



Mobile communication in the global south

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Abstract

Mobile communication has become a common phenomenon in most parts of the world. There are indeed more mobile subscriptions than there are people who use the internet. For many people outside of the metropolitan areas of Europe and North America, this is literally their first use of electronically mediated interaction. This preface to the special issue of *New Media & Society* examines mobile communication in a global context. Through an overview of eight articles situated in the global south, we describe how mobile communication sheds light upon notions of information, appropriation and development and how it is challenging, and in many cases changing, notions of gender. While the mobile phone reshapes development and micro dynamics of gendered interactions, it is not necessarily a revolutionary tool. Existing power structures may be rearranged, but they are nonetheless quite stable. The analysis of mobile communication in the global south helps us to understand the rise of innovative practices around information and communication technologies and, in turn, enables us to develop theory to understand these emergent empirical realities.

Keywords

development, gender, global south, mobile communication, social change

Introduction

Mobile phones are thoroughly entrenched in the daily affairs of people throughout the world. On a global basis there are 68 mobile phone subscriptions and 27 internet users

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per 100 people (International Telecommunication Union, 2010). The number of landline telephones is falling. Uptake of the mobile phone in the global south signals an important landmark for the ways that people communicate (Castells et al., 2006). Indeed, the latest statistics show that there are now more mobile phones in the developing world than in the developed world. According to the International Telecommunication Union (2010), four countries represented in this collection of articles, namely China, India, Brazil and Indonesia, have approximately one third of the 4.6 billion mobile phone subscriptions worldwide. For the vast majority of people in the global north, the mobile phone emerged as an extension of the preexisting landline network. However, people living in other parts of the world had only minimal access to telecommunications until the arrival of the mobile phone (Maitland, 1984). Thus, while the internet has seemingly stolen all the headlines, the mobile phone has quietly provided people at the bottom of the income pyramid access to electronically mediated communication; often for the first time.

Landline telephony in rural America in the 1920s and 1930s marked a new way of organizing daily life and social interaction (Fischer, 1992). The mobile phone offers the same transition in the global south. It behooves us to pay notice; this is the one chance we will have to understand the dynamics of adoption and appropriation and the consequences of these practices locally and globally. In particular, as the articles included in this issue illustrate, the mobile phone affects life at the macro and micro level. From negotiations of gender in public and private to the trajectories of development that are realized in the everyday struggles to communicate, there is no question but that the device has changed daily life for billions of people in the global south.

This special issue of *New Media & Society* focuses upon the implications of these transformations for empirical and theoretical work on mobile communication practices. What are the specific social consequences of these transformations? Has access, adoption or appropriation of the mobile phone realized the possibilities of 'development' that governments, non-governmental organizations and, increasingly, corporations aspired to create? Has access to communication liberated women? Has the mobile helped to expand social, financial and political networks or does its value lie in its capacity to develop social cohesion? Are these patterns particular to the global south or do they speak to broader patterns of use? Recognizing the growing academic interest in this area, the special issue began in March 2009 with a call for paper proposals. Of the 66 proposals received, we commissioned 25 papers. In addition, we held a pre-conference workshop at the Association of Internet Researchers meetings in Milwaukee, Wisconsin, in October 2009 that focused upon understanding mobile communication practices outside of Northern Europe, North America and East Asia. After external peer reviews, eight papers were selected for inclusion out of this much larger field of academic work.

In setting out the call for proposals, we felt strongly that the special issue should focus upon the everyday social and cultural dimensions of mobile communication rather than innovative platforms, development programs or policies. We also attempted to include a diverse set of geographic regions, including rural and urban areas across Latin America, Africa and Asia-Pacific. While not entirely representative, articles range from urban China (Wallis), rural Indonesia (Chib and Chen), Filipino migrants (Madianou and Miller), urban Brazil (de Souza e Silva et al.), urban Senegal (Lexander),

urban Mozambique (Archimbault), rural and urban Ghana (Sey) and the Kerala region of southern India (Palackal et al.). In the following section, we turn to two, broad contributions to the mobile communication literature that emerged in this set of articles. The first set of articles focuses upon mobile communication and development in the global south, with particular attention to the meaning of development in light of broader usage trends. The second set of articles dives more deeply into issues of gender dynamics in particular socio-cultural contexts.

Mobile communication in the global south: key contributions

As noted previously, examining the adoption and use of mobile telephony in the global south provides us with an opportunity to see how this new communication technology intersects with, changes and makes more visible existing social relations. Its adoption challenges pre-existing structures in society and pre-existing notions of how interaction should take place. Collectively, the articles contribute to our understanding of social, cultural, gendered and political relations on a global and local scale. This, in turn, provides insight into the determinants, obstacles and implications of mobile communication.

Development, appropriation and social change

Given the locations of the research represented in this volume, the issue of social and economic development crosscuts all of the articles. Like computers and the internet, mobile phones have captured the attention of a range of stakeholders in international development agencies, government entities, corporations and most importantly among common people. Mobile phones' relative accessibility, affordability and ease of use (compared to the PC) hold the promise of bridging the so-called digital divide. New programs such as M-Pesa in Kenya, the m-health initiatives of different agencies and a wide range of mobile information diffusion projects have all illustrated the potential of mobile phones to be utilized as instruments of development. While many of these efforts have yielded important successes organizationally, financially and personally for those who live outside of the industrialized centers of the north, the articles in this issue collectively reveal how everyday uses and effects challenge monolithic visions of the 'effects' of mobile phones and mobile phone interventions.

Araba Sey's article on mobile phones in Ghana addresses the tension between ICTs *for* development (ICT4D) and ICTs *and* development most directly. Defining human welfare broadly to encompass utilitarian and seemingly non-utilitarian uses of mobile phones, Sey begins by mapping the motivations to purchase, use and perceived benefits of the mobile. She reveals the myriad motivations and practices that underline appropriation in Ghana. Importantly, and as we see outside of the global south, Sey refuses to reduce usage to either economic or social uses and, in turn, privilege one sort of use over another. One point in her analysis is that the motivation to have a mobile phone is not the result of a centrally planned development initiative, but it is simply individuals adopting technology that makes sense to them and helps them with the arrangement of their daily affairs. This is a theme that arises in many of the articles.

This same motivation can be seen in the work of Palackal et al., whose article examines how the mobile phone changed the way that friendship and familial interaction took place in Kerala in the period between 2002 and 2007. Using repeated measures in a cross-sectional design, they find that the mobile phone has resulted in the tightening of social cohesion among the closest friends and family. There is a corresponding decrease in the social links for those outside of these groups. They find that mobile communication supports interaction with core members of the social sphere while it also distances people who are outside this sphere. These findings correspond to others in Japan, Taiwan, the US and Europe (Ito and Okabe, 2005; Ling, 2004) and suggest that mobile telephony does not expand social sphere but rather intensifies our social networks. This is a somewhat different dynamic than is common in the PC-based internet. This distinction tells us two things. First, the fact that this pattern is observed in India suggests that this is not merely a function of income or position in the global north or south. Secondly, and as Sey also highlights, social networks are varied in purpose and use. Rather than establishing a dichotomy between either using the mobile phone for social cohesion, or to expand networks, it is important to understand the motivation behind use in relation to the mobile phone's affordances.

The article by Adriana de Souza e Silva et al. pushes our notions of appropriation and adoption further by focusing upon how Brazilians in Rio de Janeiro incorporate mobile phones into their lives. Comparing the use of mobile phones among three communities of *favela* (slum) residents in Rio, the authors explore how appropriation, particularly the tension between legal and illegal access, are negotiated through the acquisition and continued use of mobile phones. Comparing practices such as sharing, *directao* and cloning, the authors engage with Bar, Pisani and Weber's (2007) notion of appropriation in the Brazilian context. Importantly, de Souza e Silva et al. also reveal that appropriation among low-income residents is not separate from high-income residents, but remains intricately connected through the power dynamics and geographical realities that tie them together in other aspects of life. The authors also conclude that focusing upon dichotomies of 'have' and 'have-not' notions of access fails to capture the diverse ways in which people develop relationships with technologies like mobile phones.

Lexander's detailed study in Dakar, Senegal reveals that it is not only access to phones but the modality of communication that is often fraught. Specifically, she examines the use of texting in Senegal where the official language is French but where the predominant language is Wolof and there is common use of a third language Fulfude. In addition, English, Spanish and Arabic are a part of the mix. Given the quasi-oral nature of texting (Baron, 1998; Baron and Ling, 2003), texting emerges as a potential outlet for more authentic forms of expression and participation in the language of everyday speech (Street, 2001). Exploring code switching and the micro-dynamics of these interactions becomes a way to understand the transition in language practices. It also becomes a way to understand the interaction between the official language policies and the way that a language commonly associated with illiteracy is used in daily interaction. Lexander describes the workings of power and regulation in the face of more parochial identity construction.

Whereas de Souza e Silva et al. and Lexander stress the macro power dynamics at play through everyday forms of negotiation and resistance over the access to and modalities of communication, Archimbault's analysis of urban Mozambique brings up an important

dimension of mobile communication, namely the abridged ability to control the message in romantic relations. There is often a line of thought suggesting that adoption of new technologies will only have positive effects. The mobile phone is no exception. There are many articles describing how it facilitated commerce (Jagun et al., 2008; Jensen, 2007), allows better coordination (Donner, 2007) and generally makes life easier. This line of narration often does not take into account the difficulty of parsing information and the inadvertent spreading of disruptive information. The area of interpersonal relations is particularly open to this. In the work by Archimbault the reader finds that the ease of communication can actually backfire and cause misunderstandings. The same phenomenon has been observed in industrialized countries. Teens in Scandinavia, for example, have to learn how to arrange smaller parties discreetly since the word that a party is to be found at a particular address can spread virally (Ling and Donner, 2009). In Jamaica, Horst and Miller (2006) found that men and, to a lesser degree, women made efforts to disguise the names and numbers saved in their phone and tend to avoid using voicemail and other forms of communication (e.g. SMS) that leave behind a trail. Låsen has also described the lengths to which romantic partners need to go when they are continually available to one another via the mobile phone (Låsen, 2011). Thus, mobile phones bring new problems and dilemmas for those who wish to share, spread or hide information.

So much of the literature on mobile phones, development and social change hinges upon a belief that information circulation is critical to development and the building of healthy communities. Yet, as we see here, it's important to remember that information, the processes of spreading information and even the language of communication itself are not value neutral. As Sey illustrates, people's reasons for appropriation of mobile phones are varied and change over time depending upon interest, income and other factors. These motivations and aspirations clearly shape the development potential of mobile phones. Palackal et al. make the case that mobile phones are facilitating local family and friendship networks, which corresponds with broader trends documented by Ling (2008) and others. Yet, research also shows that extended networks have also been enhanced through use of mobile telephony (Horst and Miller, 2005; Tenhunen, 2008; see also Sey in this issue). In this issue, we also see that in the workplace, such as with the migrant women in Wallis's study, the midwives in Chib and Chen's study, and the users in urban and rural Ghana as investigated by Sey, the capacity to reach out to broader networks in the cultivation of expertise, support and opportunity is equally valuable even if these practices do not receive the same air time or energy as the cultivation of close, personal networks. These practices may result in more secure employment or increase in income but, much as in the global north, are not often the primary reason that these networks are cultivated. Both can be construed as amenable to development. In the work by de Souza e Silva et al. we see how contemporary efforts to acquire mobiles draw upon long-standing historical practices of using utilities from the wealthy community neighbors living nearby, and Alexander reminds us to pay close attention not only to what is being communicated and circulated, but also how – and in what languages – these conversations take place. It is clear that when contemplating development, futures and other social change, we need to unpack our assumptions about concepts like 'information', 'appropriation', 'cohesion' and attendant values.

Gender

Several of the articles look at different dimensions of gender vis-à-vis the mobile phone. Harking back to the idea of the mobile as a Garfinklian breaching experiment, gendered use of the mobile phone can set women's situation into visible relief. As noted by Fischer when describing the introduction of the landline telephone in the US, the enhanced ability to coordinate and to engage in social interaction changes the horizon for women (Fischer, 1992). It also provides them with a radius of action that may disrupt pre-existing ideas of their appropriate role. Looking at the context of the global south Jagun, Heeks and Whalley (2008) also observe that mobile telephony places women in a broader flow of events and gives them the ability to enlarge their sphere of interaction (Jagun et al., 2008). It is not clear whether this will translate into a dramatic power shift, but it definitely changes the dimensions of the interaction.

In some of the articles we find that it is seen as legitimate and even necessary for the women to have a mobile phone. Madianou and Miller examine how the mobile phone becomes a tool maintaining contact between Filipina mothers who live and work in the UK as maids while their children remain behind in the Philippines. While they were able to maintain contact, the solution was not a panacea. The device allowed mothers to cultivate the sense that they were an active part of their children's lives. It also allowed them help legitimate of their working overseas. The perspective of their children was somewhat different. While they valued the calls from their mothers, they also expressed ambivalence to the idea that their mothers were an integral part of their lives. This became obvious when their mothers returned for visits to the Philippines and tried to reassert their role as co-located parents. The children reacted to their mother's temporary reassertion of authority in light of the norm of distance. The mobile phone kept the connection between the mother and child open, but it was not a substitute for the full range of interpersonal interactions.

There is also a tension in the use of the mobile phone by young rural-to-urban migrant women in China as described by Wallis. The mobile phone gives women some advantages in terms of finding jobs and maintaining contact with peers. Yet, it is also a channel through which employers can surveil and harass the women in her study, practices that reinforce patriarchal power relationships. Indeed, in order to ingratiate themselves with employers, Wallis describes situations where employers (who can also be relatives) expect women to use their personal phones to generate additional income. While there is often a liberation rhetoric associated with mobile telephony (Law and Peng, 2006; Rafael, 2003; Rheingold, 2002), the analysis by Wallis shows that the technology can cut two ways. It can provide users with new functionality and a way to maintain their social sphere. At the same time, it can be used to control users and encourage them to do the bidding of others. This is not to say that the women reject using mobile phones. Indeed mobile phones are sought after, the devices give the women access to relatives 'back home' and they are seen as important possessions. Wallis shows how the mobile phone can benefit young women in terms of access to jobs and other resources, but also provides opportunities for women to be taken advantage of or controlled by their employers and others.

In the previous articles, women's access to and use of mobile phones was relatively uncontroversial. The situation is not as clear for the female midwives studied by Chib

and Chen where women can experience a status where their status as 'women' presents a conflict in their worklives in the Aceh province in Indonesia and use a mobile phone to support their work. The mobile phone is an obvious link to technically developed society that is juxtaposed with a system where women do not have high status. Chib and Chen's analysis shows that the midwives (all of whom were women) value having mobile phone since it gives them access to important medical information and it allows them to mobilize more quickly in emergency situations. It also gives them autonomy in their work and a certain status in the eyes of the broader community. At the same time their material shows that some people felt that the mobile phone gave the women claim to a status that is not recognized in other dimensions of their lives. This violates their own and other's sense of their position. The introduction of the mobile phone illuminates this disjunction in the status of the women. Because of this the midwives were sometimes leery of using it to assert status.

The four articles that take up the issue of gendered use (Madianou and Miller; Wallis; Chib and Chen; and finally Archimbault discussed in the previous section) illustrate three broad points. First, there exists question throughout many parts of the world as to whether women should own or use mobile phones. Somewhat parallel to the discussions as to whether children should have a mobile phone, the work of Chib and Chen reveals that issues of morality remain key to understanding use in many places. Second, several of these articles tell us that mastering of discourse via the mobile phone is not taken for granted and 'information' that circulates is open to interpretation based upon gender dynamics and social context (Archimbault). Finally, there is disagreement with regards to the proper sphere of use (Madianou and Miller, Wallis). While women actively used the phone, there was not necessarily agreement as to what constituted correct use. The children of Filipino maids did not necessarily respect the intrusion of their mothers into their lives and the young Chinese women described by Wallis did not agree with their employers as to the correct use of the device.

As with the articles describing the mobile phone in the errand of development, there is generally a consensus that the device is positive. The questions over ownership, use and empowerment arise, however, when considering specific uses and when the technology is mapped onto pre-existing gender dynamics that often favor men as opposed to women. In order to manage this tension the women use different strategies and cultivate peer support. As the articles reveal, the negotiation of this can create problems and dilemmas that challenge accepted norms and behavior.

Where we are and where we're going: implications for theory

The adoption and use of the mobile phone in the global south has been enthusiastic. The statistics of adoption give us a sense of the device's popularity. Several of the articles, however, reveal the reasons behind this wide-scale acceptance in spite of the fact that the device costs money and that it does not necessarily overturn existing power dynamics. Those who have more powerful positions in society still have control of many resources, i.e. money, jobs, status, notions of appropriate roles, etc. However, the ability of the relatively powerless people to communicate in spite of their position means that the dynamics of the situation have been changed. The women in Wallis' work describe

the lengths that they are willing to go to acquire a mobile phone and the same can be seen in the work by Sey. It is perhaps most striking in the work of de Souza e Silva et al.'s examination of mobile phone use among the poor in Rio where the authors find that favela residents actively worked at bending the rules to obtain access to mobile phones and other services by whatever means necessary. We see the same issue in the innovative approaches to use described by others. The work on missed calls (Donner, 2007; Geirbo et al., 2007), the various forms of trafficking in used phones of various caliber (Mathews, 2009; Wallis et al., 2009) and scrape card subscriptions show the dynamics when there is a mismatch between the interest in using a mobile telephony and commanding the resources for this use. Sey and Palackal et al. show us that there are social benefits for the individual associated with this development. The work by Madianou and Miller and that of Wallis indicate that in many cases there is almost a 'taken for granted' nature to mobile phone ownership.

Once adopted the device has a hand in shaping everyday routines. The material here does not depict revolutionary changes in daily life, but rather it describes existing activities that have been adjusted and re-shaped by access to mobile communication. We also see that users must learn to calibrate their use of the device and the gap between the intentions of the person sending the message and the interpretation of the message's receiver. The articles by Archimbault, Madianou and Miller and Wallis reveal how there can be misunderstandings and problems when new forms of mediation replace more traditional ones. We see that mobile communication has the potential to facilitate coordination (Sey; de Souza e Silva et al.) and social cohesion (Palackal et al.; see also Ling, 2008). The mobile phone also shapes and, in some instances, shakes up the way that we interact, spurring the need to readjust pre-existing social relationships. Seen through the lens of power, the mobile phone changes the rules regarding who can interact with whom. Those who earlier controlled the means of communication find that there is a new, alternative channel for interaction. This is not necessarily to say that the mobile phone is a revolutionary tool. While there are examples of the mobile phone being used to organize broader, more formal social protests, the types of interactions described in this issue are more at a mundane daily level. In particular, women find that the device gives them access to others who were difficult, or impossible to contact before. They can go outside the traditional communication channels and come in direct contact with their interlocutors. Criminals can adopt the technology for their ends (de Souza e Silva et al.), individuals can misconstrue the intentions of their interlocutors (Archimbault) and by making oral traditions textual, disjunctions in the linguistic project of nation building come to light when local languages gain a new identity (Lexander).

This theme echoes the analysis of mobile telephony that examines how perpetual contact, to use the apt phrase of Katz and Aakhus (2002), plays into social interaction. A long series of authors have studied how mobile telephony allows for constant contact (Licoppe, 2004), individual addressability (Ling and Donner, 2009) and micro-coordination (Ling and Yttri, 2002). As with the behaviors described in these studies, mobile telephony became a significant element in social interaction, playing an important role in the reshaping rather than replacement of previous forms of communication. This theme is reflected in many of the articles in this issue.

Future research directions

The use of technology by relatively powerless groups has been a frequent topic in the literature. Access to the technology – and via the technology to other people – means that there is a change in who is controlling the communication channel (Bakardjieva, 2009). Adoption of the mobile phone brings the shift into focus. The device and its use become the locus of comment on what and with whom people of different status may communicate. Those who would enforce the traditionalist perspective lose an element of control while those who extend their sphere of interaction see the device as an element in their liberation. Marvin (1988) and Fischer (1992) have described historical instances of this issue and indeed, of the first scholarly articles on mobile telephony that took up the issue of gender (Rakow and Navarro, 1993). In addition Cohen, Lemish and Schejter (2007) have described the same issues in contemporary Israel. When we started the process of developing articles for this special issue, there were few substantive articles or chapters that focused explicitly on the relationship between mobile phone use and gender in the global south. Much to our surprise, we received a significant number of papers exploring gender dynamics from a variety of perspectives, many of which are included here. In some cases, the mobile phone presents a dilemma for the owner vis-à-vis their ascribed status. It allows the women to reach across the globe in order to chide their children (Madianou and Miller), it facilitates migrant workers with access to information regarding job opportunities (Wallis) and it helps women to be better health care providers (Chib and Chen). While there are undeniable advantages associated with use of mobile telephony, they do not come without moral baggage. The technology can be a breach in the expectations of different audiences. There is much more to be gleaned in this area.

One of the most intriguing articles in this special issue is Lexander's work on texting. The discussion of technology, language and notions of group identity is rich and varied. The analysis of teen slang (Baron and Campbell, 2010) shows how, on a local level, teens use special formulations to engender group identity (see also Eckert, 1989). There are also historical examples of how printing in the 16th century was an important element in the development of national identity (Eisenstein, 1979). Despite this tradition, there remains little work on the way that mobile phones influence language practices for local linguistic groups in developing countries. Through the work of Lexander in Senegal, namely the quite literal use of a 'lingua franca' in the face of local languages and dialects, we see the tentative nature of the broader development project via the national language. We clearly need more work that takes into account local, historical conditions, language variation and the code-switching necessary to navigate a device like the mobile handset, particularly as smart phones become more pervasive in these contexts.

Finally, we see the need for comparative, even cross-regional or national work to understand the broader factors at play in shaping use. For example, it is clear that these articles examine cohesion, gendering and development geography, power differentials and culture, but we still know little about the relationship between the socio-historical contexts that influence these patterns. We also need to examine the balance between social cohesion and network support and cultivation. Comparative work on migrants in different locations or the same migrants in cities might help to further elucidate the dynamics between existing social structures and place. There also remains a question as to whether

researching the mobile phone in and of itself will necessarily be the most effective way to understand the mobile phone's affordances. With the broader adoption of social media and web 2.0 technologies as well as the integration of social media into smart phones, we may also want to begin more explicitly contextualizing the mobile within the broader communicative ecologies that shape everyday life. Indeed, our focus on mobile communication (as opposed to mobile phones) may in fact look very different in another five years. With that said, the focus upon the global south clearly sheds light on new practices that shape our understanding of mobile communication and, as recent research in the many developing countries conducted by corporations suggests, innovative practices and theory may indeed emerge from attention to the global south. Given these dynamics, these articles help us to contextualize the situation and provide needed insight into notions of appropriation, identification, personalization and customization.

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