

Mobile phones, communities and social networks among foreign workers in Singapore

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Abstract *Transnational mobility affects both high-status and low-income workers, disrupting traditional assumptions of the boundedness of communities. There is a need to reconfigure our most basic theoretical and analytical constructs. In this article I engage in this task by illustrating a complex set of distinctions (as well as connections) between 'communities' as ideationally constituted through cultural practices and 'social networks' constituted through interaction and exchange. I have grounded the analysis ethnographically in the experiences of foreign workers in Singapore, focusing on domestic and construction workers from the Philippines, Indonesia, Thailand and Bangladesh. I examine the cultural, social and communicative role that mobile phones play in the lives of workers who are otherwise constrained in terms of mobility, living patterns and activities. Mobile phones are constituted as symbol status markers in relationship to foreign workers. Local representations construct foreign workers as users and consumers of mobile telephony, reinscribing ideas of transnational identities as well as foreignness within the context of Singapore. Migrant workers demonstrate a detailed knowledge of the various telephony options available, but the desire to use phones to communicate can overwhelm their self-control and lead to very high expenditures. The research highlights the constraints – as well as possibilities – individuals experience as subjects and agents within both social and cultural systems, and the ways in which those constraints and possibilities are mediated by a particular technology – in this case, mobile phones.*

Keywords SOCIAL NETWORKS, COMMUNITY, MOBILE PHONES, SINGAPORE, FOREIGN WORKERS

As the diffusion of mobile communications has proceeded apace over the past decade, both the technology and the social contexts within which it operates have been transformed (for example Haddon 2005; Woolgar 2005). Research on the proliferation of mobile phone use in less affluent social contexts is now demonstrating the variety of social-technological configurations that mobile phone adoption can

produce (for example Barendregt 2005a, 2005b; Donner 2005; Horst 2006; Horst and Miller 2005; Ito 2005: 3–4; Pertierra et al. 2002; Qiu and Thompson 2007). Mobile phones have become a crucial new communications medium in the lives of socially and economically less-advantaged individuals. Exemplifying this phenomenon is the role of mobile phones in the social networking practices and cultural identities of foreign workers in Singapore.

Workers in the domestic and construction sectors from the Philippines, Indonesia, Thailand, Bangladesh and elsewhere number in the hundreds of thousands in Singapore. These migrants face significant structural constraints on their mobility, living patterns and activities during their often long-term yet perpetually ‘temporary’ residency in Singapore (see Huang and Yeoh 1998; Kitiarsa 2005a, 2005b; Rahman 2004; Thompson and Zhang 2009; Yeoh and Huang 2000; Yeoh et al. 2004; Zhang 2005). The terms of their working conditions limit the days or hours that they are free from contractual labour obligations. Most have little choice over where to live – often in an employer’s home in the case of domestic workers or temporary onsite shelters for construction workers. In many cases, limited ability in either English or Chinese (the two *lingua francas* of Singapore) also constrains their interactions with other residents of their host nation. Under these conditions, mobile or ‘handphones’ play a crucial role in building and maintaining a sense of community and connection to others.¹

Grounded in the communicative and social practices of foreign workers as subaltern transnational migrants, this article examines the complex interplay of communities and networks at the intersection of contemporary ethnoscapas and technoscapas in Singapore. The latter field of interactions draws on Appadurai’s productive set of metaphors for thinking of social transformations as the interaction of distinct yet intersecting ‘scapes’ – of people (ethnoscapas), technology (technoscapas), capital (financescapas) and others (1996: 33–6). My intention is to demonstrate how mobile phones and foreign workers are mutually constituted in relation to each other. Mobile phones are constituted as symbolic status markers in relation to foreign workers; and in the same representational instances, the social status of foreign workers is conveyed. As utilitarian devices, handphones are transformed by the uses to which foreign work put them – for example, from devices for mobile people to devices that help people overcome constraints of their own restricted mobility. The handphone, likewise, affects foreign workers’ social networks and communities, in other words the ‘ethnoscape’ within which they are situated. My approach is to focus on mobile phones as a singular material object (a utilitarian communication device) and multivalent cultural object (signifier in a field of signs). To attend to these complex interactions, I stress a clearer delineation and demonstration of communities as cultural phenomena and networks as social phenomena.

In the next section, I clarify my use of ‘communities’ as a product of cultural systems of meaning and ‘social networks’ as a product of systems of social behaviour, followed by a discussion of the general context of Singapore and its foreign worker population. Then I examine the processes of community and social networking – moving from the former to the latter – involving the many and varied points of

engagement (representational and practical) between mobile phones and foreign workers. In the final substantive sections of the article I discuss the most interwoven instances of these social systems (of networked interactions) and cultural systems (of identities and communities) in which mobile phones facilitate the mobilization of social networks to produce embodied 'representations' of foreign workers in Singapore.

Communities and networks

Communities and networks are often theorized loosely in social science literature and shade conceptually into one another; for example, Charles Tilly's concept of 'trust networks' is framed in terms of networks rather than communities (Tilly 2005: 5). Yet, the crucial aspects that make something a 'trust network' look very much like the operations of a community: with 'members', 'us–them boundaries' and 'collective controls' (Tilly 2005: 78). Conversely, Phillip Gochenour's (2006) 'distributed communities' made up of 'nodal subjects' look more like networks than communities.

In other instances, social researchers and theorist substantively conflate the concepts of 'networks' and 'communities'. Barry Wellman (1999, 2002), for example, traces a shift from spatially bounded networks ('neighbourhood communities') to spatially unbounded networks ('community networks') associated with increasingly easy, technologically facilitated communication over distance. In doing so, he treats the concept of 'community' as essentially coterminous with the extent of any particular network (Wellman 1999: 19–20). In this article I am making a case for analytically distinguishing between 'communities' and 'social networks'.

How do we distinguish between 'network' and 'community' and why does it matter? Networks and communities, as I am using the terms, refer to distinct processes of different types of systems. Networks are a social phenomenon whereas communities are a cultural phenomenon. From a systems perspective, the social and cultural operate differently, because of the different qualities of their fundamental elements. Culture or the cultural refers to learned systems of meaning comprised of beliefs, ideas and conceptual categories. Society or the social refers to systems of relationship between people mediated by material exchanges and cultural beliefs. As the last clause here suggests, cultural and social systems are very closely interwoven, as each has powerful capacities to modify the other (thus, it is common and appropriate to talk about socio-cultural systems). But, we are better served by applying greater referential precision to our use of these terms – in other words, clearly distinguishing between cultural processes (beliefs, ideas) as systems of meanings and social processes (social networks) as systems of relationship and exchange.

The distinction between cultural and social processes has a very long history in social science (for example Geertz 1973; Kroeber 1988). We can certainly find many instances in work specifically about mobile phones as a sociocultural phenomenon in which authors make the distinction at least implicitly if not explicitly. Ito and colleagues (2005) organize their studies of *keitai* (the Japanese term for mobile phones) in Japan under domains of 'Cultures and Imaginaries' and 'Social Networks

and Relationships'. Similarly, the distinction is evident in work on 'transnationalism from below' (Smith and Guarnizo 1998) such as Goldring's attention to 'transmigrants as members of social networks and transnational communities' (1998; see also Smart and Smart 1998; Smith 1998; and Sørensen 1998 in the same volume). But attention to the distinction between social and cultural processes has not in general been rigorously and consistently maintained.

Community is best understood as a sense of (or belief in) group commonality. Communities are products of culture – namely symbolic and signifying practices, especially in representational acts of naming communities and signalling the boundaries of group membership that define them. In the past, the term 'community' referred to a group of people living in close proximity, but telecommunications and long-distance mobility call into question the spatial limits of communities. Moreover, collocation alone does not engender community – a group of people standing at a bus stop is not a community.

Communities and their associated social identities derive from communicative practices. Anderson's seminal work on nationalism (1991), under the rubric of 'imagined communities', points us in the direction of a much broader understanding: communities exist because people imagine them to exist. This does not mean that communities are 'fictional' or 'unreal'. It does, however, mean that the existential reality of communities is conditional upon cognitive awareness of belonging, boundaries and categorization (Cohen 1985). Residents of Singapore readily conjure up many communities that are confections of 'national' (people in relationship to a state), 'ethnic' (people in relationship to cultural practices) and 'racial' (people in relationship to phenotypic characteristics) – such as Thai, Filipino, Bangladeshi, Indonesian, Chinese, Malay, Japanese or *Ang Moh* (Caucasian).²

A social network is a chain of dyadic connections or interactions (Dicken et al. 2001; Tilly 2005: 5; Wellman 1999, 2002). It is social, rather than cultural, in that practices rather than ideas define it. Among humans, cultural concepts inevitably govern these practices – market exchanges, for example, take place based on shared cultural beliefs about the value of money, but a network need not be a community (cf. Wellman 1999: 19–20). Domestic and construction workers, for example, arrive in Singapore via networks of recruiters, agents, employers and others. The network does not constitute a 'community'. If anything, this particular network operates through exchanges and interactions premised on senses of radical difference among the actors (cf. Lamont and Molnár 2002: 180–1). Likewise, a community based on imagined homogeneity or experience need not be a 'network' in any functional sense.

Nevertheless, in almost all cases, communities and social networks act in consort as socio-cultural systems. Enacting social networks (through regular interactions) engenders senses of community. Senses of community shape and motivate social networks, for example, when people choose to interact with others based on a belief that they share a common identity. Here I illustrate the combination of network-effects and community-effects at the intersection of the everyday lives of working-class transnationals and mobile phone technology in Singapore.

Foreign workers in Singapore

Singapore has emerged as a hub for high finance and a major port, where a concentration of capital draws a broad range of labour migrants – from manual labourers to highly specialized professionals. Nearly 20 per cent of the island nation's 4.5 million inhabitants are neither citizens nor permanent residents. The local, quasi-official, terminology broadly differentiates this 20 per cent into 'foreign workers' and 'foreign talent'. The latter live and work in the country under 'employment passes'. The former hold 'work permits' (for a more detailed discussion of these categories in Singapore, see Thompson and Zhang, 2009). One finds employment pass holders in financial institutions, teaching at universities, and in other professions. The primary occupations of foreign workers include domestic worker (maid), construction worker and other 'working-class' positions.

Domestic workers are exclusively female and come from five approved countries – the Philippines, Indonesia, India, Sri Lanka and Thailand. The vast majority of domestic workers in Singapore are from the first two countries with approximately 70,000 Filipinas and 60,000 Indonesians working as domestics (Yeoh et al. 2004: 11). Gender and national profiles similarly shape the migration of construction workers. Foreign construction workers are exclusively male, with Bangladeshis and Thais among the most visible, though a large number of Burmese and others also work in construction. Bangladeshi, Thai and Burmese foreign workers each number in the tens of thousands.

In this article, I mainly compare the experiences of Filipina and Indonesian domestic workers and Thai and Bangladeshi construction workers. My attention to the experiences of transnational migrants in Singapore has been a burgeoning research interest since taking up an assistant professorship at the National University of Singapore. I based the analysis on a variety of primary and secondary sources, including interviews, observations, interactions and conversations with foreign workers during more than six years residence in Singapore (2002–2008). In my thinking on the subject, I am deeply indebted to numerous colleagues at NUS who have undertaken extensive first-hand ethnographic research among the communities and networks discussed in this article (see acknowledgements).

My primary first-hand information about transnational migrants' experiences in Singapore derives as much from ongoing everyday enquiry (conversation, experience and 'participant observation') in my day-to-day life in Singapore as from a formal research agenda. I have learnt a great deal from innumerable conversations at the playground where I regularly watch my children while they play, and where the majority of other minders are migrant domestic workers. (I also took this opportunity to talk to numerous migrant professionals – from over a dozen different countries – about their mobile phone use as well.) Several of the domestic workers (as well as a few others, such as Thai construction workers) agreed to undertake longer more in-depth interviews regarding mobile phones. I relate two of their stories in detail below (using pseudonyms). To supplement this ongoing 'everyday' ethnographic practice, I also accompanied several of my colleagues mentioned above on trips around

Singapore. Interactions and conversations with domestic workers, construction workers and others during the course of these 'fieldtrips' inform my arguments in this article. The incidents, events, conversations, and interviews I report here derive mainly from between 2005 and 2007 (in addition to earlier reports from online newspaper databases and archives) and thus are most relevant for that period.

The patterns I describe here are not true of every individual in each group discussed, but they indicate the conditions, means, inclinations, obligations and desires that shape the activities of individual foreign workers and different foreign worker communities in Singapore. These include the telecommunications environment they experience, the complex strategies they employ within that environment, the ways in which they manage and maintain transnational relationships, and the ways in which they forge networks and communities within Singapore. That so many colleagues and graduate students have undertaken rich, ethnographic work on particular transnational communities in Singapore allows me to approach these differently situated migrants' experiences broadly and comparatively in the current article.

I shall begin the discussion of these complex socio-cultural interactions with an account of the interplay between cultural representations of mobile telephony and transnational migrant foreign workers. In Singapore's public sphere, handphones and foreign workers are associated with important social and political concepts including modernity, class, nationality and foreignness. As material objects (or bodies in the case of foreign workers), they give tangible substance to these important but intangible ideas. I wish to demonstrate the instances of association and dissociation between handphones and foreign workers through which meaningful images of each are forged, as well as the historical shifts in these associations over the decades from the late 1980s to the mid-2000s. These are examples of the cultural systems of meaning in which mobile phones and foreign workers exist in a play of signifiers.

I then move from the discussion of cultural systems of meanings to an account of everyday practices of social networking – how foreign workers, especially women in domestic service and men in the construction industry, adopt and use mobile phones, particularly after the turn of the century when mobile telephony became economically feasible. This is not a formal social networks analysis, but rather a description of practices based on accounts of foreign workers as well as other researchers. Drawing on conversations, interviews and observations, I discuss the practicalities and conditions of mobile telephony for foreign workers in Singapore. The discussion then focuses on the role handphones play in social systems of networking. In the final sections, I describe how mobilization of certain social networks intersects with, enacts and reinforces cultural systems of identity. While it is possible (often useful or even important) to distinguish between cultural systems (of meaning) and social systems (of relationship), sociocultural processes always operate in relation to each other as exemplified in the last sections of the article.

Portraying phones and foreigners

Our starting point for discussion of the specific case of Singapore is not with mobile

communication *per se*, but representational practices surrounding mobile phones. Substantial attention has been paid to mobile phones as a symbolic commodity (for example Fortunati 2002; Katz and Sugiyama 2005, 2006; Ling 2004: 103–10; Nafus and Tracey 2002). The role of mobile communication as a ‘status symbol’ is widely acknowledged in these works, either with regard to having access to the technology or with regard to the phones themselves as display items. In focusing mainly on those who are asserting their status or group identity, the operation of social exclusions that such status expressions produce is given little attention. Elaborate representations of mobile phones in Singapore contain, among other things, a discourse about class status, ‘modernity’ as a function of wealth, and a specific marginalization of foreign workers in ways that reinscribe their status as economically disadvantaged and foreign. A survey of representations in Singapore’s leading newspapers illustrates the relationship of foreign workers to mobile phones within this symbolic field.

On 1 July 1989 the *Straits Times* ran articles on mobile phones, or ‘cellphones’, to explain this rare technology to the general public.³ Handphones were introduced in August 1988 (*Straits Times* 12 April 1990). By July of the following year, over 8500 mobile phones had been sold, with a price range of SG\$ 2900 to SG\$ 3400 (*Straits Times* 1 July 1989). Less than a year and a half later, Singapore had 35,000 mobile phone subscribers (*Straits Times* 4 October 1990). Singapore Telecom executives conceptualized the users of mobile phones as businessmen for whom ‘staying in touch even while on the move is critical’ (*Straits Times* 12 April 1990).

In the 1990s, press reports represented mobile phones as an item of exclusivity, a *sine qua non* of commodified, capitalist modernity. Handphones embodied the virtue of newness available to those with the means to acquire them. As low-paid, manual labourers, foreign workers did not have the means to ‘take up’ this technology. The single article in the *Straits Times* during the 1990s associating foreign workers with mobile phones was about a subscription fraud run by criminal syndicates, suggesting that foreign workers could only take advantage of cell phone technology through theft (*Straits Times* 3 August 1997). Mobile phones marked class status (as much as ‘modernity’) in the 1990s, and foreign workers’ exclusion from the realm of mobile phone use signalled their position at the bottom of Singapore’s socioeconomic hierarchy.

By August 2005, Singapore had 4.16 million mobile phone subscribers, a penetration rate of 98.1 per cent (*Business Times* 29 September 2005). During this period, a transformation of the discursive relationship between foreign workers and mobile phones is evident in the archives of the *Straits Times* and its affiliated newspaper, the *Business Times*. In the early 1990s, there was simply no association. From the late 1990s, when foreign workers began to be mentioned in articles in relation to mobile phone technology, the foreign workers were marginalized.

Into the first years of the twenty-first century, foreign workers figured as ‘another type of consumer’ (along with the travellers and the elderly), while the focus of attention was on business people and ‘talkative kids agonizing over their crushes and schoolwork’ (*Straits Times* 10 May 2005). Foreign workers exemplified one of the few populations that still heavily utilized public pay phones, due to their relative lack

of access to mobile phones. Stories on the growing demand for second-hand mobile phones centred on 'hip' Singaporean youths and only secondarily foreign workers as key segments of this expanding market (*Straits Times* 17 July 2004). But between 2003 and 2005, mobile phones became an increasingly unremarkable, everyday item, linked to foreign workers as part of incidental interactions, such as exchanging numbers, and as items they purchased while shopping or lost to theft (*Straits Times* 15 June 2003; *Straits Times* 4 August 2004; *Straits Times* 5 March 2005).

In contrast to the general tendency to represent foreign workers as marginal to the swift expansion of mobile telecommunications within Singapore, press reports gave working-class migrants a leading role in stories about the rapid rise of prepaid schemes 'across the Asia-Pacific region' (*Straits Times* 4 August 2003) and the low-cost 'global SMS' market (*Straits Times* 24 June 2001). Likewise, foreign workers figured as primary consumers and actors in the circulation of used handphones internationally as they became valued remittance items (*Straits Times* 2 January 2005). The difference between stories in which foreign workers figured as primary actors and stories in which they did not reinscribed their 'foreignness' in the nation-state. In consumption and communicative practices within the nation, foreign workers appear as marginal subjects, but in transnational markets and communication beyond Singapore's borders, they appear as more important.

Foreign workers as consumers

As mobile phone use by low-income foreign workers became economically feasible, the discursive, symbolic terrain of mobile telecommunications shifted and foreign workers became a focus of attention as potential customers for the telcoms (telecommunications companies). In places where foreign workers commonly congregate such as Lucky Plaza, a famous 'hang out' for Filipinas, and Golden Mile Complex, known as 'Little Thailand' with shops catering to Thais, elaborate forms of advertising target foreign workers. On a visit to Golden Mile Complex in 2005, the walls were draped with banners in English and Thai, promoting Starhub's 'Green' SIM Card. Nostalgia for Thailand, mobile phone service consumption, and language were interwoven to create a discursive space in which Thai foreign workers in Singapore were meant to constitute themselves as a particular kind of 'Thai' consumer. Likewise, the telcoms regularly sponsor beauty pageants for Filipina domestic workers, festivals for various national groups such as Thai 'Songkran' (New Year) celebrations and similar events. In sponsoring these events, the telcoms provide substantial financial backing for the enactment of community identities through visible mass happenings.

Commercial-cum-discursive constructions of foreign worker communities are inscribed in the proliferation of various types of phone cards. A series of 'insert cards' (for public pay phones), for example, were adorned with images and language tailored to appeal to key national-linguistic groups among foreign workers, including Thais, Filipinos, Bangladeshis and others. In a different mode, the 'Hello Card', the most popular international calling card, displayed cartoon images of ethnicized/national characters representing prominent foreign worker communities.

Hello Cards provide instructions in the main languages of the eight destinations they target (Bengali, Chinese, Tamil, Indonesian, Burmese, Filipino, Sinhalese and Thai). The dozens of competitors to the Hello Card offer a similar variety of instructional languages. That cards produced circa 2001 offered instructions either only in English or in English, Chinese, Malay and Tamil, Singapore's four official 'mother-tongue' languages, suggests a growing awareness of the multilingual clientele. Later cards offered instructions in a wider variety of languages – generally those of foreign worker populations.

The preceding sections demonstrate the intersections (and differentiations) of mobile phones and foreign workers within representational practices and cultural systems of meaning in Singapore. For one thing, a shift occurred over time from the 1990s, when mobile phones were more strongly associated with elite mobility (and just as importantly, *not* associated with transnational migrant labourers and domestic workers). 'Modernity' in this instance is clearly a euphemistic metaphor in a discourse about socioeconomic privilege and consumption practices. Exclusion from access to cell phone telecommunication technology (other than through theft) during that period was a negative defining characteristic of subaltern transnationals (as well as other non-elites). From the early years of the new century, the economics of handphone use created conditions for broader adoption, but the phenomenon and effects of mobile phone diffusion was not merely a matter of economics. As detailed above, the cultural creation of foreign workers as users and consumers of mobile telephony, through advertising among other things, reinscribed ideas of transnational identities (phoning home) as well as foreignness within the context of Singapore.

As well as being subjects of these broader representational practices, foreign workers are active agents in negotiating the complexities of Singapore's telecommunications technoscape. From here, we shift our analytic frame of reference from representational practices and cultural systems of meaning about handphones and foreign workers to everyday practical use of handphones by foreign workers to establish and maintain networks of relationship.

Phones, cards, and complex strategies

The mobile phone and, more generally, the telecommunications environment in Singapore, offers a wide range of possibilities. For those with means, the complexity of the telecommunications environment presents a virtual cornucopia of communicative possibilities (cf. Haddon 2005). Owning a mobile phone is *de rigueur* among professionals (whether homegrown or imported 'foreign talent'). Internet use is also extensive in one of the world's most 'wired' global cities. While cost is not necessarily irrelevant, for foreign professionals telecommunication costs are seldom an overwhelming factor in the choices they make. Compared with foreign workers, who often go to great lengths to reduce their telecommunications costs, professionals are most likely to get a single SIM card from a single company, use only that card, use a house phone for international calling (IDD), and email for communicating with

family members, friends or others overseas. Convenience (namely saving time rather than money) tends to be the most important factor in their choices.

For foreign workers, not only cost but also conditions of their employment and other factors place limits on their access to different technologies and lead them to employ a wide variety of complex strategies to maximize their communicative opportunities. In interviews on this topic with foreign workers, these complexities immediately became apparent. Not only did they often describe a great variety of different technologies (and combinations of technologies) but also clearly had a detailed knowledge of the various options available, their relative costs, quality and so on. Sharing information about the complex technoscape, motivated by the need to manoeuvre through it and parlay minimal resources into maximum communicative opportunities, is an important part of the content of exchanges among foreign workers. These circumstances reveal how the communications technoscape is simultaneously a set of constraining conditions, an enabling medium, and an animating field of desires and needs that motivates exchanges of information and objects such as phones and calling cards.

Three main kinds of telephones are potentially available to foreign workers – house phones, public phones and mobile or ‘handphones’. Access to a house phone makes local calls essentially free of charge for domestic workers, making access quite valuable. Local calls by public phone are not very expensive, but can be inconvenient. Aside from the inconvenience of having to leave the house to use a public phone, the service is not as reliable as house phones. Handphones make local and international calls very convenient, but can become very expensive.

Construction workers seldom have access to house phones. Domestic workers sometimes have access to house phones, depending on their employer. Those with access to a house phone are considered fortunate. At the same time, many domestic workers who do not have permission to use the house phone still find opportunities to do so.

Public phones are widely used by foreign workers, but universally described as inconvenient. Nevertheless, on Sundays (the main ‘off day’ for foreign workers), in public spaces throughout Singapore and particularly in shopping areas where foreign workers congregate, public phones are in almost constant use. In some areas, such as Little India, frequented by foreign workers from India and Bangladesh, public phones are found in abundance specifically to cater to the foreign worker clientele.

Mobile phones are ubiquitous among most groups of foreign workers. On salaries that range from about 250 to 500 Singapore dollars per month for domestic workers and only slightly more for construction workers a handphone is often a foreign worker’s most expensive budget item. The relative earning and purchasing power of Bangladeshi, Thai, Filipino and Indonesian foreign workers shapes the extent of access to mobile phones for individuals in each group.

Filipina domestic workers generally work under more favourable terms of employment than do Indonesians (Huang and Yeoh 1998; Yeoh and Huang 2000; Yeoh et al. 2004). They are more likely to have one day off every week and generally have higher salaries. The reasons most commonly given for these differentials are that

Filipinas speak better English, have more education and/or are more skilled, require Sunday off to attend church, and are generally better at negotiating the terms of their contracts. Some also argue that the Philippine government and embassy in Singapore has been more proactive in pushing for better conditions for Filipina overseas workers. Many Indonesian domestic workers have as little as one day off a month and sometimes not even that. More Filipinas than Indonesians own handphones, although many Indonesian domestic workers do own them. The relative difference is attributable to both the greater constraints on Indonesians' purchasing power and their greater confinement by employers.

Thai and Bangladeshi construction workers also work under substantially different conditions (Kitiarsa 2005a, 2005b; Rahman 2004). Most Thai workers, with some background in engineering or similar training, fall into a higher skill category than Bangladeshi workers, who are usually 'unskilled' manual labourers. The vast majority of Thai foreign workers own mobile phones. It is rarer for Bangladeshi workers, who consider it a status symbol. Since few of their co-nationals have handphones, they have less opportunity to use the phones for communicating with other Bangladeshi workers in Singapore. Handphones are also very expensive to use to phone Bangladesh. Bangladeshi workers generally use public payphones to phone their home country, with the majority spending \$20–\$60 per month (Rahman 2004: 178).

Not only are mobile phones expensive in general, but the variety of phones and services available is also very complex and structured to provide opportunities and throw up barriers to use by foreign workers. Singapore has three major mobile phone companies – Singtel, Starhub and M1. These offer two general types of mobile phone services, a 'line' for which the user pays a fixed monthly rate plus any excess charges accrued, and a pre-paid 'top-up' service. The 'line' service offers many advantages. It is generally cheaper (at a per minute rate). If it is not used, it does not have to be 'topped-up' regularly to maintain the service. In Singapore, users generally have to pay for both incoming and outgoing calls. However, by 2005, one company (Starhub) had begun to offer 'free incoming' calls with a line.

The main problem for foreign workers is that they must have a 'local' sponsor (though this can also be a foreigner on an employment pass with a fixed address in Singapore). The line requires a two-year contract and a substantial deposit. Foreign workers are sometimes able to get their employer or someone else to sponsor them, but this is not always possible.

It is common for foreign workers to have multiple SIM cards as a cost-reducing strategy. For example, Lana, a Filipina domestic worker, has four SIM cards: one each from the three major providers in Singapore as well as a SIM card from a provider in the Philippines. One of Lana's SIM cards is a 'line' sponsored by her employer while the others are pre-paid. She switches SIM cards depending on the best rates available at the time and the kind of call she is making. From time to time different providers will launch 'promotions' giving favourable rates on one or more services (local calls, overseas calls, local or overseas SMS). Lana pays close attention to such deals. She hears about them, she says, either through advertising or often from Filipina friends in Singapore who are also attuned to these deals.

Controlling self, cost and desire

Among domestic workers, both from the Philippines and Indonesia, 'control' emerged as a common theme regarding their mobile phone use. The desire to use phones to communicate can overwhelm their self-control and lead to very high expenditures. This is a particular danger with a 'line' since the amount one spends is not apparent until the monthly bill arrives. Domestic workers with lines frequently report 'billings' of over a hundred dollars per month.

Lana reports spending \$50 to \$100 per month, of which at least \$30 is the cost of SMS. Like many other domestic workers, Lana has had the IDD service on her phone disabled, to prevent herself from accruing an exorbitant monthly bill. She had acquired her current 'line' only a few months before I interviewed her in early 2005; she had a line before that, but had run up bills well in excess of \$100 per month. Lana also noted that her sister had a line at one time and ran up a billing of over \$500 in one month.

Even in cases where billing is not a factor (as with top-up cards and international calling cards) 'control' remains an issue for domestic workers who commonly struggle with the desire to contact others – especially overseas – against the costs involved. As one Indonesian domestic worker pointed out, she has three children in Indonesia and buys at least four (\$10) international calling cards every month. She has to work hard to control herself so as not to buy more.

In a gendered pattern reflected in many other studies (for example Ling 2005: 338; Wei and Lo 2006: 67), female domestic workers express a greater desire to talk or text by handphone than male construction workers. The overwhelming desire to communicate versus controlling oneself and the cost of calling did not emerge as a major issue with male construction workers. Most of the construction workers seemed content with the amount of time they could afford to spend in contact with people overseas or for that matter in Singapore. Gendered expectations, especially in the context of family relationships, also motivate telecommunicative networking (cf. Horst 2006: 148–53; Parreñas 2002, 2005a, 2005b, 2006; Silvey 2006). The availability of mobile telephony and teletext transform long-distance relationships by making it possible to manage and maintain them through instantaneous rather than delayed communication.

Telecommunicating family and intimate relationships

Mobile phones and other telecommunication technology make it possible, though not necessarily easy, for foreign workers to be in frequent, even daily contact with overseas family members and others (Vertovec 2004). The experiences of Lana and Rina, both domestic workers from the Philippines, illustrate the extent to which these communications are integrated into their everyday lives.

At the time of the interview, Rina had worked in Singapore for 14 years. She has five children. The youngest is 16. When she first came to work in Singapore in the early 1990s, she was unable to communicate with her family in the Philippines by phone and only communicated with them by mail. She recalls writing and receiving

letters about once a month. Because of this, she says, she would always worry and feel that she did not know what was going on at home in the Philippines. Her memories echo the general experience of foreign domestic workers of that era (Yeoh and Huang 2000: 422–4).

Now, Rina is in almost daily contact by handphone with her daughters and husband. She can keep up with and keep track of everything going on. This micro-management of daily activities in the Philippines was in evidence during my interview with her. She was waiting to hear about her daughter's admission to university and advising her to go to the university's admissions office to enquire about her admission status. During our interview in the evening, her daughter rang Rina's handphone to talk one last time before making enquires at the school the next day.

Rina primarily talks with, or sends text-messages to, her two youngest daughters, to a lesser extent her husband, and seldom her sons. She also communicates less often with her oldest daughter who is married. By all accounts, communication within transnational families involves many more interactions between women than between men or between men and women (cf. Parreñas 2005a). Mother–daughter relationships are one common, central link in these transnational networks. This can either be mothers like Rina working overseas and communicating with daughters back in their home country, or daughters like Lana communicating with their mothers in their home country. Lana also communicates more with her sisters and female cousins in the Philippines through SMS and phone calls than with her brothers.

Lana is not married, but does have a boyfriend. Their relationship also reflects the possibilities of transnational communicative networks. Lana's boyfriend is in the Philippines and she sends and receives about five text messages from him every day. On occasions such as birthdays and Christmas, Lana calls and sends text messages more often than at other times. Another 'occasion' for intensive communication is in quarrels with her boyfriend. As she puts it, when they quarrel via SMS or talking, it is because some misunderstanding has come up and it is important to settle the matter rather than let it linger. When they are not quarrelling, Lana and her boyfriend mainly communicate about mundane, daily life, just to stay in touch; 'How are you?' 'How is your day?' 'What are you doing?' or with love messages or inspirational messages, some of which are 'pass-forward' messages – text messages received from one contact then passed on to another.

Despite the intensity of their relationship, at the time I interviewed her Lana had never met her boyfriend face to face, though the relationship had been going on for several years. A Filipina friend, who is also a domestic worker in Singapore, had introduced her to him. Lana's boyfriend is her friend's cousin and the friend introduced them via text messaging. Lana was planning to return to the Philippines for a one-month vacation during which she would be meeting her boyfriend for the first time and meeting his family. She believed the relationship might lead to marriage, though she still wanted to work in Singapore for several more years and try to establish some savings.

Communication practices with transnational families are generally less intensive among male construction workers. While many whom I interviewed phone home on a

regular or semi-regular basis, it does not entail the intensive, daily communication that many female domestic workers have. Thai and Bangladeshi men are more likely to phone home in the range of once a week or once a month. They also do not generally report the same kind of 'managing' of international families and relationships (or at least not in the same way) as domestic workers – such as advising children on university applications or keeping track of wives or girlfriends. At the same time, maintaining contact with families in their home countries is very important to many Thai and Bangladeshi men. Through these communications, they establish, maintain and (re)produce transnational social relationships (cf. Kitiarsa 2005a). In some cases, various cultural expectations strongly shape them. According to Mizanur Rahman, Bangladeshi men face a delicate balance between various family members in Bangladesh (personal communication; see also Rahman 2004: 164). It is important to give everyone equal time, particularly if they were talking to both wives and parents. If they spent more time talking to one or the other jealousy could ensue with potentially serious repercussions.

Transnational networks of Singapore's foreign workers also, at least occasionally, extend beyond a singular link between themselves and their home countries. As one Thai construction worker told me, he most commonly phones his mother in Thailand and his brother who is an overseas worker in Israel. Rina remains in contact (especially via SMS) with a former employer who now lives in Hong Kong. In these and many other instances, while foreign workers are not as high profile as more economically advantaged transnational sojourners, they often work and have contacts (family or otherwise) in multiple countries over their lifetimes.

The everyday practices related to telecommunication by handphone – strategies for maximizing access, controlling costs and desires, and establishing and maintaining intimate relationships – are the stuff of which handphone-mediated social networks are made. They are the material basis of human networks of exchange and support. They also offer a medium through which some foreign workers mobilize and enact variously configured senses of community. In the following section, I recount more detailed examples of practical networking and of enacting communities in which mobile phones play a central role.

Practical networking

Like many other domestic workers, Lana has sisters and cousins working in Singapore. Communicative networks facilitate their job searches and provide important support in a variety of ways – from emotional, to financial, to practical negotiations with employers and agencies. Lana is the second youngest of seven siblings – two brothers and five sisters. Her two oldest sisters worked in Singapore in the past but have returned to the Philippines and are married. One older sister and one younger sister currently work in Singapore as domestic workers.

When Lana's youngest sister came to work in Singapore in 2005, Lana and her older sister helped arrange their younger sister's arrival and handled problems that arose in the first months of her stay. The first thing that they did on meeting their

sister at the airport in Singapore was to take the handphone she brought from the Philippines so that the employment agency would not confiscate it. Agents regularly go through the belongings of new domestic workers and confiscate any items (like handphones) that the employer does not allow, and the employer of Lana's sister did not want her to have a handphone. Lana and her older sister returned it to their sister at the employer's house when they visited a week or two after she had settled in.

Before returning the phone, Lana bought a local SIM card for her sister to use. Lana's sister kept and used the phone without her employer's knowledge. For domestic workers, this is one of the great benefits of silent SMS communication. Lana's younger sister would text messages at night when alone in her room. It was especially important for her younger sister to have the phone, Lana said, because of the problems she had with her employer.

The sister's employer did not allow her much opportunity to contact her sisters and restricted her off days to once a month; the work was hard and the employer very strict. She had not been in Singapore a month when she decided she could not go on with this employer. Lana and her older sister helped to arrange her transfer. As part of this, they had to 'fight' (in Lana's words) with the agency to avoid having the younger sister charged a full transfer fee on top of the debt owed the agency for the initial placement. To fight the agency, among other things, Lana and her older sister needed to get some of their younger sister's employment documents. Because they could not visit their sister, they arranged to have a neighbour (a domestic worker at the next-door house) get the papers from their sister. Many of the details of this case emerged in an interview with Lana that was interrupted by the neighbour's calls to Lana's handphone and negotiations over when and where to pick up the documents.

Such incidents demonstrate the everyday empowerment that handphones provide for foreign workers (cf. García-Montes et al. 2006: 69). The role of mobile communications in overt political mobilization is well documented, such as in mass rallies in the Philippines (Pertierra et al. 2002: 101–24). For most individuals, it is this everyday sort of empowerment that is more significant, whether in the form of 'mobile phone-armed Filipinas [who] have on hand the numbers of their embassies and helplines' (*Straits Times* 28 July 2002) or informal networks of friends and relatives within Singapore on whom they can rely for various forms of support.

The significance of the 'mobility' of the handphone in this case is also substantially transformed. Whereas 'mobile' communications are usually conceived and marketed as a technology that meets the needs of highly mobile people, in the case of many foreign workers, the valuable 'mobility' of the handphone lies in the mobility of the device for relatively 'immobile' subjects. It can be passed surreptitiously from one person to another and move into spaces of relative confinement.

Mobilized networks, embodied communities

Mobile phones facilitate organization of foreign worker communities via small networks (such as Lana, her sisters and sisters' neighbour) as well as much larger networks. Interviews and observations of foreign workers in Singapore provide ample

evidence of both ‘micro-coordination’ and ‘hyper-coordination’ of the sort discussed by Ling and Yttri (2002) in their study of Norwegian mobile phone users. Arranging for the transfer of employment documents in the case above is just one example of the micro-coordination that handphones afford.

Hyper-coordination involves not only ‘mundane coordination ... of everyday life’ (Ling and Yttri 2002: 142), but the integration of groups through both ‘instrumental and expressive use of the mobile telephone as well as strictures regarding the presentation of self’ (Ling and Yttri (2002: 140). It is, over and above practical networking, the instantiation of community through symbolic practices that facilitate cognizant imaging of group identity. Popular ‘pass-forward’ messages among Filipinos, also noted in the Norwegian case (Ling and Yttri 2002: 140), is one such instance that in many way echoes Anderson’s (1991) arguments about print media and ‘imagined communities’. However, Ling and Yttri’s sense of ‘hyper-coordination’ seems largely limited to the ways mobile phones engender senses of community in the ethereal realm of communication via radio waves (although they do mention the role mobile phones can play in ‘gain[ing] access to parties and other exciting social events’ (Ling and Yttri 2002: 154). In the case of foreign workers, ‘micro-coordination’ by means of handphones facilitates events involving physical collocation, which as enactments of community are themselves important to the ‘realization’ (embodied representations) of foreign worker communities and identities within Singapore.

Among Thai construction workers, for example, an annual football (soccer) tournament, the ‘Thai Labour Cup’, runs over several months and involves up to twenty teams – all consisting of Thai foreign workers (Kitiarsa 2005a). The tournament and individual teams are organized and coordinated primarily through handphone contacts. The tournament organizers keep lists of the mobile phone numbers of all team captains, who likewise keep lists of all their team members’ mobile numbers. According to the organizers, almost all the players have mobile phones, but a friend at their worksite who has a handphone will contact those who do not.

In mundane acts of micro-coordination, Thai workers use handphones to communicate with friends and organize face-to-face meetings, such as ringing friends to meet for drinks. Domestic workers use mobile phones extensively to arrange meetings with friends on ‘off days’ as well. In a variety of places throughout Singapore, particularly on weekends, Thais, Filipinas, Indonesians, Bangladeshis and foreign workers of other nationalities gather in public spaces, visibly transforming the ‘ethno-scape’ of the city-state. Filipinas are perhaps the most visible, congregating for picnics in open spaces along Orchard Road (Singapore’s main central shopping district) or bible-reading groups in the botanical gardens. As with the Thai Labour Cup, these events enact a sense of community for those involved, as well as for non-participants who happen to observe the gathering – the mobilized network becomes an embodied representation of the ‘Thai’, ‘Filipino’ or other community within Singapore.

All these examples demonstrate the intersection of cultural and social systems, of senses of community and coordinating dyadic, networked relationships. Mobile phones are not a necessary condition for maintaining relationships or enactments of

community. On weekends, Bangladeshi men, who in general do not own or use handphones, similarly congregate in Little India and elsewhere. But handphones make coordination of events easier and residents of Singapore and members of these communities generally acknowledge that the sense and strength of those ethno-national communities of foreign workers in Singapore among whom handphone use is more prevalent (Thais and Filipinas) is stronger than among those with relatively less access to handphones (Indonesians and Bangladeshis).

As the examples above suggest, handphones facilitate the production and reproduction of communities both transnationally between Singapore, Thailand, the Philippines and other places and locally for foreign workers within Singapore. By using handphones and skillful negotiation of the broader communications technoscape available to them, foreign workers 'reach back' to their countries of origin and reach out within Singapore to foster a sense of community in both transnational and local spaces.

Mobile phones, communities and social networks

In this article, I have contrasted cultural, representational processes through which ideas and senses of community are produced to practices of establishing and maintaining dyadic relationships, which are elemental to more or less extensive social networks. My main motivation in emphasizing this contrast is to seek referential clarity in social and cultural research. While this contrast between social and cultural systems is by no means original, its application by social scientists is far from consistent and often made implicitly rather than explicitly. Emphasizing one or another is by no means a problem, as Wellman (1999, 2002) does in his focus on social networks or in Cohen's (1985) earlier work on the symbolic construction of community. No one can say everything about everything all the time. To insist that social researchers examine all facets of all sociocultural phenomena all the time is not only an impossibly unfair standard, but also it would be detrimental to the analytical necessity of focusing on particular parts of any given sociocultural system to understand better its dynamics. However, it is important to insist – as far as possible – on analytical and referential clarity.

My interest in distinguishing between community (drawing on Anderson's provocative phrase 'imagined community') and social networks (of the sort Wellman and many others study with far more formal methods than have been attempted here) is to argue that these are the effects of two deeply interrelated, yet empirically distinct systems. One, most commonly referred to as culture, is a system of meanings, ideas and beliefs, involving relationships among signs and signifiers – such as 'mobile phone' and 'foreign worker' in pages of the *Straits Times*. The other system, commonly called society or social systems, refers to networks of relationships, exchanges and interactions (social behaviours) among people.

I have elucidated this distinction by examining mobile phones in relation to foreign workers in Singapore. Mobile phones are involved in multiple complex effects that are both social and cultural. They facilitate communication. They are

symbolic objects. They are part of the content of foreign workers' discourse. They are part of a broader discourse, such as in print media, through which cultural imaginaries of mobile phones and foreign workers are mutually constituted and contrasted. These are not unique characteristics of mobile phones. They are characteristics of all new and old technology. We are simply more aware of these characteristics with regard to new technologies because they are yet to be fully incorporated into our everyday habits and expectations (cf. Wilding 2006; Woolgar 2005: 23). At the same time, in various ways I have described, specific characteristics of mobile phones produce unique effects – such as the small size of handphones and silence of text messaging, which are ideal for covert communication among confined domestic workers.

Writings on society and technology often claim that mobile phones inherently accelerate a process of social and psychological individualization (see Fortunati and Law 2005; García-Montes et al. 2006: 69; Humphreys 2005: 828; Nafus and Tracey 2002). For foreign workers in Singapore, they are clearly a device that fosters connection and community. The idea of 'networked individualism' or spatially unbound 'community networks' (Wellman 1999, 2002) displacing spatially bound 'neighbourhood communities' or small-scale, face-to-face communities (which Anderson 1991 contrasts to 'imagined communities') may be historically descriptive but analytically misleading. I would not seriously question that such a shift entails a qualitative change in human relationships and cultural imagination. However, both Anderson's and Wellman's conceptual frameworks are misleading insofar as they use a stereotype of prior 'face-to-face' relationships to argue for the relative erasure of social networks by mass media (Anderson) or cultural processes by newer information and communications technologies (Wellman).⁴ In the latter case in particular, I would suggest that 'individualism' is a culturally asserted and constructed value that needs more careful examination as such.

Drawing on a variety of first-hand and second-hand ethnographic research, the comparisons here among different foreign worker communities and narratives of individual experience have sought to shed light on the complex intersections of mobile communications 'technoscape' and transnational 'ethnoscape' found in Singapore, particularly among foreign workers in this transnational municipality (see Thompson and Zhang 2009). Most individuals experience cultural processes and representational practices, particularly mass-mediated ones, primarily as consumers or audiences rather than as producers or creators. Print media, advertising and such are products of human creativity and imaginative practices. For most individuals most of the time, however, engagement in these fields of signifiers (of ethno-national or gender identities, for example) over which no single person has control is likely to seem abstract and far removed from day-to-day experience. Though continually produced, reproduced or even contested, they are seldom seriously, reflexively, questioned. Processes and practices in the production of social networks, by contrast, are experienced as being much closer at hand and enacted with a greater sense of intentionality. The choice to ring up a friend on a mobile phone is generally a more deliberate, intentional act than choosing what words to use or what images to pay attention to in any given moment.

Finally, the case (or cases) of foreign workers in Singapore highlights the constraints – as well as possibilities – individuals experience as subjects and agents in both social and cultural systems, and the ways in which a particular technology – in this case, mobile phones – mediates those constraints and possibilities. The most obvious constraint facing foreign workers in Singapore are those of costs and their own circumscribed mobility, which gives them far from unfettered access to mobile or other forms of communication. Of course, no one ever has completely ‘unfettered’ ability to communicate across distance; but in much research on new media attention to relatively socioeconomically privileged users leaves such issues largely unexamined. In the examples provided here, constraints not only shape the relationship of foreign workers to mobile telephony and teletext, attempts to overcome these constraints becomes an important motivation in itself to enact networked relationships in order to exchange information or in some instances mobile phones themselves along with related paraphernalia.

Culturally, mobile phones produce and enable a variety of differently positioned subjects – in terms of systems of gender, ethnicity, nationalism, or kinship, for instance. In the mass-mediated examples of print journalism and banner advertising provided here, both exclusionary and inclusionary discursive constructions have been illustrated. Both the foreignness and subaltern socioeconomic position of ‘foreign workers’ have – at different times – been constructed in symbolic relationship to mobile phones (in the Singapore’s leading newspaper). Similarly, advertising (for example in the form of banners or event sponsorship) leverages and at the same time reproduces a discourse of ethno-national specificity (and therefore, implicitly of difference). In more intimate and embodied ways, mobile phones are a device through which Filipina women can enact culturally construed roles as mothers, Thai men can assert their masculinity through organized sports, and foreign workers of all sorts can mobilize widely dispersed networks to (re)create communities imaginatively.

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Notes

1. In this article, I use 'mobile phones' and 'handphones' interchangeably. The latter is the most common general term in Singapore.
2. Communities and community-effects can derive as well from such notions as gender, occupation, class, consumption-activities and religious identification.
3. Reports here are based on a Factiva database search of the *Straits Times*, Singapore's newspaper of record, and *Business Times*, its sister publication.
4. I am of course simplifying and stereotyping Anderson's and Wellman's arguments here. While I believe it is fair to say that their conceptual frames of reference have the effects I am identifying, neither is as blinkered as this sharp dichotomy might suggest. A detailed, point-by-point discussion of each of their writings, however, goes far beyond anything that can reasonably be accomplished here.

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