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Beyond the Personal and Private: Modes of Mobile Phone Sharing in Urban India

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Arundathi is a college student in Bangalore. As she sits in one of the city's many new popular coffee shops, her mobile rings. Although the young woman on the other end of the line is not looking for Arundathi, she has not misdialed, either. The caller asks if Arundathi's friend Neema is there. Indeed, she is, and Arundathi happily passes over the handset. The caller was trying to locate Neema but did so by contacting *someone* else, not *someplace* else. This incident is both an example of mobile sharing, as well as how the use of mobile phones complicate and restructure physical and social space. As sharing mobiles is relatively common but not well represented in the research literature, this chapter explores the connections between mobile sharing and social space.

Of course, the mobile phone is designed to be moved from place to place and allows users to connect with others no matter where they might be. It is a simple proposition, but one with significant impacts on daily life. Inquiry around these impacts is advancing, led by the development of mobile theories with a specific focus on spatial issues, such as the real-time city (Townsend, 2000), absent (Gergen, 2002) or connected (Licoppe, 2004) presence, and hyper- and micro-coordination (Ling and Yttri, 2002). Yet, as the theme of this volume makes clear, decades into the mobile communications age we are still making sense of how mobile communications both reflect and reconstruct spaces.

This chapter contributes to the overall dialogue on the significance of mobile communication for human, social space by expanding the inquiry into one of the world's largest communities of mobile users, India. In this context, we draw on ethnographic research to identify various modes of mobile phone sharing that cannot be entirely explained by economic necessity and instead reflect deeper processes of human organization. In the process, this chapter further illustrates how mobile communication helps people create and alter the social spaces around them.

Background

To begin, we briefly review existing literature on three distinct conceptual threads: the relationship of mobiles and other information communication technologies to space, the sharing of mobile communication devices, and the growing importance of mobile communication in the developing world. We then synthesize these threads to present our ideas about how mobile phone sharing in India relates to the reconstitution of space.

Social Space and Mobile Space

Lefebvre, Appadurai, and Castells remind us that space is structured by the humans who occupy it. For Lefebvre (1991, 26), "(Social) space is a (social) product," marked by "spatial practice." Appadurai defines "locality" and "neighborhood" in this regard: locality is "primarily relational and contextual" rather than "scalar or spatial" (Appadurai, 1996, 178); neighborhoods are "situated communities characterized by their actuality, whether spatial or virtual, and their potential for social reproduction" (179).

The use of communication technologies challenge and reconstruct these social spaces. Castells (2000) suggests that space is "not a reflection of society, it is its expression . . . space is not a photocopy of society, it is society." To Castells, "the space of flows," brought about by the widespread use of communication technologies, is the material form of the informational society (441). Like other communication technologies, mobile use pressures older concepts of space (Nyíri, 2005), divides attention between proximate and distant subjects (Gergen, 2002; Licoppe, 2004), creates tension between private conversations and public venues (Höflich, 2006), and enables coordination and simultaneity over distances (Ling and Yttri, 2002; Townsend, 2000). Overall, the research suggests that like its antecedent, the landline (Gottmann, 1977), the mobile telephone is a powerful mediator and disruptor of these human

social spaces and is a new addition to the growing tensions "between the space of flows and the space of places" (Castells et al., 2007; Castells and Susser, 2002, 397).

Sharing Mobiles

Sharing is among the core subjects of social inquiry (Huntsman and Hooper, 1996; Mauss, 1990). However, research on the sharing of mobile phones is relatively rare. Weilenmann and Larsson (2001) argue that sharing behaviors challenge our dominant, default view of mobile phones as personal, individual devices (e.g., Katz and Aakhus, 2002). They describe how Swedish teens shared mobiles in a "minimal" way by exchanging messages across handsets, and in a "hands on" manner by sharing time on a single call, through borrowing and lending phones both among friends, and, occasionally, to proximate strangers. Taylor and Harper (2003) identify sharing as a critical component of mobile use by teens, describing the "gifting" of SMS messages between proximate users as they leaning over each other's handsets. Bell (2005) notes that while mobile use in Asia may be mostly individualistic, sharing behaviors are common in families.

Different Contexts, Different Uses—Mobiles in the Developing World

The third conceptual thread involves distinct patterns of mobile use in the developing world, where connectivity is now possible for millions who previously could not afford a landline. In India, for example, between March 2003 and September 2006, mobile subscriptions increased tenfold, from 13 million to 129 million. By contrast, fixed line growth has been relatively stagnant, with 40 million lines currently in operation (Telecom Regulatory Authority of India, 2007).

Reviews of the social and economic implications of this sudden availability (Castells et al., 2007; Donner, 2005a), suggest that for much of the world, mobile use is substantially and symbolically distinct from use in the prosperous global North. On the one hand, mobile use in the developing world is defined and structured by persistent conditions of economic scarcity and low tele-density, particularly in rural areas (Cartier et al., 2005; Zainudeen et al., 2006). These conditions encourage reliance on pre-pay cards (Minges, 1999), public pay-per-use mobile phones (Sey, 2006), and the use of beeping, flashing, and missed calls as strategies to keep mobile expenditures low (Donner, 2005b; Zainudeen et al., 2006). Even in urban contexts, among emerging middle-class families, telecommunications expenditures can be a significant proportion of

household income, leading to careful assessments of if, when, and how to place a call (Donner et al., 2008). Looking beyond economic scarcity, other researchers are exploring how socio-cultural differences structure mobile use (Campbell, 2007; Horst and Miller, 2006; Leonardi et al., 2006). Still others argue that the mobile is a global device with strong and problematic symbolic value as a consumerist, individualistic tool (Kavoori and Chadha, 2006).

Synthesis and Research Problem

Both central concepts of this paper (mobiles and space, mobiles and sharing) have been studied in developing-world settings, both rural and urban. Mobile use sets norms and helps individuals carve "personal" spaces out of crowded urban environments. Maroon explores mobile use in the changing urban spaces of Morocco, emphasizing how it is as "culturally-situated bodies that people utilize inventions with the power to reorganize normative modes of sociality" (201). Writing about the Philippines, Paragas (2005) explores norms of mobile use on Manila's crowded public busses, while Pertierra (2005) explains how Filipinos, "without a room of their own," use the mobile to create private spaces. Conversely, in rural areas, mobiles help conquer distance and isolation by linking villages and individuals to the rest of the nation and beyond (Tall, 2004).

Recent research has also begun to explore mobile sharing behaviors in developing-world settings. Perhaps most salient is the mobile kiosk, made famous by Grameen's formal, franchised "Village Phones" in Bangladesh (Aminuzzaman et al., 2003). The transactional model of mobile phone as public payphone is actually quite varied, encompassing both formal ventures, such as Grameen Village phone or Vodacom's community phone shops in South Africa (see Reck and Wood, 2004), to grey-market "umbrella ladies" who offer little more than a lawn chair and a handset (Sey, 2006). These shared-access models extend telecommunications services to rural and urban poor alike (Donner, 2005c; Reck and Wood, 2004).

Sharing is not limited to these formal, transactional venues, however. For example, Chipcase and Tulusan (2007) detail a variety of ways in which sharing occurs over and around handsets. Their field notes from Uganda describe pooling minutes, coordinating electric charges (Samuel et al., 2005), beeping/intentional missed calls (Donner, 2005b), and electronic banking and remittances (Ivatury, 2006). In rural villages, many handsets may be gifts from family members who have moved to the city or overseas (Tall, 2004).

Looking at urban areas, Konkka (2003) stresses the importance of sharing and collectivist approaches to the handset to Indian consumers. Other research from urban India suggests that within families, children often share handsets with parents (Donner et al., 2008; Horst and Miller, 2005), and wives share handsets with husbands (David, 2005); in both cases, the negotiations around mobile use reflects and restructures family dynamics.

Nevertheless, these sharing studies are at the periphery of a research literature that mostly assumes that the mobile is owned and operated by a single user. It is against this backdrop—a relative lack of research on mobile sharing, a growing interest in distinct forms of mobile use in the developing world, and continued interest in the complex relationship between mobiles and space that we embarked on our Bangalore study. Our study involved a set of interviews and observational visits centered on relationships between location, space and sharing behavior. We focus on non-transactional sharing behaviors that involve the handset itself. We distinguish this physical, visible sharing from the "minimal" forms identified by Weilenmann and Larsson (2001), from the village phone or commercial phone kiosk, and from the broader array of sharing behaviors identified by Chipcase and Tulusan (2007).

At the outset, we had no *a priori* categorization of mobile phone sharing behaviors. Though we set out to interview people at a variety of socio-economic levels in urban Bangalore, we expected to see more instances of sharing among relatively poorer individuals and households, since these groups would be less likely to afford (own) mobiles of their own. We also expected to see relatively formalized sharing arrangements, such as explicit device sharing and people sharing one handset with multiple SIM cards, something we had heard of anecdotally. Instead, we found little evidence of a strong economic demarcation of sharing and observed plenty of mobile sharing, even among middle-class Bangalorians.

Mobile Phone Sharing in Bangalore: An Ethnographic Study

Our study consisted of interviews with thirty-nine residents of Bangalore, conducted in July and August of 2006; eighteen were male, twenty-one were female. Interview subjects fit into three groups: students or recent college graduates and their family members (fifteen students, eight parents or elder relatives), service workers (five men and six women, who fill a number of small service jobs), and micro-entrepreneurs (three from a large street market, two with businesses in a Bangalore apartment complex). We used three overlapping methods to recruit interview

participants. Working with research assistants from Bangalore fluent in Hindi and the local language, Kannada, we identified an initial small set of middle-class interview subjects and moved from there, via referrals, to their friends and neighbors. Second, we visited seven homes in Bangalore's largest slum thanks to Geeta Menon of Stree Jagruti Samiti, an organization that aids domestic workers. Finally, we re-contacted a vendor with whom we were acquainted from a previous study on low-income micro-entrepreneurs (Donner, 2006), as a point of departure for observing sharing activity in Bangalore's Gandhi Market. From his post, we sat back from the street, watched activity and approached people when we noticed sharing behaviors, interviewing those who consented to speak with us. We conducted our interviews in homes, workplaces, and cafés, where the people sharing phones were likeliest to be most comfortable. In some situations, we conducted interviews in group settings of friends or family members; this sometimes offered a different perspective than we realized from solo individuals.

Through observations and interviews, we identified various forms of sharing. Table 10.1 illustrates two spatial dimensions to these behaviors, which in turn became the basis for our categorization of sharing behaviors. First, some behaviors were *proximate*, meaning the sharing was initiated between two or more people co-present in a location. Often, but not always, this resulted in one person borrowing a handset from another to place a call. Other forms were *distributed*, meaning that the sharing behavior was prompted by an incoming call from somewhere else.

Second, spatial factors restricted distinct sharing behaviors to certain social-spatial domains: different spatial contexts (domestic, out and about, marketplace, and village-to-urban) fostered different forms of sharing. Both dimensions illustrate how mobile use complicates what was once more straightforward: when all telephones were landlines, people called *places*; now, people call *people* (Wellman, 2001). The various forms of sharing we identified (conspicuous, stealthy, person-seeking, and place-seeking) are discussed below.

Conspicuous Sharing

Although the mobile may be a personal device, it is not necessarily a *private* device—people borrow handsets. This most obvious and natural form of mobile sharing is the "hands on" approach described by Weilenmann and Larsson (2001: 104). Such conspicuous, informal sharing is born out of social and spatial proximity. We saw this form of sharing in every spatial context we visited: within the home, out and about, in

Table 10.1
Kinds of sharing across various settings

Co-Presence	Sharing Behavior	Spatial Context			
		Domestic	Out & about	Marketplace	Village-to-urban
Yes - Proximate	Conspicuous	Yes	Yes	Yes	Yes
	Stealthy	Yes			
No - Distributed	Person-seeking	Yes	Yes		Yes
	Place-seeking	Yes		Yes	Yes

the marketplace, and between urban workers and their families in rural villages.

In domestic settings, mobiles come out of pockets and purses, and are placed on tables and countertops, both for recharging and for easy accessibility. These visible resting places may prompt mobiles to temporarily take on "landline" characteristics and enable and encourage conspicuous sharing. We saw this pattern in the family of Sushma, a forty-eight-year-old middle-class housewife with a home-based life insurance business. Sushma's husband, sister, mother, twenty-five-year-old daughter visiting from the United States, and twenty-year-old son all make use of her phone even though many of them have mobile phones of their own. The situation is similar in twenty-year-old Girish's family. He, his mother, and his father all charge their mobiles on a table in the front hallway. Though Girish and his father both own the same, relatively fancy handset model, he freely uses his father's phone. As he wryly puts it, "What's mine is mine, what's theirs is mine too." While Girish acknowledges he uses his father's phone when he has his own, economically, it all comes from the same place—Girish's father pays for his son's calls, which amount to Rs. 300 a month (about $7 USD). Yet Girish does not like using his mother's phone. This is not for an economic reason but rather because his mother receives too many business calls on it.

Siblings, too, use each other's mobile phones, particularly when a younger sibling does not yet own a mobile. When Ajay, twenty, shares with his eighteen-year-old brother Abhishek, Abhishek uses it to text or call his friends while the two of them are watching TV. The case is similar with Raghu, twenty, who comes home from school and places his shiny 3G handset on top of the television set ("It's India's place to leave things," he explains). Inevitably, his sixteen-year-old brother will

grab it, but not to make calls or send text messages: his friends don't have their own mobiles either, so he uses the phone to play games or listen to the radio.

The rationale for such sharing is not purely economic, and instead reflects deeper family dynamics. In particular, the patterns of sharing between husbands and wives reflected differences in gender roles. These gender differences are not unique to India—for example, Ling (2001) observed a gendered component to mobile phone non-ownership (rejection) in Norway, but they were particularly evident among the homes we visited in Bangalore. Dickey (2000) writes about the predominance of traditional gender roles: men are viewed as primary earners who make household decisions; women maintain the home and kinship network and raise children, regardless of employment outside the home. Tying into this is the cultural ideal of modesty for Indian women, crossing caste, class, and religion. Some of the more prosperous women we interviewed expressed little interest in owning their own mobile phones. Lata, forty-four, said she never wanted to own a mobile phone; her two landlines were sufficient. When she goes out, she says she can use the family driver's phone, a phone booth, or the phone of a vendor to call home. Only when we asked explicitly did Lata reveal that she shares her husband's mobile: she shares it when they are in the same place, but would not consider taking it with her, away from him. Like other women we interviewed who do not carry mobiles, sharing with a spouse is so commonplace it isn't even mentioned. Jyotisana, forty-three, also a traditionally dressed housewife, uses her husband's new mobile phone. "I'll never get my own mobile," she says; she insists that her twenty-year-old daughter, Soumya, will not get one unless she moves away for a job. Clearly, the mobiles are shared between husband and wife, but not on equal terms (David, 2005).

When a family goes out, the assumptions around mobile sharing become particularly evident. Anasuya, twenty-three, a recent master's graduate, has carried a mobile phone since early 2004; her sister, Aparna, twenty-seven, has carried one for five years. But when the sisters go out with their mother, only the mother carries a mobile. Similarly, everybody has the mobile number of Sushma, the housewife and insurance agent mentioned above; they reach the family through her. When we shared these stories within our research lab, one researcher said her family did the same thing: only her mother carried a mobile when the family went out. When asked how we would reach her, she said, "If you were meant to reach me at dinner with my family, you would already have the number!"

This behavior illustrates the blurry boundaries between the handsets, the numbers, and the individuals who supposedly are reachable by those numbers; when the family is in one place, it may require only one handset, which in turn reinforces the cohesiveness of the family unit.

We also saw this lack of correspondence between handsets and individuals among the groups of friends we visited. While "out and about," Raghu prolifically shares his mobile phone not only with his brother, but also with his friend, Rajesh, twenty-one. Without asking first, Rajesh picks up the phone and freely texts friends in the group. He also answers the phone for Raghu when he is Raghu's moped passenger. In the same group of friends, Rajesh also uses the phones of friends Gautam and Minthu, who each claim not to mind at all. Text messages are essentially free within the prepaid mobile phone plans they have, but the freedom of sharing seems to extend beyond economic argument. The frequent sharing of handsets, messages, and message credits among the group reinforces the close relationships between its members. Moreover, Rajesh carries on the communication with and for the group, which serves the collective good. But these interactions are bounded; Rajesh does not use his friends' mobile phones outside of the group situation; he does not borrow it to take home at night, for example. This out-and-about behavior resembles the sharing behavior of wives who reject mobile ownership in favor of sharing with their husbands. Ironically, Rajesh could have owned a mobile phone if he had wanted one, but perhaps he knew he could count on his friends' handsets. His parents gave him the money for a mobile, but he chose to spend it on clothes and a DVD burner.

In addition, conspicuous cell phone sharing happens outside of close relationships. Within other mutually beneficial exchanges, mobile phone sharing is a courtesy. In Bangalore's Gandhi Bazaar, a thriving market street, we approached fruit vendor, Mahadev, thirty-two, after observing him lend his phone to another vendor. The other vendor used it to place an outbound call because he was out of credit on his own phone. Though not close friends, the two were familiar to each other; Mahadev has worked at Gandhi Bazaar since he was twelve and in his current location for fifteen years. It was no matter to extend the courtesy to the other vendor.

The forms of mobile sharing described in this section are conspicuous and common, which is why we start with this category in our observations. Certainly, economic constraints shape the form mobile sharing takes (Haddon and Vincent, 2005). Among the young middle-class users we spoke to, it was more common to share lower-cost text messages

and free features on the phone like games, radio, or MP3, rather than outbound voice calls. The more economically constrained users in our discussions reported using mobiles only for incoming calls, going to one-rupee (about $0.02 USD) phone booths to make return calls; they also used the phone to place "missed calls" (Donner, 2005b). However, as these observations show, non-economic factors structure the ways people overtly share mobile phones. In the home, territoriality and positioning shape proximity—while rules and mores determine appropriateness of use; as occurs elsewhere in the world, the handsets are "domesticated" according to deeper patterns and expectations of family dynamics (Haddon, 2003). In the middle-class homes in urban India we visited, those expectations include sharing of handset according to a blend of communal and hierarchical family roles. Among students, friends who share minutes and message credits or tease each other by nabbing and hiding mobiles, demonstrate in-groups and outsider status by their target choices.

Stealthy Sharing

A second form of sharing happens among people proximate in space without agreement or explicit consent. Simply put, our interviews with family members illustrated that occasionally, young people in the household borrow phones from their parents without the parents' knowledge.

Stealthy mobile phone sharing circumvents rules parents or other authority figures put in place. Ashita, a twenty-four-year-old architecture student, has owned a mobile since 2002 but says she always runs out of currency on her prepaid plan. Her parents know she has a boyfriend, but the family does not discuss him. When Ashita runs out of credit on her phone, she sometimes uses the mobile of her father, Avani, fifty-three, to text the boyfriend, carefully erasing the sent message in the call register. Yet, she also openly uses her father's mobile to text her friends. "It's this mobile freakiness," Avani says. "She can't do without it." Ashita also reaches out to her neighbor friends when she needs to use a mobile phone. When she ran out of currency in the middle of a fight with her boyfriend, she bolted to the apartment of Nishita, twenty, to finish the argument on Nishita's mobile. But if Ashita lent her phone to her friends, she would likely erase her personal information before doing so—as her twenty-year-old neighbor, Vicky, told us, anybody his age erases personal messages and call registers before sharing their mobiles.

If this stealthy use were a clear-cut case of theft or stealing, we would not count it as sharing.[1] But as we discussed previously, the personal-not-

private nature of the mobile blurs lines of behavior. The difference arises in the level of transparency of phone use in terms of who the phone is used to contact and how frequently. If the conspicuous forms help reinforce and restructure family and friendship ties, then these surreptitious forms may undermine or subvert them.

Person-Seeking: "Approxi-Calling"

So far, we have described two modes of sharing that are relatively straightforward, since they occur among co-present actors—people use another's handset to make outcalls with permission (conspicuously) or without it (stealthily). Other modes are more complex, as in-calls involve actors distributed in geographic and social space.

At the beginning of this chapter, we described Arundathi and Neema's "out-and-about" sharing at a café, when Arundathi's personal mobile phone rang with a call for Neema. The interaction seems simple, but it requires a tacit understanding among the participants that one person can call a second person and expect that second person to (a) be near the actual call target and (b) be willing to pass the phone over to the target. It is a similar story to the one reported by Weilenmann and Larsson in Sweden:

> A girl sitting at a table at the far end of the café has a phone that is ringing loudly. The girl, A, stands up and begins running across the café, while holding the ringing phone in her hand. She runs to the other end of the room, ten tables away. Four ring signals have now been heard. She gives the phone to a girl, B, sitting at a table. B answers the phone. A walks back to her table. B talks for a while, then puts on her coat and leaves the café together with her friend, and the phone: A remains seated in the café. (100)

Parents know how to contact their non-mobile-owning children via their friends' mobile phones. If Nimisha, twenty-three, is not at home or school, she is likely with her best friends Supriya, Anu, or Anasuya. Her mother, Lata, knows how to reach her, even though Nimisha does not carry a mobile phone. Lata simply calls one of the three young women's mobile phones, knowing she will eventually find her daughter. This is not very different from recent landline-only circumstances where she might have called the homes of each of the young women to touch base with her daughter. However, even though the young women may be at someone's apartment where she could call a landline, Lata still calls their mobiles. This reflects a hybrid of person-to-person and person-to-place calling as described by Wellman (2001). Nimisha's friends do not mind fielding the calls and sharing the handset, even though the purpose of the call may be just to keep in touch or exchange a trivial piece of information.

Approxi-calling is not restricted to family members and cliques of friends. Anand, thirty-three, a personal driver, and Santosh, twenty-seven, a caretaker, both accept calls for other workers at the apartment complex where they work. The workers call their families back from one-rupee phone booths. Anand and Santosh both come from villages far from Bangalore. When they each moved to the city, they relied on others to share phone messages from their families. Ultimately, this proved unreliable and, in Santosh's case, tragic when he did not receive the news that a family member was critically ill. He made it back to his family's village in Kerala too late. The crisis sparked each man to get his own mobile phone. Now, both Anand and Santosh serve as connection points for numerous people, they field approxi-calls from the families of other workers at the apartment complex, passing on messages to the workers, who in turn call their families from one-rupee phone booths. Anand and Santosh try to be more trustworthy than the people they originally relied upon before they had mobile phones. In turn, these sharing transactions create and reinforce not only the social bonds between the phone owner and the call target, but also in an overall ecosystem connecting rural villages to the urban apartment complex.

Place Seeking and Fixing: Landline Substitutes

In areas where landlines are scarce, the mobile is often used as a substitute for a landline, rather than as a complement to it (Hamilton, 2003). As we described above, the mobile on the kitchen counter might be used similarly to a domestic landline, but we found other manifestations of substitution effect in sharing behaviors outside the home, as, in some instances, callers sought to speak to someone (anyone) at a location, rather than to a specific person (Wellman, 2001).

In Gandhi Bazaar, we spoke to locksmith Venkatesh, forty-four, who has worked in the same location at the market for thirty years. His workplace consists of a bench with a vice, bags of different keys, a small cabinet, and a trunk that also serves as a place to sit. At night, he puts away these items in a nearby building. He has owned two mobile phones in three years (he gave his first to a vendor around the corner). Though his workplace is in the open air, uncovered, and portable, his mobile phone affords his business a degree of predictable reachability previously available only to more formal enterprises with permanent structures to support a landline. At work, Venkatesh places the mobile phone on top of or inside of his cabinet. It is answered by whoever is around, most likely him, his son, or the vendor next to him. If he leaves

town, as he does for his annual holiday, the locksmith who works in his location uses his mobile. Thus, Venkatesth's locksmith business shares the mobile in the same way it would share a landline. People who call Venkatesh's mobile aren't necessarily calling Venkatesh, the individual; they are calling the locksmith in Gandhi Market.

Sharing as a Contextual Lens

We have discussed four forms of mobile sharing, as observed across different physical and social spaces. Not all forms of sharing happen in all social-spatial contexts. Mobile phones are shared freely in the home, by necessity when out-and-about, as an approxi-calling method to reach someone in a social network, and as a substitute for landlines in small business settings. Mobile sharing in urban India exemplifies the themes outlined by Castells and Appadurai, demonstrating the tensions at play between the global and the local, as well as the "local interaction" of mobile phones, used and shared in a local situation, as outlined by Weilenmann and Larsson (2001: 92). Most importantly, the notion of mobile phone sharing provides a contextual lens, through which we can better understand the interactions between people, their mobile phones, and human space. Sharing marks the production of social space, to follow Lefebvre's (1991) concept. Mobile sharing not only highlights the configuration of communities but also the ways these practices reproduce themselves in different social settings. Following this thread, one way to understand the concept of home is as a set of interactions between its occupants: every time family members share a mobile phone, they reaffirm roles of who and what belongs inside and outside the home, as well as the purposes of the home itself. At the neighborhood and inter-neighborhood level, the sharing helps reinforce community ties—and binds villages and the immigrant communities in urban areas.

This is not to say that everyone shares. Girish, mentioned above, uses his father's mobile regularly but will not share his phone with others. Ashita did not share her mobile phone with her mother, twenty-three-year-old sister (who do not own mobiles), or father. Although Girish and Ashita are middle-class students, we also found this non-sharing behavior in a family we interviewed in Bangalore's largest slum. We assumed that a mobile phone in a lower-class family would be a de facto shared resource, used as the main telephone. But this was not always the case. Rafiq, a twenty-six-year-old steel fabricator, lives with his mother, brother, father, sister, uncle, and two cousins in a very small slum dwell-

ing. He owns a mobile phone and will not let anyone else use it. Rafiq aspires to a business context use for his mobile, in which the phone is a consistently private device and not for sharing.

This established mode of use is the case with Vipim, forty-two, a businessman working in electronics and manufacturing, who largely uses his phone for business purposes. He calls his handset an "office asset"—his employees provide their own handsets and the company pays for the mobile phone plan. Avani, fifty-three, a government official mentioned earlier in this article, has a similar perspective: "You never do that [share mobiles] at a particular level—nobody shares that way." Thus, Rafiq's decision to not share the mobile is consistent with our observations of all people we spoke to who used a mobile for business purposes—only when family members run a business together do they share mobile phones (as was the case with a family of vitamin distributors and a couple who owned several small bakeries). The comments of these businessmen suggest that there is a both a functional and symbolic component to the role of the mobile in a business, and that, perhaps, by electing not to share their handsets with people, they are reaffirming their status as autonomous economic actors.

This study raises many priorities for future research and deeper explanation. Our own research interests will likely draw us toward further study of the spatial indications of these various modes of sharing within both marketplaces and the domestic setting. For others interested in exploring sharing behavior, we suggest that each behavior type we identified could be delved into more deeply, with a closer look at conspicuous, stealthy, people-seeking, and place-seeking sharing. In each case, the "tensions" between when to share and when to withhold might be explained by additional inquiry into the socioeconomic factors at work—class, caste, income, and vocation may influence sharing behaviors in ways this brief review only begins to address.

Conclusion

Within our study, we saw at least four kinds of sharing, across multiple physical contexts (domestic, public, commercial, and long-distance). In every case, the sharing that occurred was structured by, and helped to restructure, social space. We found a rich set of interactions at play within the sharing behaviors in their spatial environments, with the mobile phone acting as a fulcrum on the axis of communalism and individuation. Even when mobile phone users strive toward greater individuation, many remain open to sharing the mobile phone in a variety of social spheres:

at home, moving between places, in the marketplace, and as a conduit to disparate, dislocated social networks.

The observations from the Bangalore phone sharing study outlined four key sets of ideas. First, regardless of mobile ownership, informal sharing occurs extensively. Certainly, in many cases this is marked by proximity, friendship, and kinship, but other informal sharing happens at the neighborhood level without close bonds. Second, sharing is structured by constraints (e.g., economic, family mores, literacy) that permit and restrict certain behaviors. Third, though the mobile is a flexible device, it fixes and reaffirms space, whether domestic or commercial. Finally, mobile sharing bridges social networks in a set of ecologies between neighborhoods and rural villages.

It is worth considering non-sharing behaviors to illuminate issues of socioeconomic mobility and domestic dynamism. Mobile phone users exercise power dynamics regarding who may or may not share a mobile and under which conditions. In most interviews, we observed a tension between the imperative to share (with family, with friends, with customers) and the imperative to control, as illustrated by the comments of Vipim and Rafiq—and by the rules of mobile use negotiated between parents and their children. In terms of socioeconomic mobility, Rafiq's non-sharing behavior reflected that of personal business use, as opposed to the more communal sharing we observed between vendors in the market. His family prioritized this personal business use over the collective household use of a phone. They did not indicate they were put out by this behavior, much the same as middle-class families agreed that mobile use for business made the phone unsuitable for sharing unless all parties conducted business together. At the same time, rejecting the mobile helps to reinforce and control appropriateness of behavior within the domestic boundary, as interviews with non-sharing housewives indicates. But where it intrudes upon this boundary, it is also a point of play, such as between Avani and his daughter Ashita. The father knows his daughter surreptitiously uses his phone; the family knows she has a boyfriend, but charade and the stealthy sharing it requires are part of a larger family dynamic.

Mobile penetration in India (and elsewhere in the developing world) is in the midst of a virtuous cycle. As the middle class grows and prosperity increases, more people are able to purchase handsets of their own. At the same time, coverage is reaching small towns and villages, and the price of handsets continues to fall, allowing people of extremely modest economic means to also become handset owners. As penetration rises,

the proportion of people who must share mobiles for purely economic reasons will fall further. However, this chapter has illustrated a variety of situations in which sharing seems not to be purely derived from economic constraint. Thus, we do not expect it to disappear entirely. In domestic settings, among teens, and between the rural villages and prosperous urban areas, the micro-contexts of domestic and intra-group social spaces will persist—and so will the sharing that these spaces enable. Understanding what happens when there are fewer mobiles than people in the room (or the restaurant, or the marketplace) will remain a fruitful and important line of inquiry.

Notes

1. Stealth behavior can spur identity management through Subscriber Identity Module (SIM) card swapping with oneself. In the case of Sushma's twenty-year-old son, Vicky, a mechanical engineering student, this practice allowed him to hide from his parents a girlfriend he met on the Orkut social networking website. Vicky's parents pay for his calls and receive a paper bill each month. Though Vicky carefully erased messages and his call register on his phone, he did not calculate that this paper bill would list all of his calls. His father showed him the bill and asked about a frequently occurring number. "Just a friend!" Vicky said. When his father saw the number again, he asked, "Her again?" Now Vicky uses an old SIM card solely to contact the girlfriend and puts all of his pocket money toward its credit. He swaps a SIM in to call his girlfriend and quickly swaps it back afterwards. He laughs and says that in order to avoid further embarrassing questions from his family, he has avoided being alone with his father for the last two weeks.

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