

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

---

**Jesica Mwithia**

**A thesis submitted in fulfilment of the requirements  
for the degree of Doctor of Philosophy  
Faculty of Arts and Social Sciences  
University of Technology Sydney**

2015

# 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.

Production Note:

**Signature of student:** \_\_\_\_\_  
Signature removed prior to publication.

**Date:** 21/01/2016

# Acknowledgements

---

*Ebenezer! For this far the Lord has brought me.*

The PhD experience has been both challenging and fulfilling. I am indebted to many who came along in one way or another to encourage and support me during this journey. First and foremost, I want to salute my parents, Gerald Mwithia and Sarah Mwithia. Since I was young, you instilled in me the importance of education and discipline. You also gave me unwavering support in the whole process. Dad, your passing away ten months before my completion of this thesis surprisingly turned around to be my motivation, because I knew I was doing what you wanted most for me. Thank you for being my greatest cheerleader.

I am grateful to my thesis supervisors for the invaluable support they gave me. Associate Professor Elaine Lally, thank you for setting the bar high. It stretched me to do better. Your dedication to reading my work and the time spent with you helped clarify my research. Thank you to Dr. Rick Flowers for the invaluable advice on the research design. Thank you too to Dr. Theresa Anderson for your input during the early stages of this research. I would also like to thank Suzanne Eggins for copy editing and formatting the thesis. I appreciate the time, effort and level of attention you invested in this task.

I am grateful to my fellow research students and academic comrades. Too many to mention everyone, but special thanks to Dr. Judy Bett, Dr. Mehal Krayem, Verena Streitferd, Burcu Cevik and Dr. Maria Chisari. The many chats over lunch and coffee about life in general and our research experiences

were a source of encouragement and learning. Special thanks too to Dr. Catriona Bonfiglioli, Dr. Belinda Middleweek and Dr. Kate Delmo for giving me the platform to share my research experience and my study with wider audiences through guest lectures and tutoring in different subjects.

I am also grateful to my family members. Their optimism and 'you can do it' attitude was a great source of motivation that carried me through this journey. The many overseas calls and texts to check on me assured me of your support and love.

Thank you to my study respondents for the willingness to share their experiences with the mobile phone with me and in a way let me into their world. Thank you to my research assistants. This study would not have been a success without your dedication.

You all made this thesis journey manageable and worthwhile. ❖

# Contents

---

<b>Acknowledgements</b> .....	<b>ii</b>
<b>List of figures</b> .....	<b>ix</b>
<b>Abstract</b> .....	<b>xi</b>
<b>Chapter 1 Studying the mobile phone in Kibera: background and context</b>	<b>1</b>
1.1 Impetus for this journey .....	1
1.2 Background to the study.....	2
1.3 Approaches to mobile phone research.....	5
1.4 Context of the study: Kibera.....	7
1.5 Studies of mobile telephony in Kenya.....	10
1.6 Aim of this study.....	11
1.7 Theoretical approach in this study .....	12
1.8 Research design.....	13
1.9 Scope and limitations of the study .....	13
1.10 Significance of the study .....	14
1.11 Thesis structure .....	16
<b>Chapter 2 Theoretical framework and research questions</b> .....	<b>20</b>
2.1 Theoretical framework.....	20
2.2 Domestication of communication technologies. ....	20
2.2.1 Stages of domestication .....	23
2.2.2 Domestication in the era of mobile and personal communication technologies .....	27
2.2.3 Bias in domestication studies.....	29
2.2.4 Application of domestication theory in the current study.....	32
2.3 Uses and gratification theory.....	33
2.3.1 Gratification sought from the landline telephone.....	35
2.3.2 Gratifications sought from the mobile phone.....	37
2.3.3 Application of uses and gratification theory to the current study .....	38
2.4 Diffusion of innovations theory .....	39
2.4.1 Five-stage process .....	39
2.4.2 Perceived innovation characteristics.....	40
2.4.3 Diffusion as a communication process .....	41
2.4.4 Five adopter categories.....	42

2.4.5 Critique of diffusion of innovations theory .....	43
2.4.6 Application of diffusion of innovations theory to the current study.....	44
2.5 Technological acceptance model .....	44
2.5.1 Application of the technological acceptance model to the current study .....	46
2.6 Theoretical approach explained.....	46
2.7 Application of the theoretical approaches to the research questions .....	47
2.7.1 Research question 1: What are the processes of mobile phone acquisition among Kibera residents? .....	48
2.7.2 Research question 2: How are Kibera residents incorporating the mobile phone into their everyday life? .....	49
2.7.3 Research question 3: How are Kibera residents objectifying the mobile phone?.....	49
2.7.4 Research question 4: What meanings are Kibera residents attaching to the mobile phone? .....	50
2.8 Summary.....	50
<b>Chapter 3 Literature review: the mobile phone in everyday life .....</b>	<b>52</b>
3.1 Adoption .....	52
3.2 Individual and social motivations to adopt .....	55
3.3 Impact of mobile phone connectivity.....	56
3.3.1 Locational independence.....	57
3.3.2 Private and public.....	58
3.3.3 Work and life .....	59
3.3.4 Literature challenging work and life overlaps .....	60
3.4 The mobile phone’s impact on relationships and social and business networks.	62
3.4.1 Social networks.....	63
3.4.2 Businesses.....	64
3.5 Security.....	66
3.6 Symbolism.....	67
3.6.1 Mobile phone placement .....	68
3.6.2 Mobile phone use propriety .....	68
3.7 Summary and conclusion .....	70

<b>Chapter 4 Research Design</b> .....	<b>71</b>
4.1 An interpretivist research approach .....	71
4.2 Data collection methods .....	72
4.2.1. Interviews .....	73
4.2.2 Focus group discussions.....	74
4.2.3 Photovoice .....	75
4.3 Sampling .....	76
4.4 Ethics.....	77
4.5 Data analysis .....	80
4.5.1 Analysis of in-depth interviews and focus group data .....	80
4.5.2 Analysing photovoice data.....	81
4.6 Presentation of analysis .....	81
4.6.1 Vignettes .....	81
4.7 Limitations of the study .....	83
4.8 Entering Kibera.....	83
4.8.1 Meeting focus group discussion participants .....	86
4.8.2 Second and third focus group discussion.....	87
4.8.3 In-depth interview respondents .....	88
4.8.4 Session structure.....	89
<b>Chapter 5 Appropriation of the mobile phone</b> .....	<b>91</b>
5.1 Mobile phone uptake: Is the mobile acquiring ubiquitous status in Kibera? .....	92
5.2 Motivations leading to uptake.....	94
5.2.1 Increased and convenient connectivity with family and friends .....	96
5.2.1 Privacy and inconvenience .....	98
5.2.3 Literacy.....	99
5.2.3 Money transfers.....	100
5.2.4.Challenges of sharing mobile phones.....	101
5.2.5 Conclusions.....	105
5.3 Process of acquisition. ....	108
5.3.1 Ownership takes place.....	108
5.3.2 Replacement of mobile phones.....	111
5.3.3 Criteria.....	112
5.3.4 Consultation .....	119
5.4 Conclusions.....	126
5.5 Summary: first steps in the process of embedding the mobile phone in daily life .....	129

<b>Chapter 6 Incorporating the mobile phone into daily life .....</b>	<b>131</b>
6.1 Uses of the mobile phone .....	132
6.1.1 Communication.....	134
6.1.2 Emergencies and simply checking on others.....	135
6.1.3 Coordination of everyday activities.....	138
6.1.4 Social and domestic uses .....	138
6.1.5 Uses related to finance and economics .....	141
6.1.6 Work-related uses .....	146
6.1.7 Selecting among options.....	149
6.1.8 Analysis of gratifications sought .....	156
6.1.9 Conclusions.....	159
6.1.10 Summary: the process of embedding continues.....	164
6.2 Rules and practices governing mobile phone use .....	165
6.2.1 Balancing between the co-present and the absent .....	168
6.2.2 Personal regulations.....	171
6.2.3 Mobile phone sharing .....	177
6.2.4 Use of mobile phone accessories.....	180
6.3 Conclusions.....	184
6.4 Summary: the process of embedding so far .....	186
<b>Chapter 7 Objectification and conversion: negotiating space .....</b>	<b>187</b>
7.1 Negotiating Physical and Social Space.....	188
7.1.1 Carrying Practices.....	188
7.1.2 Placement Practices.....	200
7.1.3 Conversion: symbolism.....	212
7.1.4 Conclusions.....	219
7.1.5 Summary: the process of embedding so far .....	220
7.2 Exploring the value of the mobile phone.....	221
7.2.1 Do you ever leave your mobile phone in the house or anywhere else?.....	225
7.2.2 What if you forget your mobile phone?.....	230
7.2.3 Television, mobile phone or radio? The mobile phone please! .....	232
7.2.4 Money or the phone?.....	235
7.2.5 What is the mobile phone to you? .....	235
7.2.6 Conclusion.....	236
7.3 Summary: the process of embedding so far .....	238

---

<b>Chapter 8 Conclusions: Kibera residents make the mobile phone their own.....</b>	<b>240</b>
8.1 Appropriation: ownership takes place.....	241
8.2 Incorporation: defining the mobile phone’s uses.....	244
8.2.1 Coordination of everyday life.....	244
8.2.2 Uninhibited versus moderated access.....	246
8.2.3 Partial versus full adoption.....	247
8.2.4 Sociability, reassurance and instrumental gratifications.....	248
8.2.5 Nuanced perspectives of the ‘personal’ nature of the mobile phone.....	249
8.3 Objectification and conversion: value and symbolism.....	250
8.3.1 Concealment versus display.....	250
8.3.3 Perspectives on portability and wearability.....	250
8.3.3 At close-range for cost management,.....	251
8.4 Attachments to the mobile phone.....	252
8.5 Concluding summary.....	254
8.6 Significance and implications of the study.....	255
8.6.1 Academic discourse.....	255
8.6.2 Theoretical implications.....	257
8.6.3 Mobile phone designers.....	258
8.6.4 Policy makers.....	259
8.6.5 Development projects.....	259
8.6.6 Areas of further research.....	260
8.6.7 Limits of this study.....	262
<b>References.....</b>	<b>263</b>
<b>Appendices.....</b>	<b>279</b>
Appendix A: Information sheet.....	279
Appendix B: Focus group discussion guide.....	280
Appendix C: In-depth interview guide.....	281
Appendix D: Information sheet for photovoice exercise.....	282
Appendix E: Themes guiding the photovoice exercise.....	283

---

# List of figures

---

FIGURE 5.1: 'MY PHONE' (SOURCE: PENINAH, STUDY PARTICIPANT).....	92
FIGURE 6.1: BERNICE GIVING MONEY TO A FRIEND VIA HER MOBILE PHONE.....	132
FIGURE 6.2: KHASAKHALA HOLDING HIS MOBILE PHONE NEXT TO THE ELECTRICITY SWITCH IN HIS HOUSE .....	143
FIGURE 6.3: HABIL AT AN M-PESA SHOP.....	144
FIGURE 6.4: BEATRICE ABOUT TO PAY FOR PRODUCE AT THE MARKET USING HER PHONE	145
FIGURE 6.5: PHILIP USES HIS PHONE TO ASK FOR DIRECTIONS TO ONE OF THE HOMES WHERE HE WAS BUILDING CABINETS .....	148
FIGURE 6.6: HABIL RELAXES OUTSIDE HIS HOUSE LISTENING TO MUSIC USING HIS MOBILE PHONE.....	153
FIGURE 6.7: PHILIP RELAXES OUTSIDE HIS HOUSE LISTENING TO THE RADIO USING HIS MOBILE PHONE.....	154
FIGURE 6.8: PENINAH TAKING A PHOTO USING HER MOBILE PHONE.....	156
FIGURE 6.9: HABIL USES EARPHONES TO LISTEN TO MUSIC AS DOES CHORES .....	182
FIGURE 6.10: HABIL USES EARPHONES TO LISTEN TO MUSIC AS HE RELAXES.....	183
FIGURE 7.1: KHASAKHALA HOLDS HIS MOBILE PHONE WHILE PREPARING THE CHARCOAL BURNER FOR COOKING .....	188
FIGURE 7.2: HABIL KEEPS A FIRM GRIP ON HIS PHONE, DESPITE HIS CASUAL POSTURE .....	192
FIGURE 7.3: PENINAH CARRIES HER PHONE IN HER HANDBAG .....	193
FIGURE 7.4: KHASAKHALA HOLDING HIS PHONE TIGHTLY IN HIS POCKET.....	193
FIGURE 7.5: STEPHEN TUCKING HIS MOBILE PHONE INTO HIS SOCKS .....	194
FIGURE 7.6: PHILIP IS CARRYING HIS PHONE IN HIS POCKET .....	195
FIGURE 7.7: PHILIP TUCKING HIS PHONE INTO HIS SOCKS .....	195
FIGURE 7.8: PENINAH CARRYING HER MOBILE PHONE IN A PLASTIC BAG .....	196
FIGURE 7.9: BEATRICE INSERTS HER PHONE INTO A PLASTIC BAG.....	197
FIGURE 7.10: FAITH INSERTS HER PHONE INTO THE POCKET OF TIGHT JEANS .....	198
FIGURE 7.11: BARBARA INSERTS HER PHONE INTO THE POCKET OF HER TIGHT JEANS .....	198
FIGURE: 7.12: HABIL INSERTS HIS PHONE IS A POCKET THAT IS INWARDS TO DISGUISE THAT HE HAS IT.....	199
FIGURE 7.13: PHILIP WILL HAVE HIS PHONE ON THE ARMREST IF RELAXING AT HOME .....	200
FIGURE 7.14: KHASAKHALA WILL HAVE HIS PHONE NEXT TO HIM WHILE AT HOME.....	201
FIGURE 7.15: PENINAH KEEPS HER PHONE NEXT TO HER SEWING MACHINE.....	202
FIGURE 7.16: BEATRICE HAS HER PHONE NEXT TO HER WHILE MIXING DYE AT HER WORKPLACE.....	202
FIGURE 7.17: IF IN THE KITCHEN, PENINAH WILL HAVE HER PHONE RIGHT NEXT TO THE STOVE.....	203
FIGURE 7.18: IF SHE IS IN THE KITCHEN, FAITH WILL HAVE HER PHONE WITH HER.....	203

FIGURE 7.19: SOMETIMES BARBARA HAS HER PHONE RIGHT BESIDE HER PILLOW WHEN SHE IS RESTING.....	204
FIGURE 7.20: FAITH PLACES HER PHONE NEXT TO A DVD PLAYER.....	205
FIGURE 7.21: BARBARA PLACES HER PHONE NEXT TO THE TELEVISION.....	205
FIGURE 7.22: SOMETIMES BEATRICE LEAVES HER PHONE IN A BASKET HANGING OFF A POLE IN HER HOUSE .....	206
FIGURE 7.23: SOMETIMES PENINAH LEAVES HER PHONE HIDDEN IN A BAG HANGING OFF HER WALL.....	207
FIGURE 7.24: STEPHEN PLACES HIS PHONE ON A HIGH SURFACE AWAY FROM CHILDREN'S REACH .....	207
FIGURE 7.25: HABIL PLACES HIS PHONE IN THE ZIPPED POCKET OF A BAG AND PUSHES IT AGAINST THE WALL.....	208
FIGURE 7.26: STEPHEN PLACES HIS PHONE IN THE POCKET OF A JACKET HANGING OFF HIS WALL.....	208
FIGURE 7.27: PHILIP WRAPS HIS PHONE IN A PLASTIC BAG AND PLACES IT IN A COMPLETED WARDROBE.....	209
FIGURE 7.28: HANDSON WRAPS HIS PHONE IN A PLASTIC BAG WHILE AT WORK AT THE WATER SELLING POINT.....	210
FIGURE 7.29: KHASAKHALA PLACES HIS MOBILE PHONE RIGHT IN FRONT OF HIM AT THE BARBER'S.....	211
FIGURE 7.30: KHASAKHALA PLACES HIS PHONE NEXT TO OTHER ELECTRONIC DEVICES AT HOME SO THAT HE REMEMBERS TO PICK IT UP.....	211
FIGURE 7.31: PHILIP HAS HIS PHOTO AS A SCREEN SAVER.....	213
FIGURE 7.32: DURING DECEMBER, BARBARA HAS CHRISTMAS THEMES AS HER MOBILE PHONE'S SCREEN SAVER.....	214
FIGURE 7.33: HANDSON CONSIDERS THIS CORNER TO BE SAFE TO USE HIS MOBILE PHONE.....	215
FIGURE 7.34: HANDSON COVERING HIS MOBILE PHONE WHEN USING IT IN PUBLIC.....	216
FIGURE 7.35: HANDSON USING HIS MOBILE PHONE IN A QUIET ALLEY .....	217
FIGURE 7.36: PHILIP USING HIS MOBILE PHONE WHILE LEANING AGAINST A WALL SO THAT HE IS AWAY FROM HIGH TRAFFIC.....	217
FIGURE 7.37: BARBARA USING HER MOBILE PHONE WHILE IT IS PARTLY COVERED IN HER PURSE .....	218
FIGURE 7.38: PHILIP USING HIS MOBILE PHONE WHILE COVERING IT WITH ONE HAND .....	218
FIGURE 7.39: FAITH HAS HER PHONE IN HER RIGHT HAND AS SHE HANGS CLOTHES ON THE LINE .....	226
FIGURE 7.40: PENINAH HAS HER PHONE IN HER LEFT HAND AS SHE CHECKS ON HER KITCHEN GARDEN .....	226
FIGURE 7.41: STEPHEN IS HOLDING HIS MOBILE PHONE WHILE FETCHING WATER OUTSIDE HIS HOUSE.....	227
FIGURE 7.42: KHASAKHALA HAS HIS PHONE RIGHT NEXT TO HIM AS HE POLISHES HIS SHOES.....	228
FIGURE 7.43: BEATRICE HOLDS HER PHONE IN HER HAND AS SHE LOCKS HER DOOR .....	229
FIGURE 7.44: HABIL CHECKS WHETHER HE HAS HIS MOBILE PHONE BEFORE LOCKING HIS GATE .....	229

# 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. ❖