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Mobile Women: Investigating the Digital Gender Divide in Cellphone Use in a South African Rural Area

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Abstract

This paper details the findings of a section of research into mobile phone access and use in Keiskammahoek, a small rural community in the Eastern Cape, South Africa. Part of a wider research and development project started in 2012 by a nearby university, this research investigates the gendered aspects of mobile phone use in the community from a critical cultural studies perspective. The data presented here were collected through two gender-disaggregated focus groups and one in-depth follow-up interview. Taking place within a wider context of ICT access and development theory, this research investigates the differences and similarities between men and women's mobile phone use, and aims to add qualitative texture and detail about this use to existing quantitative access studies. It tentatively concludes that, contrary to earlier research about women's interactions with earlier ICT in developed countries, rural women are championing mobile phone use in their communities and using them to overcome historical 'digital divides' along various demographic intersections. However, socio-economic barriers to access persist and continue to shape mobile phone use in this severely resource-constrained rural area.

Keywords: mobile, internet, ICT, rural, women, gender, social media, intersectionality, South Africa

Introduction

Mobile phones are changing the way we live and work at a rapid speed around the world. By the end of 2014, it is forecast that there will be more than 635 million mobile subscriptions in sub-Saharan Africa (Smith, 2014). In 2013, the UN Human Development Report highlighted the role of telecommunications in economic and social development, fuelling investment, increasing trade and serving millions of previously unbanked people in developing countries (Souza, 2013, p. 1).

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Mobile technology has been heralded as the cheapest and most ubiquitous answer yet to the 'digital divides' between those with access to the internet and those without. In their increasing affordability, cellphones present a thus far unparalleled opportunity for people across all strata of society to access the internet and use the rich store of information available there to improve their lives. The present study outlines preliminary

research that was conducted into the use of mobile technology in Keiskammahoek, South Africa. The purpose of the research was to add qualitative depth and specific detail to a baseline study of mobile phone usage in the area. The study takes an intersectional feminist perspective informed by the critical cultural studies tradition to interrogate how young women in the area are using their cellphones, which also informs the methods that were used. It draws upon a growing body of work on new media and inequalities of access and use along demographic variables such as class, race, and gender, explaining the concept of a ‘fourth world’ arranged along various digital divides. The central question is whether ICTs are poised to overcome these systemic inequalities or perpetuate them – even widening their reach.

The wider research project of which this study is part has practical development aims, i.e. exploring the potential of mobile phones, and particularly mobile apps, for the socio-economic upliftment of rural communities in South Africa. As a case study, Keiskammahoek also serves as an entry point into an increasingly important theoretical investigation of digital divides in a world where many people’s first and often only point of contact with the internet has been through a mobile phone. After a brief discussion of the context of the research, we review recent literature investigating the intersection between mobile use and a number of ‘digital divides’, where inequalities along various intersections dictate access to and use of digital technology. First, the conceptual framework informing this approach is outlined with a brief introduction to the critical cultural studies paradigm. Then, the concept of the ‘fourth world’ and the digital divides that characterise it – including gender and other socio-economic factors – is explained. The concept of intersectionality in feminism is discussed with reference to specific case studies relating to the gendered aspects of mobile technology use, with special attention being given to research into rural women’s use of cellphones. Then, the methodology that was employed in this research is outlined. This paper concludes with a discussion of the findings of this specific research, their relation to the project, and their tentative practical implications.

Context

This research forms part of a larger project that aims “to foster the development of community media and to explore the potential of ICT for the socio-economic development of [Keiskammahoek]” (Dalvit & Strelitz, 2013, pp. 1-2). Keiskammahoek is a relatively small rural area in the former homeland of Ciskei in the Eastern Cape Province of South Africa. The combination of flat and mountainous terrain has implications for mobile phone reception and network coverage is uneven across different villages. Thanks to the involvement of international donors and of different departments at a nearby university, the presence of ICT infrastructure and support in the area is increasing and the local community is relatively well documented. A baseline study in the area in late 2012 (Dalvit & Strelitz, 2013) described the demographics, level of access and basic kinds of uses of mobile phones in the area. The vast majority of Keiskammahoek households in the baseline survey had mobile phones and network coverage – 91% (Dalvit & Strelitz, 2013, p. 7). The high level of mobile penetration shown in this preliminary survey revealed a potential for future development in this field, both in research as well as the creation of custom-made mobile applications that can be put to use by Keiskammahoek residents. The data for this study was collected by fieldworkers with an orally administered, ten-item questionnaire. Data were quantitatively analysed and presented through descriptive statistics in terms of the media landscape in Keiskammahoek, both in terms of access and in terms of types and platforms. This study described the level of access and established the need for further research in areas such as quality and frequency of access to content, and a study of new media use across age, gender, and language. This baseline study informed research projects by two Masters students and another intensive round of surveys administered by fieldworkers in Keiskammahoek – all with the purpose of informing a mobile development project for Keiskammahoek. The scope of this paper, however, is tightly focused on the gendered aspects of mobile phone use and the focus groups and in-depth

interview that were used to interrogate this aspect. While an understanding of this context is important, the findings of the wider research project will be discussed in another companion paper (Dalvit & Kromberg, 2014) and will therefore not be referred to at length in this paper.

Literature Review: Critical Cultural Studies

Critical research into the economic, political and, to a lesser extent, social dimensions of digital – and specifically, mobile – technology has flourished in the last couple of years. The present study approaches this literature as well as the research conducted from a critical cultural studies perspective, which is aimed at uncovering the “political stakes” behind everyday cultural practices (Conquergood, 1991, p. 179). By interrogating the power relations that characterise these interactions, critical cultural theory has explicitly political goals of social justice in the form of recognition, redistribution, and representation – often from the ‘bottom up’ (Burgess, 2006, p. 3). Not only is critical cultural studies concerned with “understanding and dignifying ‘ordinary’ people’s lived experiences and cultural practices”, but it also sees these practices – and mass-mediated popular culture in general – as a “site of negotiation and political potential” (Burgess, 2006, p. 2). In practice, research in the cultural studies tradition has been characterised by linguistic and ethnographic studies of texts and cultural consumption. It introduced the ‘active audience’ paradigm and the importance of *interpretive work* to socio-economically deterministic critical theory. These developments contribute to a more nuanced understanding of culture and power, and structural determination and human agency. Cultural studies stresses the “complexity and contradictions” of social formations: “any difference, and how it is lived – whether race, gender, class, sexuality, and so forth – is articulated to and by other differences” (Grossberg, 1995, p. 93). What emerges is a complex story of different factors and articulations of structures and identities we call ‘the circuit of culture’.

The development of digital technology in an increasingly information-based society and criss-crossing cultural circuit, where the divisions between media producers and consumers have become blurred, has proven a particularly fruitful avenue for cultural studies critiques (Burgess, 2006). Cultural studies have provided researchers and theorists with a useful and accommodating framework from which to examine the democratising potential of the internet and ICT. Being an intrinsically diverse and contested field of inter-disciplinary study, it is well-suited to discuss the opportunities and challenges that accompany ICT use and development in the 21st century, such as the blurred boundaries between producers and consumers and the increasing importance of ICT for economic and political activity. While the ease and ubiquity of 21st century self-publishing tools poses interesting possibilities for cultural theorists who insist on individual agency and the importance of self-expression (Burgess, 2006), the shift towards an increasingly knowledge and information-based society is of concern to those who acknowledge the importance of structural limitations to human possibility. Critical cultural studies require that both these forces – structural limitations and individual agency – be taken into account in terms of the various intersections that order human experience.

Digital Divides: The Fourth World

The ‘Information Age’ is a term that has been used to describe a new paradigm of human organisation in which “synchronized and integrated networks of information, production, and exchange are the new and prominent feature of social organization” (Donner, 2008, p. 29). In this age, economic productivity as well as social organisation depends on information and human activity has been reorganised around various networks (Castells, 1997, p. 7). These changes mean that those who fall outside the information economy due to a lack of skills or resources or other factors are relegated to a theoretical ‘fourth world’, where they do not contribute to or benefit from new systems of organisation (Castells, 2000). But this world is not bound by geographical nation-state

borders: instead it is made up of all those individuals and countries that are excluded from global socio-economic development and progress based on their use of ICT. The ‘divides’ characterising the information society are not only organised around a number of socio-demographic variables, but a whole strata of people based on their level of access and astuteness when it comes to ICT. Castells (2008) employed the phrase to discuss the complex factors that contribute to the asymmetry of ICT access and use and, subsequently, socio-economic development:

Thus, I propose the notion of the emergence of a Fourth World of exclusion, made up not only of most of Africa, and rural Asia, and of Latin American shanties, but also of the South Bronx, La Courneuve, Kamagasaki, or Tower Hamlets of this world. A fourth world that... is predominantly populated by women and children.

(Castells, 2008, p. 8)

While the positive effects of ICT development – especially mobile – have been quite extensively described in such a short period, it is worthwhile returning to the arguments of less optimistic theorists to understand how technological progress could set in motion a process of social exclusion. A number of theorists have written about the power of advantaged groups to “exploit their relatively high proficiency in Internet use to support their relative communicative power in society” (Dutton et al., 2007, p. 33), thus widening the digital divide as their privilege grows exponentially. Previous inequalities and power relations still exist and continue to exist through new informational systems and technologies, which has strengthened and extended them in many ways along the same divisions and intersections. When access to and use of ICT is a central determinant of a community’s participation in the informational system, being left out can have disastrous consequences for that community: “Information technology, and the ability to use it and adapt it, is the critical factor in generating and accessing wealth, power, and privilege in our time” (Castells in Donner, 2008, p. 29). As ICT becomes more important to our social and economic lives, the poor are being left behind. But there is a growing argument that African countries provide unique case studies in light of the explosion of mobile ICT and its innovative use there (Gergen, 2008, p. 297), where developments also provide the opportunity to oppose and restructure existing inequalities. It is true that mobile technology is making ICT cheaper and more easily and widely accessible than ever before (and will predictably continue to do so at an ever-increasing rate), but there are other hurdles to social inclusion than mere access into the growing information society.

The Value of Qualitative Research: From ICT Access to ICT Use

Much of the literature surrounding the ‘digital divide’ critically examines normalisation and stratification theories about whether the digital divide is shrinking or growing in terms of access to ICT, resulting in a seemingly clear-cut division making up the digital divide between “haves and have-nots” (Kreutzer, 2009, p. 4). In terms of mobile technology, research has mostly been done through quantitative studies of access and adoption. While it has been established that more people have access to ICT through mobile technology, this kind of quantitative research into access and coverage fails to take into account the texture and detail of actual ICT usage and the factors that influence inclusion and exclusion in the information age. Moreover, the South African context provides an interesting and underrepresented opportunity for research into the dynamics of its dual economy and the major inequalities characterising it: sectors of the country (both geographically and economically) are developed, and others are still developing (Clark, 2013). Previous studies into ICT access have not left much room for the complex and multifaceted reality of mo-

mobile phone usage and the individual choices people make when using mobile phones (Kreutzer, 2009, p. 5). Instead, ‘digital divide’ theorisation and research has come down on one or the other side of the debate without a critical investigation of *how* and *why* people are using mobile technology and what they are consuming and creating.

Earlier understandings of the digital divide in terms of access have since been expanded to take into account these nuances that affect how people make use of ICT and the role these new technologies play in their lives. While digital divide theorisation provides a solid foundation and critically important context for any work that is to be done on mobile phone usage in South Africa, larger questions around the impact of ICT on human development can only be answered with rigorous empirical research into the social and cultural realities of South Africans in the 21st century. Research into mobile phone usage, especially in developing countries such as South Africa, has revolved around quantitative data about the level of mobile access and the normative, developmental prescriptions of researchers and theorists, failing to address the “cultural and sociological questions that have been discussed in much depth in wealthy nations” (Kreutzer, 2009, p. 5). Work like that which is being done in Keiskammahoek aims to address this dearth in research into the texture and detail of actual, everyday mobile phone use and link it to various socio-economic and political considerations.

What are the implications of this powerful, ubiquitous, and cheap technology for people and their practices? What will the exponential growth of the mobile industry mean for societies and relations of power along various axes of inequality and oppression? Without such socio-cultural considerations and actual empirical qualitative *and* quantitative research, theories of normalisation or stratification tend to lead to little more than overly optimistic or overly pessimistic fantasies of the future. Widespread access to ICT cannot be said to have an inherently positive or negative socio-cultural impact as conventional dichotomous notions of the digital divide seem to imply. But the ubiquity, interactivity and increasing affordability of mobile technology does offer a powerful potential tool for economic and social activity and development. In his study of mobile culture on the micro-level, Wasserman paraphrases Ekine on the unique role that Africa might have in determining the future of mobile as follows:

For Ekine (2010, p. xi), the creative ways in which Africans have adopted and adapted the mobile phone, rather than the technology itself, is what makes mobile phones a force for social change.

(Wasserman, 2011, p. 147)

While debates surrounding digital divides tend to focus on whether access to ICT “systematically supports or undermines social relations in a networked society” (Dutton et al., 2007, p. 34), it is important to remember the centrality of people’s individual choices and active agents in society. It is not enough to measure mobile penetration or levels of access and connectivity – although this is an important start, it does not measure the quality and level of actual use and engagement. Qualitative studies of the actual uses individuals are making of their cellphones and the role this technology plays in their lives is crucial in overcoming the impasse between new media theories about the effects of technological development on socio-economic inequalities. Viewing ICT and society as constantly interacting with each other and impacting on one another is a useful way to incorporate the agency engaged netizens have in determining their own use of social media while not discrediting the power of existing power structures in society (Wasserman, 2011, p. 156). People make choices about interactive ICT around them every day: from whether or not to use it to how, why and when they do so. “[D]igital choices made about the use and non-use of the Internet can reconfigure access to people, information, services and technologies” (Dutton et al., 2007, p. 42). The concept of “domestication” refers to the unique, creative, individual and con-

text-specific nature of ICT adoptions and adaptations (Wasserman, 2011, p. 147) as a negotiation amongst and between people and technology.

The impact of this tool depends on actual, specific uses of mobile technology, the study of which has been situated within the appropriate contexts and structures. Using theories which incorporate and contextualise the choices of and opportunities available to mobile users is crucial to predicting what the future of interactive ICT is going to look like, and what it is going to mean for society at large. Kreutzer's quantitative study of the mobile phone use of 441 Grade 11 students at nine schools in low-income areas in Cape Town, South Africa (Kreutzer, 2009) made use of various qualitative methods. The study assessed the "detailed usage [of mobile phones] based on a multitude of activities" and looked for "significant differences for users in this population, based on ownership, gender, language groups, academic or socioeconomic status" (Kreutzer, 2009, p. 4). In his research, Kreutzer proposes methodological approaches he hopes will enable "a more fact-based discussion about the role of mobile phones in the media landscape" (Kreutzer, 2009, p. 17) and interrogates various aspects such as frequency of use, ratio of mobile phone use to traditional media consumption, ratio of mobile-based to PC-based activities, and a breakdown of specific activities such as news, entertainment, social networking, or research.

Mobile technology provides opportunities for "social networking and communication, media use and production, political activism, as well as education" (Kreutzer, 2009, p. 2). From a political perspective, cellphones give citizens the power to "self-organize popular demonstrations in protest", the benefit of cheap and transparent election monitoring, and the power to "disseminate information that is suppressed by authoritarian regimes and controlled mass media" (Rheingold, 2008, p. 237). But ICT might very well weaken democracies by hurrying along civic and political decision-making and sacrificing engaged debate and thoughtful deliberation, by putting power into the hands of authorities to manipulate people with "planted provocations and misdirection", increased surveillance, and the drawbacks of the rapid spread of misinformation (Rheingold, 2008, p. 237). Mobiles are also becoming powerful publishing and broadcasting tools for social activism, political monitoring, transparency, coordination and social mobilisation (Kreutz, 2010, p. 18). 'Voices of Africa' is a project where "mobile reporters across Africa use mobile phones to report on events...from an informal area" (Kreutz, 2010, p. 19) using text and video and publish their content in the internet and on traditional media. Another example has been the recent proliferation of citizen bloggers in lots of African countries – from South Africa to Nigeria, Kenya, and Tanzania (Kreutz, 2010, p. 20). Services that make use of text messaging – the most far-reaching mobile communication platform – such as M-Pesa (a mobile banking service) and FrontlineSMS (a system used for election monitoring, where "people collect decentralised information from polling stations") are crucial because they are cheaper, more accessible and therefore more inclusive (Kreutz, 2010, pp. 20-21). While mobile technology may have narrowed certain digital divides in internet access by allowing more people to afford ICT (Srivastava, 2008, p. 22), the nature of the technology as a useful economic, social and cultural tool has also been argued to result in a growing divide between those who can afford it and those who cannot. Those who do not have access to digital technology for whichever reason – economic, political, geographic, social, etc. – have limited access to communication and information, which is seen as crucial to development and democratization (Moyo, 2009, p. 125). More people have access to money management facilities thanks to internet and mobile banking, but those who cannot afford the technology do not get to enjoy the benefits. The digital divide is enforced because technology mostly serves those who have access *as well as* the knowledge and skills to put it to creative use, leaving those who don't behind. There are arguments for quality access to ICT improving economic equality and enable social mobility and strengthening democracies (Rheingold, 2008, p. 236), but the high cost and limited reach of technology is hampering access to these benefits. Even in a best-case scenario of 100% penetration and availability, where the necessary infrastructure maintenance and upgrades have taken place, "equal exposure is still likely to accentuate existing knowledge

gaps” (Dutton et al., 2007, p. 34) and political and social divides dictating access, such as age, gender, language, class and culture.

Mobile Use in the Developing World

This research in Keiskammahoek presents an example of mobile-centric access, an increasingly prevalent phenomenon that has only been the object of a handful of recent studies into mobile phone use (Gitau et al., 2010, p. 575). For all of the participants in the focus groups and many in the baseline survey, their first (and often, only) point of contact with the internet is via mobile phones instead of through computers or laptops. This presents an interesting and unique configuration that needs to be taken into account to make “needed improvements in theory, policy, and design”, especially because of this phenomenon’s prevalence in poor and resource-constrained communities (Gitau et al., 2010, p. 575). One ethnographic action research into mobile-only internet access in a severely resource-constrained environment saw eight South African women being trained to use their mobile phones and access the internet effectively (Gitau et al., 2010, p. 574). Researchers worked with participants and based the mobile training on their expressed needs and desires, adding qualitative depth and empirical information to this underdeveloped area of mobile research. The study “draws on the concepts of appropriation and domestication to consider adoption not as a single event but rather as a process” (Gitau et al., 2010, p. 575). To help this process along, service providers, technology companies and policymakers need to take into account this complex phenomenon: the study found that “gaps in functionality... [and] information literacy” were harder to overcome for those who did not have PC experience to draw on, and noted other barriers such as affordability and skills (Gitau et al., 2010, p. 591).

Rural areas in developing countries also provide an interesting and divergent case to researchers in mobile technology and social development in terms of privacy and sharing. Sharing behaviour has been described in a few studies in rural areas in India (Stenson & Donner, 2009, p. 233) and South Africa (Dalvit & Strelitz, 2013), amongst others. In Keiskammahoek, 76% of the baseline survey respondents who do not own cellphones have access to one, and sharing allows people access to more advanced mobile technology such as multimedia, network-related activities, and money-related uses (Dalvit & Strelitz, 2013, p. 7-8) Findings such as these “challenge the dominant, default view of mobile phones as personal, individual devices” (Stenson & Donner, 2009, p. 233) and therefore present an important avenue for future research and development.

The Digital Gender Divide

The present study takes a critical perspective on the ‘digital divide’ and acknowledges that differences in access, adoption and use are not only structured in terms of income and class, but a myriad other demographic factors such as sex and gender, age, race, ability, technological know-how to different extents in different contexts. An intersectional feminist approach which focuses on the social category of gender nonetheless needs to take into account other inequalities of power and how they intersect with gender identities. Intersectionality is a crucial tenet of critical cultural studies, and serves as a bridge between the previously contradictory forces of structure and agency. While human experience is still structured by various factors such as economic status, existing inequalities of power and the nature of our institutions, people’s agency to act within these limitations should not be disregarded. Although it was developed in part to overcome the economic determination that crippled most critical positions, cultural studies needs to take into account the complex and shifting relation of economic factors and class with other demographic variables. The term ‘intersectionality’ was coined by American professor Kimberlé Crenshaw in 1989 to describe the way systems of society overlapped in people’s lived experience, although the concept was not so new (Crenshaw, 1989). Although Valentine’s (2007) discussion of intersectionality is undertaken from a feminist geography perspective, the field is inherently inter-disciplinary

and her theorisation of the concept is as useful to the field of new media studies as it is to many others. Importantly for feminist theory, “[these] debates led to the decentering of white, western, heterosexual, middle-class women and a pluralizing of feminism” that took into account people’s lived experiences and the way different facets of their lives constituted these experiences (Valentine, 2007, p. 13). Quantitative studies of these experiences and realities are important, because different ethnographic variables intersect in different and unpredictable ways. Although earlier work in feminism was based on a strong empirical tradition, a recent and general “theoretical turn” within feminism has led to a shortage of empirical inquiry into the relatively recent concept of intersectionality (Valentine, 2007, p. 14).

There are different spheres of life on which mobile technology is thought to impact in different directions: economic stratification or integration, gender equality or inequality, racial inclusion or exclusion, language differences, knowledge gaps and education-related divides are only a few (Dutton et al., 2007, p. 31). Research into the various digital divides affecting the spread and reach of the internet constitute a large part of the work being done around the internet and its impact on society. The present study is concerned with the role of mobile technology in addressing questions of stratification along economic and gender lines. Early studies of internet usage have shown that “men use the internet somewhat more than women, in line with the digital-divide hypothesis” (Dutton et al., 2007, p. 37). But, as we turn to “high-use countries”, gender differences were also shown to diminish (Dutton et al., 2007, p. 37). More recent studies of the gendered aspects of the digital divide, especially in developing countries, have increasingly found that mobile technology has done more to disrupt historical inequalities than ever before.

In the baseline survey conducted at Keiskammahoek, gender differences were most pronounced when it came to money-related activities (Dalvit & Strelitz, 2008, p. 9). “Mothers and sisters generally use a phone to transfer money more frequently than their male counterparts” because women were more likely to receive child support and government grants (Dalvit & Strelitz, 2008, p. 9). This preliminary study concluded with the assertion that there was great scope for growth in new media, particularly among young adopters and women (Dalvit & Strelitz, 2008, p. 9). Research into the gender digital divide takes up a host of issues beyond simple penetration and adoption, including the level, nature, and quality of individuals’ access to ICT and their actual engagement with it (Selwyn, 2004, p. 356) from a gender perspective. Specifically, it also looks at the way the digital divide is related to other historical and social ‘non-digital’ divides. Mostly, this work has been intersectional in theory and takes into account “individual factors such as age, gender, class, geography, ethnicity and disability”, amongst others (Selwyn, 2004, p. 356). In a study of ICT adoption in Dwesa, a marginalised area in the Transkei Region of the Eastern Cape in South Africa, rural women were found to act as the champions of ICT projects in their communities (Mapi et al., 2009, p. 83). Researchers identified three independent variables that impacted on ICT adoption, namely age, education and gender. Contrary to the findings of research into conventional PC internet use and the assumptions that go along with it, Dwesa women “willingly adopted ICTs and became skilled in ICT use” whereas men were slower (Mapi et al., 2009, p. 83).

Hilbert’s analysis of the digital gender divide evident in data sets from 12 Latin American and 13 African countries from 2005 to 2008 found mobile to be a serious contender in traversing the digital divide of PC-only web access. It found that women in fact were more likely to use ICT, although they “continue to be discriminated in many other aspects of social life, including employment, literacy and income... inequalities [which] also throw their shadows on ICT usage” (Hilbert, 2011, p. 487). Hilbert’s research contradicts earlier research on computer use, particularly in the developed world, which found women “underrepresented in their use and ownership of computers” and lagging behind in ICT skills and engagement and thus also the benefits they carry (Cooper, 2006, p. 321). Although mobile has played a role in this development, an important the-

oretical distinction has also arisen from it that should change the way we see the digital divide in terms of policy-making, theory, research, and development. Hilbert's suggestion is that the digital gender divide should be seen to exist "only as a direct reflection of existing gender-related inequalities" and that these economic and social inequalities should be addressed in order "to create policies and projects that truly allow girls and women to become equal members of an information society" (Hilbert, 2011, p. 487). While this understanding of structural understanding of gender relations is useful, Hilbert's insistence that the "policy actions should make use of the natural communication skills and media capacities of women" (Hilbert, 2011, p. 487) borders dangerously close to an essentialist reduction of gender differences. Nevertheless, his research is a powerful and comprehensive study of women in the developing world's "proven embrace of the new digital opportunities to overcome longstanding gender inequalities" (Hilbert, 2011, p. 487). He sees this becoming possible through women's access to and positive attitudes towards ICT, which can enable them to fight existing inequalities. In this way, mobile ICT provides an opportunity for women to overcome "longstanding inequalities [that] prevent [them] from accessing ICT, leading to a vicious circle between digital exclusion, unemployment, low income and lacking education" (Hilbert, 2011, p. 487). Instead of understanding the digital gender divide as a result of innate qualities in men and women, we should theorise it as the product of systemic social, cultural and economic inequalities between them.

Methodology

This paper focuses on the intersections of mobile phone use and gender in Keiskammahoek. In this section, the methodology that was used in the collection of this data is discussed. First, the process that was followed is described, with a discussion of the scope of the study as well as the participant selection process. Then, the choice of methodology is discussed in terms of its position within cultural studies and intersectional feminist approaches. Alongside information from two gender-disaggregated focus groups, one in-depth individual follow-up interview with a member of the female-only focus group was used for data collection. Both the issues of language and gender in relation to mobile use in Keiskammahoek were explored in these focus groups. One set of identical questions was discussed with two groups of four men and four women (See the Appendix). Although these two topics – language and gender – were the focus of two separate research projects, the questions were asked together to each of the two focus groups because of constraints on time, the number of participant numbers and the number of researchers.

Participants for the focus groups were purposively sampled, and the selection of the subject of the in-depth interview followed from these focus groups. Because of the lack of generalisability resulting from the small sample inherent in focus group discussions, we opted for "theoretically motivated sampling" (Morgan, 1997, p. 7). Researchers at the university were in regular contact with a Keiskammahoek community heritage organisation called Ntinga Ntaba ka Ndoda. Members of this organisation took part in the focus groups and helped to select the other participants. Being friends, colleagues, and even family in the case of the female focus group, focus group participants formed quite homogenous groups. Homogeneity in focus group research can be useful: participants feel comfortable speaking to one another, and share enough of a common background and experience for a potentially fruitful conversation to follow (Morgan, 1997, p. 7). The people in this focus group were mostly young, and had taken part due to their active participation in civic activities and social organisations because of the method of selection. For the purposes of identifying gender differences in mobile use – if there were any – these participants were separated into two groups: men and women. The questions that were discussed focused on issues such as phone ownership and sharing, quality and frequency of access and use, language, barriers to use, and specific questions about the communities and groups the participants were part of. Questions about language preferences and use were included in both focus groups, and differences and similarities between the two groups served as a preliminary introduction into the gendered aspects of

mobile access and use. Questions were formulated to generate qualitative data about the access these young men and women had to mobile phones, what kinds of activities they were used for, and what barriers they encountered in terms of high charges, connectivity, and technological know-how.

The focus group and in-depth individual interviewing methods were chosen for their qualitative character. Qualitative studies of the use of ICT represent a relatively recent approach, complementing quantitative research on the impact of the spread of ICT and its consequences for social and economic development and inclusion. Focus group interviews echo the “consciousness-raising (CR) groups” of the women’s liberation movement of the late 1960s and 1970s and adhere to the basic principles of feminist research (Montell, 1999, p. 46), and are also used to achieve the qualitative, subjective depth demanded by cultural studies approaches (Pickering, 2008). In relation to research methodology, these principles include a concern with the relationship between the researcher and the subject which is addressed using “more egalitarian and less objectifying” methods such as focus groups and interviews (Montell, 1999, pp. 49-50). These methods are also used by feminist researchers because they “allow participants to exercise a fair degree of control over their own interactions” (Morgan, 1996, p. 133) and treat them as ‘experts’ on their own lived experiences (Montell, 1999, p. 46). Pini (2006) discussed the value of focus groups as a useful method for feminist social research in rural areas as they “provided space for discussion and reflexivity” (Pini, 2006, p. 339). Although the discussions in the focus groups did not explicitly address gender issues, the openness and emphasis on self-narration and determination of focus group research is nonetheless valuable from a feminist perspective.

The qualitative findings from the present study cannot be taken as representative of the population of Keiskammahoek and is not necessarily applicable to the study of mobile use in other rural areas or with other groups. However, this case study will offer insights into the gendered use of mobile phones in a rural setting, to inform similar interventions. The focus groups were small, with only four men and four women. While most of the participants ranged from 19 to 24 years of age, outliers aged up to 38 were included because of the small number of participants. The limited timeframe of the study meant the focus groups could not be repeated. The two groups comprised of only a few individuals, all coming from a specific and related context of active political and social engagement, and working on the same community heritage project. In the female focus group, three of the women were related to one another. Despite these challenges, the qualitative data collected provides a useful insight into how young women in a rural area access and use mobile phones.

While this research into the gendered aspects of mobile phone access and use in Keiskammahoek forms part of a greater research and practical developmental project, the present study will focus on the findings from two gender-disaggregated focus groups – specifically the female focus group – and the in-depth individual follow-up interview that was conducted with one of the female participants. Conducted with the aim of contributing to a larger research and practical development plan, this research aims to come to greater understanding of specific facets of the diffusion and use of mobile phones in Keiskammahoek (Dalvit & Strelitz, 2013, p. 2) to inform future projects. The original baseline survey discussion of mobile phone penetration, network and use follow, with particular attention to intergenerational and gender differences. This discussion of the subsequent research into the gendered aspects of mobile use in Keiskammahoek addresses only one of the complex range of intersectional features and factors of this use. While the baseline study and other subsequent research addresses such aspects, more research is needed in many different aspects including gender, age, language, socio-economic factors, and race, for example. The present study refer to findings in the original baseline survey and subsequent household surveys only insofar as they provide a wider context for the small, qualitative samples of research conducted in the focus groups and interview.

Findings

The findings of the two gender-disaggregated focus groups as well as the in-depth follow-up interview echo the results of the baseline survey as well as similar qualitative studies of mobile phone usage in rural areas. The following section presents some of the most interesting aspects of these findings in brief before discussing their practical implications. This discussion takes the findings into account in the light of previous work done on mobile technology and the digital gender divide, mobile sharing and mobile-only internet access, and the barriers to access and use that were identified.

All four of the women in the focus group own their own smartphones, and most participants have in many cases owned a feature phone or smartphone for the last three to five years. These phones included a Nokia X2, an MTN Steppa, and two Nokia Asha 201 models. The price for one of these handsets ranges from R499 to R1 000. Most of the participants in the Keiskammahoek focus groups are mobile-first internet users, and many of them only access the internet through their cellphones. All of the participants in both the male and female focus groups have their own cellphone and have had substantial experience with mobile phones, echoing the results of the baseline survey in terms of mobile phone ownership and access (Dalvit & Strelitz, 2013, p. 7): most of the cellphones currently owned by survey participants were acquired in the past two years. All of the participants in both focus groups access various mobile services every day, numerous times a day.

Sharing and Privacy

In some cases, participants reported cellphones being passed down from older siblings and other family members, or being passed on to younger ones when they bought a new cellphone. While the baseline study and subsequent household surveys showed the prevalence of cellphone sharing in Keiskammahoek, the women in the focus group valued the fact that they didn't have to share their phones with anyone else: "This is only my phone, nobody else uses it," said one respondent. When prompted to elaborate on how they felt about this, the women unanimously agreed that this was an important and valuable aspect of their mobile phones. Contrary to the emerging literature reviewed in the previous section of this paper, sharing does not seem to be a phenomenon that is on the rise in Keiskammahoek. Rather, evidence points to the fact that sharing happens out of necessity for those who do not have their own mobile phones or have run out of data and airtime on their cellphones.

Uses: Communication, Entertainment, Organisation

The baseline survey categorised and ranked the use of mobile phones for different purposes in the following order: communication, multimedia, network-related, and money-related uses (Dalvit & Strelitz, 2013, p. 8). The women in the focus group focused mainly on the first three activities, communicating in private as well as semi-public and public instant messaging applications, social networking groups and websites, numerous times every day. Although the women reported capturing, downloading, and sharing pictures, music and video using their smartphones on various networks, multimedia formed a larger part of the discussion in the male focus group with men describing the active creation and sharing of content more frequently than the women.

The Keiskammahoek women in the focus group have established social networks that they communicate with on different platforms, including voice calls, SMS/MMS, instant messaging services, social networking applications, and websites. They belong to different private, semi-private and public instant messaging and social networking groups, where they spend most of their time online. One respondent uses Facebook to correspond with members of her church organisation, planning events and gatherings: "We have a Facebook page (sic) for my church group where we

can talk and make plans,” she explains. Facebook groups are also used for political and social mobilisation alongside personal communications. The other women listed political organisations, community projects and social youth groups in which they take part and talk about on these applications. While they were heavy mobile users, they mostly used them for communication and did not prioritise news in their discussion. While the women’s focus group talked more about their instant messaging and social networking activities, the men mentioned emails more often, social networking taking a backseat. Both men and women valued the ability to install apps and access the internet on their cellphones, expressing frustration about their phones’ shortcomings or the high cost of data. Every participant in the women’s focus group uses Facebook, and most use an instant messaging application of some sort. One woman used three instant messaging services: “I need 2Go, WhatsApp and Mxit because I speak to different people on them,” she said. While WhatsApp and Mxit are mostly used to communicate with strangers and friends of friends, Facebook is kept for less personal conversations, and Facebook Messenger does not feature strongly because of high data costs.

An individual follow-up interview with one of the women yielded more specific and detailed information regarding her use of mobile technology to stay in touch with friends, meet new people from around the country, and communicate with members of the political organisations she belonged to. These organisations include the Solidarity Economic Movement and the Democratic Left Front youth groups. She makes use of a chat group on Whatsapp managed by one central person who connects young people he meets from all around the country by adding them to the group, giving them a space to meet each other and talk: “He goes around the country to different events and adds people he meets to the group so that we can talk,” she says. “He changes the name of the group all the time based on a theme.” The respondent described giving and getting relationship and career advice on the chat site: “One girl on there came to us for advice because she thought her boyfriend was cheating. When I have a problem, there are lots of people I have met there that I can talk to in private messages for advice”. But this group is also used for group discussions around news and current events, members often getting into heated debates about national politics. Even though the respondents did not list reading or listening to the news amongst their uses of mobile phones, social networks and instant messaging groups seem to be serving this function in the form of conversation and information-sharing.

Barriers to Access

Amongst the men’s and women’s focus groups, the biggest barrier to access was the high cost of mobile data and airtime. This restricted some of the women to instant messaging applications like Mxit and Whatsapp even though they would like to use Facebook more often. For two of the men, these costs made using their mobile phones nearly impossible. One of the other men reported spending R10 a day on data and airtime costs, another R280-R500 per month. The women were not as forthcoming with the precise figures behind their mobile data and airtime expenditure, but unanimously agreed that data costs were too high and restricted their mobile activities to a large extent.

Economic access is not the only barrier to mobile use. As shown by the baseline survey, the vast majority of cellphone users in Keiskammahoek subscribe to MTN, as other networks have very poor network coverage there. These results were reflected in the focus group findings, where everyone was an MTN subscriber. One participant in the women’s focus group said that “...only MTN has good signal” in Keiskammahoek and this is why residents prefer it. Another respondent cited MTN’s slightly lower call rates and special discounts as a factor. Even using MTN, the women still experienced connectivity issues: “Sometimes I have to turn my phone on and off because it isn’t connected anymore,” explained one participant.

Even with smartphones, enough data and strong network coverage, the problem of skills and knowledge in terms of technology presents an epistemological challenge. As one respondent, a 38-year-old woman, says, “My phone is the new one: it has 2Go, WhatsApp, Facebook... but I don’t understand how to download things like Twitter”. The follow-up interview respondent explained that age was also an important factor in mobile phone use: “Some older people only call and SMS, even though they have smartphones. They just don’t know how to use it”.

Conclusions

These findings echo previous research done in Keiskammahoek and similar situations in which women are found to be championing mobile ICT adoption, contrary to earlier research into the gender aspects of internet use and assumptions where women were thought to be lagging behind. The focus groups, which were disaggregated by gender, showed no marked differences in the level of access and frequency of use. Women are being shown over and over again not to be passive spectators of change, but incorporate and appropriate technology in ways that enrich and extend their social, economic and political lives. By focusing on their agency, emerging research can problematise the black-and-white world of the digital divide. Work in this area has tended to focus on the socio-economic structure of society and the cost of properly theorising adoption, domestication, action and resistance.

Albeit small and limited, this empirical sample investigating the gendered aspects of mobile access and use in a rural area reveals a number of ramifications for feminist technology and development praxis. Although this research is qualitative in nature and its scope by no means representative, it forms part of a small but growing body of research into the gendered aspects of mobile phone usage in poor rural areas, and can be understood in the context of ICT development research more generally. When this small sample of empirical research is viewed in the context of the emerging body of work on the democratic promise of the internet and cellphones, smartphone technology seems to problematise the concept of the ‘digital divide’ by virtue of its ubiquity and the ease of internet access it allows. Of course, it is to be expected that this kind of rapid technological shift will challenge and expand existing academic concepts. But emerging research and theorisation seems to suggest something more: mobile phones have quietly revolutionised communications in an unprecedented way which will have many fundamental implications for socio-economic development.

The barriers to this use that have been identified – both for men and women – seem to reflect other existing patterns of inequality. Both groups cited the high cost of data and airtime as one of the greatest barriers to their internet use, indicating that they would make use of the mobile internet more frequently for a wider array of activities if this obstacles were eliminated. Because of their rural location, Keiskammahoek residents also do not have many options when it comes to mobile service providers and are often cut off from connectivity. Mobile phones still have a long way to go if they are to overcome existing socio-economic inequalities. The men and women interviewed in Keiskammahoek are avid mobile technology users but there are still many who will never own a cellphone. This highlights the importance of a nuanced understanding of the complex demographic intersections along which socio-economic life and activity are organised: while mobile technology seems to have overcome *some* of these inequalities in *some* cases, others still exist. What critical cultural studies research and theory can do is investigate the character and texture of the ‘fourth world’ of socio-cultural and technological exclusion that still exists, interrogating inequalities of power and access.

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Appendix

The following questions guided the semi-structured focus group interviews with the two gender-disaggregated focus groups:

1. Do you have a cellphone?
2. What kind of cellphone?
3. When did you get it?
4. Do you share your cellphone?
5. What cellphone network do you use?
6. When did you first get a cellphone?
7. What do you do on your cellphone?
8. Which apps/services do you have on your cellphone?
9. Which instant messaging apps/services do you use?
10. Who do you communicate with on your cellphone?
11. Which social network/IM groups do you belong to?
12. What languages do you use on your cellphone?
13. Do you use different languages when talking to different people/on different platforms on your cellphone?
14. Do you feel like airtime is too expensive?

Biographies



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