left their mobile phone at home, they would go to great lengths to get it. This would include incurring extra transport costs. However, this happens on very rare occasions, because picking up the mobile phone before they leave the house has become almost a reflex to them. If they were not carrying or holding their mobile phone, they indicated that it must be within close range. Participants mostly had their mobile phones within an arm's length.

The reasons for not being able to venture far without their mobile phones and for needing to have the phone at close range are primarily the connection the device provides to the rest of the world. They want to hear calls and text

alerts when as soon as they come in. Participants want to be able to connect with others if need be during their everyday activities. This includes reaching a business client, reaching family members for various reasons. They note that there are always unexpected events, and they need to be able to connect with others in either addressing the events or in keeping updated about the event. To the study participants, the mobile phone has become critical in managing their day-to-day activities. It is providing a sense of the 'connected' management of activities (Licoppe 2004), in defiance of physical and time restraints (Bhatia 2008). Participants need it to coordinate daily activities. The phone is a representation of far-removed relationships. It gives owners a sense of connection to their family, friends, business associates. They are able to attend to numerous activities that are required to sustain and maintain these relationships. This is further enhanced by the fact that the mobile phone offers a two-way communication platform. This is the primary reason why participants would choose the mobile over other communication technologies such as radio or television.

The mobile phone also gives participants the opportunity to use it at their own discretion, as opposed to the other devices. Unlike other communication technologies, with the mobile phone the participants feel they have a sense of control. They can negotiate their own private uses; they can decide when and how to use it. While with the other technologies (particularly the television) one has to work around a schedule set by broadcasters, the mobile phone fits into a participant's own schedule and is also key to organising and executing that schedule.

The centrality of the mobile phone to the study participants is further reflected in the emotive descriptions they gave of how they feel in the event that they do not have their mobile phones with them. These descriptions indicate practices that are consistent with McLuhan's assertion that

technologies are an extension of self (1964), so that without the device one feels incapacitated (or at least disorganised). Participants feel that there is an essential part of them that is missing; they thus feel exposed, vulnerable and unable to face the world. Such feelings consequently affect their representation of self. This is why Stephen said that one would feel 'unreal' if they did not have their mobile phone with them. Some are so attached to their phone that they describe themselves as 'inseparable' from the mobile phone: it is 'everything' to them.

In line with Vincent's (2006) argument, the mobile phone acts as a conduit enabling activities between the study participants and those with whom they already have a relationship. Some participants described their relationship with their mobile phones as symbolic of real significant relationships. That is why for Philip the mobile phone is his mother and father. It connects him to them. To Barbara, it is her 'best friend' because it comes in handy when she needs help. To Peninah, it is like a first-born child, indicating that it is to be treasured and treated with care. Others said that they are inseparable from their mobile phones, while still others chose to say that the mobile phone is everything to him. These terms indicated a close, personal and emotional attachment to their mobile phone as it allows the physically absent to be present. Although the relationships that matter to participants are often far removed from them physically, the mobile phone makes them feel a sense of connection (2004).

7.3 Summary: the process of embedding so far

The mobile phone has found a place in the life of Kibera users. They have developed a relationship that can be described through terms including mother, father, firstborn daughter, everything and special. This is not because it is like or can replace these relationships, but because it provides a

constant and almost instant connection to these relationships. It is seen to be as important as these relationships and central to one's life and wellbeing. It makes the absent present, so that even when one's relationships are far removed, the mobile phone's presence means that one can easily connect to them. Its value and benefits are clear to participants. It is not a luxury but a necessity. It does not alter participants' activities and routines. Instead, it fits within them. It has become an essential tool for execution of their everyday activities. One cannot navigate around their day without it. That is why it will not be left behind. Participants feel naked or indecently exposed without it, and they are inseparable from it. The mobile phone has become indispensable. ❖

Chapter 8

Conclusions: Kibera residents make the mobile phone their own

This study set out to explore how Kibera residents are fitting the mobile phone into their everyday lives. The study aimed to provide an account that captures participants' experiences with the mobile phone in a way that respects their autonomy and agency in shaping its meaning within their context. Domestication theory was selected as the ideal framework to help understand the mobile phone in the context of the everyday life of the user. Complemented by concepts from diffusion of innovation theory, the technological acceptance model and uses and gratification theory, the study sought to capture the process by which the mobile phone is embedded into participants' lives by analysing the acquisition process, uses of the mobile phone, practices accompanying use and finally the meanings users attach to the mobile phone. Four research questions guided the study:

1. What is the process of mobile phone acquisition and appropriation among Kibera residents?
2. How are Kibera residents incorporating the mobile phone into their everyday life?
3. How are Kibera residents objectifying the mobile phone within their environment?
4. What meanings are Kibera residents attaching to the mobile phone?

8.1 Appropriation: ownership takes place

The process by which Kibera residents are acquiring mobile phones is not spontaneous or impulsive in nature. It is a well-thought out process (Teng & Lu 2010). Participants develop criteria to govern how to go about acquiring one. This was examined for two phases: during the acquisition of the first device and acquisition of the second and subsequent devices. There were differences in the criteria considered at both phases. With the acquisition of the first mobile phone, the criterion was very simple: participants just wanted a mobile phone. However, as they acquired subsequent devices the criteria were modified and extended. It now went beyond just wanting a mobile phone, to wanting one with radio and internet access or with a torch.

The study participants carefully consider their need for a mobile phone against their economic capacity. Previous literature has already documented cost as the main criterion in acquiring the mobile phone (e.g. Karjaluoto et al 2005; Donner 2007). As would be expected, this criterion becomes even more critical among users who experience economic challenges like the urban poor. While the Kibera participants highlighted the simple need for a telephone as the baseline motivation for getting one, this did not negate the importance of cost. It only pointed to the insignificance of other criteria such as model, shape and colour in comparison to the basic function of connectivity. Even when these other criteria were considered, they were still secondary to the cost of the mobile phone. Participants stressed that the overriding determinant on what they would finally get is its affordability – a relative concept defined by the money they had at their disposal in relation to the cost of the mobile phone. The above indicates participants' awareness of and desire to benefit from other affordances of the mobile phone, but also their realisation that such desires must be restrained by cost.

Development of criteria went beyond cost, type and shape as reported in the literature (e.g. Karjaluoto et al 2005), to include where to buy and what kind of shops to buy from. One of the unexpected findings is that participants did not trust the mobile phone shops in Kibera. Most of the study participants placed more trust in the mobile phone shops in Nairobi's central business district. This meant they were willing to incur the extra transport cost to the city centre to buy their phone as opposed to getting one in Kibera. Participants said that the mobile phones in Kibera are likely to be fake. Once in the city, they further discriminated among the shops. The ones run by the mobile phone service providers such as Safaricom and Airtell were preferred. Participants said that these shops have genuine mobile phones and ones of better quality.

Along with development of acquisition criteria, participants engaged in information-seeking behavior in a bid to draw boundaries around the type of mobile phone to buy. Literature reviewed in chapter three points to the fact that one's significant others play a critical part in providing information that is essential in the acquisition decision-making process (e.g. Lehtonen 2003; Stewart 2007). Published studies also posit that the salespeople are rarely consulted. Buyers do not always trust them to provide unbiased and genuine advice during purchases. Similar to previous studies (e.g. Turnbull, Leek & Ying 2006), for the Kibera participants trusted relationships played a critical role. For the most part they consulted close relations—husband, son, friend, sister in-law. These people provided support during the acquisition process by giving advice, going to the shops to help the buyer choose, helping to teach how to use the new phone. Of significant note is that although participants preferred to go to the mobile phone service provider's shops, they did not trust the salespeople. They questioned their loyalty to them as customers vis-a-vis their employers. As one of the study participants said 'a

marketer is a marketer, he will be interested in selling the product'. This indicates that the trust for the brands noted above (Safaricom and Airtell) does not automatically translate into trusting the brand representative, i.e. the salesperson.

With the unexpected finding that some study participants were on their second, third or even fourth and fifth device, I was keen to explore why they replaced their previous devices. Almost all participants said that their earlier ones had been stolen. Only one person said that they had wanted to upgrade. This differs substantially from the findings of other studies into reasons for mobile phone replacement. For example, Karjuluoto et al (2005) concluded that the study participants replaced due to technical problems. Huang and Khai (2008) highlighted the need to upgrade and attractive offers by service providers as the main reasons for replacement among their study participants.

One of the unique findings of this research is the fact that the practice of mobile phone sharing played a critical part in spurring some to acquire their own mobile phones. Participants pointed out that the challenges experienced in borrowing other people's mobile phones led them to want to get their own. Previously mobile phone sharing has been presented as a practice that poorer communities use as a way to circumvent the cost of mobile phone use (James & Mila 2007; Sey 2011). It is said to enable more people to have access to and benefit from mobile phone connectivity without having to invest in their own devices. While the borrowing benefitted them by providing more convenient connectivity, the practice was not convenient from the standpoints of either the borrower or the lender. The challenges included being unable to continuously borrow someone else's mobile phone and the possibility of compromising one's privacy as a result of the rules the lenders applied to govern who, when and why one can borrow their mobile phone.

This study concludes that mobile phone sharing seems to have provided many Kibera residents with the platform to experience the device before acquisition of their own. This study speculates that the experiences participants had when borrowing others' mobile phones allowed them to evaluate the benefits of owning one. They could now compare their experiences with the older modes to achieve the same goals (use of public telephones, snail mail and telegrams). Through sharing participants were able to catch a glimpse of the relative advantages the mobile phone offers over those earlier modes and evaluate its compatability with their everyday practices. In this case, the study concludes that while sharing was originally appreciated as a first step towards enabling greater connectivity, it also led to dissatisfaction with one's situation and provided a foretaste of the benefits of owning a mobile phone of one's own.

8.2 Incorporation: defining the mobile phone's uses

Domestication theory assumes that the uses to which people put communication technologies are not always in line with what was envisioned by the designers or producers (Silverstone et al 1992; Carroll et al 2002). Instead, the users apply technologies in ways that they find most beneficial and suitable for their context. In this process, they try to make the device their own (Sey 2011). Kibera residents demonstrated a sense of control over the mobile phone as they determined how and how not to use it. These decisions seem contingent on the routines and practices that define the terrain of their everyday life.

8.2.1 Coordination of everyday life

As Licoppe (2004) notes, the increasingly changing techno-space that now includes personal, portable and interactive devices allows users to feel in constant connectivity with those who are important to them and makes it

easy for users to carry out duties that are deemed important in these interactions.

My study participants indicated that the mobile phone is enabling an anytime, anywhere interlacing of various activities in defiance of challenges previously posed by time and distance. The mobile phone is proving relevant in carrying out duties and responsibilities such as in business, work and family related arenas. This ability to coordinate activities seems to be the most appreciated element of the mobile phone among the study participants. The desire for better connectivity motivated them to acquire one, and they keep the phone within arms' reach to ensure continued connectivity. That is why it is unthinkable that they would leave it at home and why they would go back for it without question. Connectivity is so important that other functions will be compromised or moderated to ensure maximum connectivity. Participants moderate their use of other functions such as listening to the radio via their mobile phones or use of the internet so they can save the battery just in case they need to make a call or someone needs to reach them. They will choose the mobile phone over other communication technologies such as the television and radio, primarily because it allows them to connect with others while the other two devices do not.

Questions about who they connected and communicated with and the purpose and content of this communication shed more light on the importance of connectivity to this group. It seems most participants valued the ability to coordinate family-related matters. Participants are finding the mobile phone useful in helping them stay connected to parents living in the countryside, children in schools located far from home and other family members such as spouses, siblings etc. The content of this communication primarily includes notifying or receiving news of emergency situations (e.g. illness, death in the family), checking on the well being of loved ones,

warning them in case of pending danger like riots in the city and updating them on one's progress. This is consistent with earlier studies that point to the fact that the mobile is not necessarily used to establish new relationships but instead to nurture and maintain already existing relationships (e.g. Höflich & Rõssler 2002; Smith, Spence & Rashid 2011). The mobile thus operates within closed as opposed to open social networks. This was further elaborated on by participants who said they have only the phone numbers of people they personally know. Other participants said that most of their calls are with close relationships, while others said that they do not return (some will not answer) calls from unknown caller identities.

8.2.2 Uninhibited versus moderated access

While it seems that this connectivity provides an open channel for messages to travel uninhibited, it is important to note how other practices governing use such as rules and cost moderate this accessibility. Rules reflect participants' wider sense of domestication that goes beyond just use to cover also how to or how not to use it. Participants indicated that they have control over the device. Rules on when to answer phone calls or not, who to call back and who not to call back, whether to continue with a conversation or hang up help regulate accessibility. These rules also come in handy in determining how to balance a co-present and remote party, and how to determine what can be public and what is private. In making these judgements participants maintain autonomy while still being assured of connectivity. On this basis, this study concludes that the increased opportunity to build or extend social networks afforded by access to mobile phones is tempered by the need and desire for autonomy. Participants are consistently negotiating this autonomy through the type of rules that define an in-group to whom they are happy to give open access and an out-group whose access is moderated.

8.2.3 Partial versus full adoption

Cost is not only considered at the time of acquisition but also in determining how to use the mobile phone. Whether to call, beep or text is determined by the cost and the importance of the expected conversation. Beeping is typically a cost-saving mechanism. Sending a text is seen to be cheaper than calling. Calls are reserved for only the most important engagements. As noted in chapter seven, the mobile phone is placed at close range to avoid missed calls, which may mean having to call back at one's own expense. Some participants moderate the use of the radio because it runs the battery down, and recharging will cost them money.

The above assertions indicate that cost sets boundaries on the extent to which participants can fully benefit from the affordances of the mobile phone. This selectivity about which aspects of the mobile phone to use and which not leads to a partial rather than full adoption of it as an innovation. Jasperson et al (2005) cited in Jeyaraj and Sabherwal's (2008) perspectives of full as opposed to partial adoption of information systems is useful here. Jasperson and colleagues define full adoption as the use of all features the innovations affords the user, while partial adoption refers to the use of only some of the features but not all (2008, p. 209). Although the Kibera study participants have the mobile phone and its multiple communication platforms at their disposal, they are not fully utilising its functions or features. Cost is limiting the extent to which they can fully benefit from it as a multifunctional device. Some of the mobile phone accessories are also avoided on a cost basis. Pressed a little further for the reasons participants did not have decorations on their mobile phones, Philip's response captured the value of the mobile phone in the face of cost constraints:

> 'Some of us struggle to get the little money we have, so we can only afford to invest in the mobile phone to be able to communicate, it would not be necessary to invest that money into decorations of the mobile phone.'

This study concludes that Kibera residents are demonstrating their sense of agency by selecting uses and non-uses and by further classifying these into the most essential uses and non-essential uses. Non-adoption of certain affordances is not so much a matter of know-how but an issue of its importance compared to cost.

8.2.4 Sociability, reassurance and instrumental gratifications

A close investigation into how cost and rules impact on participants' decisions about use or and non-use reveals that sociability, reassurance and instrumental gratifications that relate to their immediate concerns are privileged over other uses such as entertainment and relaxation. There are limited chances that they will use their mobile phone (and thus spend precious money) on issues that are deemed not immediately relevant to one's family or one's own well-being. Rules are partly crafted along these lines. This was amply demonstrated by those who said that, while they will not make calls late at night, they would answer every incoming call from family members despite the hour. This is because it might be an emergency. In this way the mobile phone is finding relevance within participants' immediate and personal concerns and is less relevant for concerns such as political issues. Uses outside the personal realm are considered unimportant. They are relegated to second position. The internet and radio are considered entertainment and are therefore of less value. As noted above, some participants do not engage with these functions and those who do highly moderate it. Calls that do not relate to their immediate needs are avoided.

8.2.5 Nuanced perspectives of the 'personal' nature of the mobile phone

From the above observations, this study concludes that participants are introducing nuances into what it means for the mobile phone to be personal in nature within their context. Ito (2005) describes the different dimensions of the personal nature of the mobile phone. She points out that the personal characteristic sets the mobile phone apart from earlier communication technologies whose consumption was shared, such as radio, television and the landline telephone. Instead, the mobile phone is consumed individually and for the most part is attached to a particular individual. The users of mobile phones can use it to create their personal and private spaces. They can also personalise their phones by customising them. While the study participants demonstrated the above dimensions to varying degrees, they also seem to draw clear boundaries around the 'personal' arena for which the mobile phone is useful and the 'non-personal', which they regard as not relevant. For example, when asked whether he calls radio stations to contribute to discussions of social and political affairs, one participant responded 'that does not concern me', a response that received sounds of affirmation from the other focus group members.

The study found that participants are domesticating the mobile phone within the personal arena that consists of their immediate relationships and practices and the routines that define their everyday activities. Bakardjieva's (2005) argument about the re-enactment of the home and the relevance of these technologies in the home is relevant here. Bakardjieva argues for the notions of user agency and home not as a real-estate unit but as 'a feeling of safety, trust, freedom and control over one's own affairs' (p 68). The mobile phone is giving the study participants a sense of control over their immediate affairs. They are developing mobile phone use practices that prioritise what

they perceive as important, drawing boundaries and securing their sense of safety and privacy.

8.3 Objectification and conversion: value and symbolism

8.3.1 Concealment versus display

Concealment of the mobile phone was privileged over the need to stay connected while one is on the move. The perceived insecurity of some of Kibera neighborhoods leads participants to conceal ownership of their mobile phone while in public. Ownership is therefore disguised as opposed to displayed and is not used to negotiate social standing among peers as depicted in existing literature (e.g. Hynes & Rommes 2006; Pierson 2006; Kyen & Lemaire 2006). This study speculates that the reason why participants did not attempt to customise the mobile phone by putting adornments on it is because it is not going to be on display. I also suggest that although it may seem this practice reduces the level of connectivity as the most valued benefit of the mobile phone, it is in fact easy to see how this practice is an attempt to ensure continued access to connectivity.

8.3.3 Perspectives on portability and wearability

This study observes that the practice of concealing rather than displaying the mobile phone is introducing new nuances into the concepts of the portability and wearability of the mobile phone among Kibera residents. Literature posits that both dimensions allow users to move around easily with their mobile phone and as a result the phone gives them connectivity anytime and anywhere (Glotz & Bertschi 2006, Ling 2004). Wearability has conventionally been exploited for purposes of display, allowing one to negotiate self-representation through practices such as fashion and taste. Scholars have argued that the mobile phone is integrated in a way to display fashion (Fortunati 2002; Katz & Sugiyama 2006) and negotiate one's social standing

(Ling & Yttri 2002; Kyen & Lemaire 2006). This study notes that while it is true that Kibera residents similarly benefit from the constant connectivity afforded by the portability and wearability of the mobile phone, their immediate socio-economic environment interferes with the extent to which the mobile can be used to negotiate public image or self-representation. In this case rather than the mobile being integrated with ones clothing and accessories (handbags, plastic bags) to enhance image, it is integrated to disguise its presence.

8.3.3 At close-range for cost management,

For the participants in this study, placement of a mobile phone while not in use mostly happened within closed environments such as at home and at work. In these contexts participants displayed attempts to have the mobile phone at close range for the purpose of hearing incoming calls. While other studies have similarly pointed to this need to hear incoming calls as the reason for having the mobile phone close-by (e.g Patel et al 2006), this study notes a slightly different dimension to this practice. The study participants reasoned that it was important to hear an incoming call the first time it came in in order to avoid incurring the costs of calling back or texting the other person.

Kibera participants also considered safety (the need to keep the phone out of harm's way) in deciding where to place it even within the home. This included putting it in places where the children cannot reach it. Although participants considered these closed environments safe enough for them not to conceal the mobile phone, interestingly some still did conceal it, especially if they were not at home. Thus they would insert it in the pockets of jackets or in a bag or basket. This reflects the presumption that in the likely event of a break-in, the thief will not easily find the mobile phone.

8.4 Attachments to the mobile phone

Asked what the mobile phone means to them, participants likened their mobile phones to significant relationships such as mother, father, firstborn child and best friend. These emotive descriptions did not mean that the mobile phone was equal to or a replacement of these relationships. Instead the mobile phone was seen as a conduit to these relationships. As one participant explained, it is 'my father and mother because it helps me connect to them'. It provides a constant 'tethering' to these relationships, thus enabling frequent interactions between mobile phone owners and these significant others. These frequent contacts are essential for the 'oiling' of these relationship (Ling 2004). The tethering allows participants to engage in practices that help nurture and maintain those relationships, such as simply calling them to check on well-being and financial support, and responding to emergencies experienced by these relations.

Just as in Sagins and Floods (2013) study, the Kibera participants pointed out that this dependence makes it difficult for them to be separated from their mobile phones. Consistent with Cui, Chipchase and Ichikawa's (2005) assertion, Kibera residents have their mobile phones with them most of the day. It has become an indispensable tool in running their every day activities. This is the reason it cannot be left behind, and if it is, they will go to great lengths to get it. If they lose it, they will quickly replace it with another because without it they feel vulnerable, naked (or indecently exposed), disoriented and sick. As one participant said 'I only feel better after finding the mobile phone again or getting another one'. This attachment can further be seen in the way some participants will have it in their hands even when they briefly step out of their house to attend to chores. Others say that even when they do not have it at hand, they are constantly aware of where it is. In this way, to use McCluhans (1964) assertions, the mobile phone has become

an extension of who they are. Without it, one feels incomplete. Vincent (2006) probably gives a plausible explanation for these emotional responses to not having one's mobile phone. She says not having it feels like a wrenching away of the relationship it enables and perhaps of the comfort that constant contact provides. To the study participants, then, leaving, forgetting or losing the mobile phone is like cutting off the relationship with one's mother, father, firstborn child or best friend. This explanation certainly seems to fit this group of mobile phone users. As observed earlier, they articulated the importance of these relationships and the value of the mobile phone in nurturing these relationships.

In comparison to other communication technologies such as television and radio, the mobile phone is giving Kibera residents greater control over their circumstances. One participant said it was everything to him. It seems that it is empowering participants to respond to their circumstances better. While television and radio inform them of what is happening, the mobile phone allows them to engage in two-way communication. As one participant said of the television, 'this thing talks to me, I cannot use it to talk'. Mobile phone users do not have to work around schedules to consume the media as they do with television and radio.

As participants moved from the period before acquisition through to how they were now using and viewing the mobile phone, they seemed to appreciate it more with time. Initially envisioned as a tool essential for easing communication between them and their family members living in the rural areas, it was now an essential tool in running their everyday activities. As one participant said, they can now not imagine life without it. Another one said that 'now nothing can happen without a mobile phone'. To use Vincent's (2006) argument, the mobile phone is no longer an appendage, but an essential and integral part of Kibera residents' everyday life

8.5 Concluding summary

By the time we got to the last question of my interview schedule, I was not surprised when my participants defined the mobile phone using terms of endearment that represent significant relationships. Talking about the mobile phone with my study participants literally translated into talking about their everyday life and the activities, routines, beliefs and values that define it. They had let me into their world and given me a privileged understanding of who they are, what they value in life and the place of the mobile phone in that world. Participants stressed the significance of relationships and the importance of engaging in practices that help nurture and maintain those relationships through practices such as simply calling relations to tell them about one's life, providing financial support, checking on well-being and being accessible in emergencies faced by these loved ones. The mobile phone is not altering that; instead it is seen to be a perfect fit, facilitating those practices in a more efficient manner. Participants were willing to invest the little money they had available to get these benefits. But in reaping its benefits, they have to be strategic in keeping the operational costs as low as possible. Along with already known cost-saving practices such as beeping and mobile phone sharing, the phone also has to be at close range, because missing a call may incur a cost.

Participants also took photographs that gave me further insight into their lifestyle and the challenges of trying to fit the mobile phone into their physical and social environment. Security is highlighted as the most significant threat to continued ownership of the phone and by extension continued connectivity. Thus participants engage in practices to reduce the chances of losing the phone by concealing it. They become innovative in their carrying practices, engaging in methods that are not typical of other

populations who only have to decide the most convenient or fashionable way to carry their phone.

The way participants are embedding the mobile phone into their everyday life demonstrates Kibera residents'role in shaping its usefulness within their context. This study concludes that while the mobile phone is providing Kibera residents with the coveted better connectivity, an interplay of other factors (primarily cost, rules and security) impact on how their immediate needs are met with the mobile phone, while at the same time limiting their ability to exploit the device's full potential.

8.6 Significance and implications of the study

8.6.1 Academic discourse

By using the domestication theory framework, this study privileged Kibera residents to articulate how they actively manage the mobile phone in their everyday life, thus exploring participants' nuances in mobile phone appropriation, incorporation, objectification and interpretation within their socio-cultural context.

The study combined an interpretivist research approach that emphasises respondents' context, along with photovoice, a participatory approach and the non-deterministic framework of domestication theory. This gave the respondents more space to articulate their experiences with the mobile phone and their interpretation of those experiences. The study is instrumental in facilitating a contextual understanding of the mobile phone among Kibera residents and by extension the urban poor in Kenya. The study thus fills an academic void in relation to the role the urban poor in Kenya are playing in shaping of the meaning of the mobile phone. The findings also have significance for wider discourses on mobile telephony. They shed light on how practices such as objectification and conversion are expressed differently

in such societies. In some cases these practices are altered altogether. For example, the study found that for Kibera residents there is more need to conceal rather than display ownership of mobile phones in public as a response to the perceived insecurity of their environment. This leads residents to engage in what would be assumed to be unconventional ways of carrying the mobile phone in order to disguise its presence. Participant opt for tucking it into their socks and carrying it in plastic bags. In some instances they opt to switch the phone off so that an incoming call would not give away ownership.

While a limited number of studies have explored domestication of the mobile phone among the urban poor, so far none has incorporated photovoice. Photovoice as a participatory approach allows the study participants to have a greater say in shaping the themes of the research and in selecting and interpreting the photos they want discussed. The photos participants took visually captured the mobile phone in their physical environment and the practices that accompany ownership.

This study explored how participants acquired both their first and subsequent mobile phones. In doing this the study ventured into an area that has received very little attention, that I would call repeat adoption. My study explored how criteria and information-seeking behavior during the first phase differed or were replayed in the adoption of the second or subsequent devices. The finding that *any* mobile phone was all participants wanted at first further consolidates the view of connectivity as the most valued aspect of the mobile phone. Reasons for the replacement of earlier devices helped highlight how security plays a role in repeat processes of adoption of the mobile phone.

8.6.2 Theoretical implications

As noted in chapter one and two, domestication has been described as the taming of communication technologies to fit into the everyday life of the user (Haddon 2001, Berker et al 2006; Hynes & Richardson 2009). This research concludes that Kibera residents are taming the mobile phone in ways that reflect their own agency in adapting it into their social-cultural landscape as defined by their rituals, routines, practices, values and beliefs. They are displaying what Rogers (1995) referred to as innovativeness as they define the usefulness of the mobile phone within their context. They are doing this by deciding what the most appropriate uses are and how to make best use of them. To make these decisions, they are taking into account their immediate needs for connectivity, their socio-economic status and immediate environmental factors. Their decisions result in nuanced understandings of technological appropriation, objectifications, incorporation and conversion unique to their immediate environment. The deliberate manner in which they make these decisions is indicative of the fact that users of innovations are aware of their own agency and are intentional in determining the value and meaning of the innovation in their everyday lives. The research also shows that processes of embedding technology are not universal but subject to the user's immediate circumstances.

Discussions in chapter two highlight the value of using non-deterministic rather than deterministic approaches to understand the meanings of technology within the context of the user. This is primarily because non-deterministic approaches favour human agency over technological agency in defining the place of technology in the life of the user (Ling 2004). While domestication highlights the power of the user in adopting and further shaping the role of the technology in their lives, affordances of the technology (as argued under diffusion of innovation and Technological

acceptance model) influence the users' attitudes towards the technology and their desire to adopt and thus triggering off the process of appropriation. By carefully incorporating select tenets of these theoretical approaches, this study demonstrates the value of a multi-theoretical framework in providing a more detailed and holistic account of the process by which an innovation enters the life of the user and how it is further appropriated into their everyday life.

8.6.3 Mobile phone designers

Given the widely held assumption that users of communication technologies do not always employ the technology in the same ways as envisioned by the designers (Silverstone et al 1992), this study has relevance for mobile phone designers. Kibera residents have demonstrated that they develop uses and practices that are unique to their immediate environment. They most highly value the mobile phone's basic function to provide connectivity. Use of other affordances is constrained based on the environment and economic status, to the extent that participants limit their use of the internet or radio. Participants do not use their phones for symbolic representation. This is because they engage in concealment as opposed to display of the mobile phone while in public. These findings can be used to inform future designs that take into account an immediate environment that requires owners to constantly think of the most efficient way to carry the mobile phone to ensure connectivity and yet reduce the chances of it being stolen. This could perhaps include much smaller devices that can easily be fitted into one's clothing or accessories, and mobile phone devices that allow owners to respond or call without obvious public displays of the device's type and model.

8.6.4 Policy makers

Discourse on information and communication technology influences policy in any given context. Many times, this discourse does not include the voices of the under-privileged, or at least not in a manner that represents their perceptions, practices, interpretation of those practices, values, knowledge and skills. Many times they are represented only in reports that have taken a deterministic approach in exploring the uptake, spread and use of technology. In contrast, the findings of this study can be used as a way to channel the voices of Kibera residents (as representatives of the extremely under-privileged) into these discussions. Participants' comments can be considered when telecommunication policies are developed. Clearly, for the Kibera participants, cost is a major factor that constrains their ability to fully exploit the affordances of the mobile phone. This could be addressed by coming up with tariffs that specifically benefit and are promoted among this user group. For example, those with limited resources could be able to make toll-free calls during emergencies. Policy makers can also regulate the market in a way that enables the majority of users across the economic divide to make the best of these devices.

8.6.5 Development projects

Although not central to this study, it is difficult to ignore the implications of this study on development discourses and projects in Kibera. The populations of marginalised localities like Kibera are typically the target of many development programs. Kibera alone is said to have representatives of about 11,000 non-governmental organisations. Against an estimated population of 171,000 (2009 Population and housing census report), this translates to the equivalent of one NGO for every 15 people. The pervasiveness of communication devices with multiple interactive platforms such as the mobile phone has tended to raise optimism about such

technology's potential in development (Rashid & Elder 2009; Diga 2008). This has resulted in initiatives that try to harness this potential in many ways. Program names that start with the letter M or the epithet mobile have become widespread, for example mobile health, mobile money, mobile commerce, and mobile agriculture. However, these strategies have barely considered Kibera residents' mobile phone practices and values.

While this study does not deny the influence of mobile phones in these spheres, it cautions against assuming a simplistic linear relationship between the mobile phone and development. The findings in this research indicate that participants highly control use of the mobile phone, limiting its use to engagements that are deemed to be of immediate concern to the individual. This moderation is based on interest and cost. As one study respondent said when asked whether he uses the internet: 'Why use money that I do not have?' This does not spell doom for agencies planning to use the mobile phone to spur development but it does indicate that agencies need to be strategic in terms of how they navigate around these practices in order to use the almost ubiquitous mobile phone in Kibera to add value to development strategies among this population.

8.6.6 Areas of further research

The fact that Kibera participants wanted to stop sharing mobile phones suggests further investigation is needed into existing notions of the widespread nature of this practice among the poor as a way to circumvent cost calls. In this study, sharing mobiles seems to have played the reverse role of being a catalyst towards mobile phone acquisition. Other recent sources have also pointed to the reduction of this practice (e.g. Sey 2011). More recent surveys in Kenya also have noted a reduction in mobile phone sharing (e.g. Demombynes & Aaron 2012) However, none of these studies have noted that the practice can act as a catalyst for acquisition as this study

has found out. Similarly, beeping has also been previously presented as an acceptable and in fact encouraged practice among the poor. My study participants demonstrated an attempt to break away from this as well. Some are even irked by the idea or practice of beeping. These findings point to the need for more detailed studies focusing on these practices. Questions to explore can focus on how changes in the socio-economic environment that initially encouraged these practices may now be working against them.

Discussions with my participant about mobile phones led to talk about security, which has been seen as a perennial problem in this area. Similar to Patel and colleagues' (2006) respondents, Kibera residents seem aware of the security threat they constantly face in such neighborhoods. Replacement of a mobile phone is tied to the security of the area. How participants use the phone and when is also influenced by security, as are carrying practices. Further research could look into the impact of security on mobile technological advancement and its impact on optimum utilisation of such devices.

The qualitative approach taken in this study brought to the fore many aspects of the community's life as they relate to the mobile phone. However, this study was limited in the extent to which it could delve in each of the issues raised. Findings indicate interesting areas that could be explored further. For example, one unexpected finding was that the study participants did not use their mobile phones to engage in political discussions via radio. This is contrary to existing literature that has hailed the presence of the mobile phone as a way of increasing the voices of the less privileged in the public discourses that shape democracies (e.g Hermann 2008; Wasserman 2011). This finding points to the need for a detailed study into if, how and to what extent this is happening among Kibera residents or more broadly among the urban poor.

8.6.7 Limits of this study

This study has taken a qualitative approach in understanding how Kibera residents are embedding the mobile phone into their everyday life. While the approach gives rich data about how participants are embedding the mobile phone into their everyday life, it does not shed light on the spread of specific practices across the population.

Consumption of communication technologies can be dynamic in nature, as are societies. This is especially so for personal communication technologies such as mobile phones. The findings of this study can be considered to be true at a given period in the history of adoption and use of mobile phones among the group that participated in the study. This may mean that some of the practices may change with time while others may persist for a while. The study speculates that, as a population that is more concerned with meeting their immediate basic needs due to the financial constraints they experience, the Kibera population may continue to value the mobile phone more for its benefits in attending to issues that are of immediate concern and valued less for its relevance to issues outside that realm. Other specific factors such as the perceived insecurity of Kibera neighborhoods may still continue to influence mobile phone consumption patterns for some time. However, despite these limitations, overall this study is relevant in providing valuable information in understanding how Kibera residents are embedding the mobile phone into their everyday lives. It demonstrates Kibera residents' agency in adapting, shaping and determining the mobile phone's usefulness within their socio-cultural landscape as defined by their rituals, and shows how their social, cultural and economic landscape impacts on this process. ❖

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Appendices

Appendix A: Information sheet

Identifying the Participants

Selection overview

- A snow balling technique will be used to identify the participants.

Contacting the participants

- The research assistants will contact the participants by phone or by person.
- The research assistant will introduce themselves, the researcher and the research.
- The research assistants will politely request the potential participants if they are willing to participate in the study:
    - If they say yes, they will be given further information on where and when to meet.
    - If they are not able to, the research assistant will politely thank the person for their time and wish them a good day.

Preparing for the meeting

Hosting

- Meeting venues should be within walking distances for the participants
- Potential hosts will be contacted and politely requested if they are able to host the meeting.
- All ingredients for refreshments will be provided
- Chairs will be arranged in a circle or semi-circle.
- The venue should be ready at least 30 minutes before the arrival of the participants.

Equipment for hosting

- Facilitation guide
- Information sheet
- Every facilitator and co-facilitator will have a pen and paper
- Recording device

Beginning the meeting

- The facilitator will welcome everybody to the meeting
- They will explain the purpose of the study and the purpose of the FGD.

- Politely ask the potential participants' if they are willing to continue participating.
- Explain the procedures
    - Duration of the meeting (Approx. 90 min)
    - Explain the importance of recording the discussion both in writing and audio
    - Encourage everyone to contribute to the discussion.
- Seek the participants' permission to record them including their introductions as a sign of consent.
- Put on the recording equipment
    - Participants introduce themselves

Appendix B: Focus group discussion guide

(These were open-ended questions that led to further probing and allowed for discussions to evolve, thus research captured more data than represented here)

1. What factors influence the decision to buy or not to buy a mobile?
2. Did you consult any one in the process? (Probs: If yes who and why. If no, why
3. Did you consult the sales people? Please explain.
4. What are the main uses you put the mobile phone into?
5. What are the expected mobile phone-use etiquettes among Kibera residents?
6. What is the most valuable thing about your mobile phone?
7. What are the common ways of carrying the mobile phone (Probe: Why are they the preferred methods?)
8. How do you compare the mobile phone to other communication technologies such as the TV, radio and landline telephone?
9. In what ways do you use the phone for home-related matters?
10. In what ways do you use the mobile phone for work-related matters?
11. Do you have any rules governing your mobile phone use? (probs: do you have it on all through? do you receive all calls? when can you or not call?)
12. Do you think the mobile phone is in any way enhancing or creating opportunities for the people of Kibera to participate in local development activities? If yes, how, if not, what potentials do you think it offers?
13. In what ways is the mobile phone contributing towards access to development related information among you? (Share experiences)
14. Share with me instances where you or someone you know used the mobile phone to express a societal concern to either the relevant authorities or to the

general public. (Probes: What was the message? Was it communicated by calling or text? Whom was it aimed at? What were the results?).

15. Do you ever leave your mobile phone behind? (probs: what do you do if you do? Do you go back for it or not? Why? how do you feel without it?).
16. How would you describe your mobile phone in one or two words?

Thank you for participating in this discussion

Appendix C: In-depth interview guide

(N.B: This was a guide. Data generated during the interviews covered more areas than represented here)

Dear respondent,

My name is Jesica Mwithia. I am a PhD student at University of Technology Sydney doing a study on mobile phones in Kibera.

This interview is going to take approximately one and half hour. You are free not to respond to any question you are not confortable with or stop responding to this questionnaire if you so wish. All the information you provide will be treated with confidentiality and will be used only for academic reasons.

For any questions or concerns regarding this exercise, please do not hesitate to contact Rebecca Oladipo of Daystar University on xxxxxxx. You can also contact me the researcher on xxxxxxxx. Thank you for your co-operation.

1. How long ago did you get your first mobile phone?
2. How did you get your phone?
3. What do you consider when buying a phone?
4. When buying a phone, did you consult anyone?
5. If yes, whom did you consult, on what issues did you consult. If not why?
6. Does your phone have a radio?
7. How often do you listen to the radio using your phone, do you have any criteria on when you can use it and when you can't?
8. Have you ever used your mobile phone to send a text or call to contribute to a discussion on radio?
9. Does your phone have access to the Internet?
10. Do you use your phone to access Internet? If yes, how often and for what purpose. If not, why?
11. What do you mostly do with your mobile phone?
12. What else is your phone able to do? (Probes: take photos, take videos, receive TV, do you use any of these functions, when and how?)
13. Have you ever done the following with your phone? Please expound

- Beeped/flashed anyone?
- Hang-up on anyone?
- Intentionally ignored a call
- Used the phone to organize events
- Left a message on a voice mail
- Transfer money to someone else
- Shared your mobile phone with anyone else

14. How would you describe the mobile phone to you? Why?
15. If I gave you a radio, a television and a mobile phone and asked you to choose one. What would you choose and why?
16. Using two or three words how would you describe what the mobile phone means to you?

Appendix D: Information sheet for photovoice exercise

INFORMATION SHEET (PHOTOVOICE)
ADMINISTERED: DECEMBER 2013 (projected date)

I, Jesica Kinya Mwithia, a student of University of Technology Sydney (UTS) invite you to participate in a research on Mobile Phones in Kibera. You were selected as a participant of this study on the basis that you are an adult resident of Kibera, and that you own a mobile phone.

One of the objectives of this research is to understand the various ways people carry their mobile phones or where they place their mobile phones while at work, at home or in public places such as restaurants. It also partly focuses on the different ways that mobile phone users adorn the phone. If you agree to be part of this study, you will be required to take pictures following the above ideas.

The process will begin with a one-hour training on basic camera skills. After which you will be provided with disposable cameras and a list of themes that will guide your picture taking. You will then select a few of the photos of which you will give your interpretation. This allows you to communicate what the various pictures mean to you and why you think they are important. You will also be requested to attend a 90 minutes focus group discussion, where the pictures will be discussed alongside those of other participants. The information you give will be recorded electronically (audio) as well as in hand-written notes.

The pictures and the interpretations you attach to them, will be used for academic purposes such as thesis writing, publishing and conference paper presentations. Parties affiliated to this research (UTS, Daystar University, Research Assistants, Supervisors) will have access to the information and pictures.

Your participation is voluntary. You are free to withdraw from the research process at any stage or time if you so wish. Your withdrawal will not affect your relationship with the researcher or any of the above named parties.

If you wish to verify any aspects of this research or have any questions regarding the process, please do not hesitate to contact either me, Jesica Kinya on +xxxxxxxxx or Dr. Rebecca Oladipo, Research and Publications centre at Daystar University on phone number xxxxxxxx

Yours sincerely,

Jesica Kinya

Appendix E: Themes guiding the photovoice exercise

1. How do you carry your mobile phone when not in use?
2. Where do you place your mobile phone when not in use at: Work, home, church
3. What adornments have you put on your mobile phone?
4. Do you ever leave the mobile phone in the house?
5. If you were to leave the house without your phone, where would you place it?
6. How do you use your mobile phone?

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