Current Anthropology Volume 46, Number 5, December 2005

From Kinship to Link-up

Cell Phones and Social Networking in Jamaica[1]

by Heather Horst and Daniel Miller

On the basis of lists of numbers saved on individuals' cell phones and other evidence, it is argued here that low-income Jamaicans use the cell phone to establish extensive networks, a practice identified as "link-up." Link-up has many of the same characteristics as those found by R. T. Smith in a classic study of Jamaican kinship and genealogy. However, the new evidence suggests that kinship merely exemplifies a pattern that may be found in a wider range of Jamaican networking strategies including the creation of spiritual and church communities, the search for sexual partners, and the coping strategies adopted by low-income households. Link-up also accounts for the rapid adoption of cell phones and the patterns of their use by low-income Jamaicans and highlights the importance of understanding the local incorporation of cell phones and local forms of networking enacted through new communication technologies.

HEATHER A. HORST is a postdoctoral research associate at the Annenberg Center for Communication at the University of Southern California (3502 Watt Way, Los Angeles, CA 90089-0281 [h.horst@ucl.ac.uk]). Born in 1973, she was educated at the University of Minnesota, Twin Cities (B.A., 1996), the University of California, Santa Barbara (M.A., 1998), and the University of London (Ph.D., 2004). Her research interests include new communications technologies and the matrial culture of the house in Jamaica. Her publications include "A Pilgrimage Home: Tombs, Burial, and Belonging in Jamaica" (*Journal of Material Culture* 9[1]:11–26) and "Building Home: Being and Becoming a Returned Resident," in *Returning to the Source: The Final Stage of the Caribbean Migration Circuit*, edited by Dwaine Plaza and Frances Henry (Mona: University of the West Indies Press, in press).

DANIEL MILLER is Professor of Material Culture in the Department of Anthropology of University College London. Born in 1954, he received his B.A. (1976) and his Ph.D. (1983) from Cambridge University. His current research is on loss and separation, the experience of au pairs, and a theory of value. Among his recent publications are the edited volumes *Materiality* (Durham: Duke University Press, 2005) and (with Susanne Küchler) *Clothing as Material Culture* (Oxford: Berg, 2005) and *The Dialectics of Shopping* (Chicago: University of Chicago Press, 2001).

The present paper was submitted 31 I 05 and accepted 7 IV 05.

1. We thank Phil Burnham, Fiona Parrott, Anastasia Panagakos, Anat Hecht, Eric Olive, and the journal reviewers for advice and corrections on the text. We are grateful to Digicel for sharing commercial information with us and an anonymous reviewer for drawing our attention to the work of Lars Hinrichs.

Far from the homogenization that might be expected from the global appropriation of new technologies, ethnography reveals considerable variation in what technologies have become in different regions. For example, no one in the cellular phone industry denies that the rapid and widespread adoption of texting in Europe was largely unpredicted. Yet the texting capital of the world soon established itself in an even less likely place, the Philippines, where according to Nokia 100 million texts were being sent daily from 10 million cell phones by 2002 (Pertierra et al. 2002:88). With respect to the Internet, Miller and Slater (2000) argue that a study of the localization or appropriation of the Internet does not appropriately conceptualize our relationship to technology because it presupposes a fixed entity called "the Internet." Rather, the Internet is something created by Trinidadians, for example, in that the particular relationship between e-mail, web surfing, and chat that makes up the Trinidadian Internet has as much claim to being called "the Internet" as the usage of any other region. These researchers found that, despite predictions that its globalizing effects would erase conventional boundaries and notions of territory, the Internet in Trinidad was the most nationalistic medium they had encountered.

The global development of the Internet was accompanied by an almost uncontested set of inaccurate predictions that finally led to what Cassidy (2002) has called the "dot.con" fiasco. Similarly, in the development of cell phones, one of the biggest gambles in business history—the worldwide sale of licences for third-generation phones for US$125 billion—has led to a situation in which it is their inexpensive voice facility rather than any of their new features, such as video phoning, that has generated the most sales (*Economist* 2004). The recent history of telecommunications is, then, a story of the failure of prediction by industry, investors, and experts. It therefore seems reasonable to propose that the social imperatives of consumers and not just the demands and influences of commerce may be a major factor in accounting for patterns of usage.

Initial research on the impact of the cell phone on a regional basis has indeed already suggested a wide range of local patterns of usage (Katz and Aakhus 2002). That this is the case even within the Caribbean is evident from the contrast between Trinidad and Jamaica. Trinidad has approximately half of Jamaica's population of 2.6 million (cf. Henry 2004) but nearly three times its per capita income in 2003, US$7,260 as compared with Jamaica's US$2,760 (World Bank 2004). The ethnography of Internet usage in Trinidad in 1999 demonstrated great enthusiasm and considerable sharing of access, while our study of Jamaica in 2004 revealed much less interest and sharing. Although government statistics suggest 7% penetration of the Internet in Trinidad and 3% in Jamaica,[2] our evidence is that actual usage is considerably greater

2. The Jamaican figure comes from a survey by Don Anderson's Market Research Ltd. carried out in 2003 for JAMPRO, the Jamaican promotion corporation. This suggested that there were 95,000 Internet users, 60% of them residential (Kirton 2003).

in Trinidad (Henry 2004). With respect to the use of cell phones, there were also clear differences but in the opposite direction. By the end of 2004 Trinidad had approximately 600,000 cell phone subscribers (*Trinidad Guardian* 2004), whereas there were 2 million subscribers in Jamaica (Digicel, personal communication). The latter figure reflected an average of three phones per household. Given the much higher income levels of Trinidadians and their sense of themselves as a First World nation (Miller and Slater 2000:118), these numbers were quite surprising.

One reason for these differences was the different responses of the two governments to the liberalization of the telecommunications sector prompted by the World Bank and others.[3] The Trinidadian government encouraged the development of the Internet and computers with interest-free loans to public-sector workers that, combined with much higher income levels, made computers more affordable. By contrast, it was slow to grant licences to the cell phone sector. The Jamaican government showed less appreciation of the potential of the Internet but was quick to grant licences for the cell phone industry.

The role of companies has been as important as that of the state. As it has for much of the Caribbean (Maurer 2001), the Cable and Wireless Corporation has dominated the telecommunications industry in Jamaica for a century and has attempted to retain the various privileges associated with its monopoly. Not surprisingly, it has come to be regarded as impeding the development of the telecommunications industry (Miller and Slater 2000:117–43; Stirton and Lodge 2002). This perception proved decisive when it came face to face with the modernizing commercial strategy adopted by Digicel, a cell phone company capitalizing on its success in developing media in Ireland in entering the Caribbean market (Boyett and Currie 2004). Since commencing operations in 2001, Digicel has achieved extraordinary success in Jamaica. By the end of 2004 it had sold nearly 1.5 million cell phones in a country of only 2.6 million people. Capitalizing on many Jamaicans' visceral dislike of Cable and Wireless, Digicel created an impressive marketing campaign led by the highly experienced Jamaican Harry Smith. Smith successfully used many populist images, such as Rasta or "roots" colours and prominent sponsorship of sports and entertainment such as the TV series *Rising Stars*, the local equivalent of Britain's *Pop Idol* or *American Idol* in the U.S.A.

To suggest that the comparative success of the Internet in Trinidad and the cell phone in Jamaica is entirely due to the actions of the state and the companies involved, however, would miss the story that emerges from the ethnography of usage.

The research described here is based on a year's ethnography divided between an urban and a rural site in Jamaica. Funded by the British Department for International Development, the study was carried out simultaneously with research in Ghana, India, and South Africa.[4] The goal of the project was to assess the impact of new communication technologies on low-income households and thereby to help agencies determine whether they should be a priority in future aid policy. Since our research in Jamaica was limited to low-income households in which we observed very little Internet use,[5] our ethnography essentially developed into a study of how low-income Jamaicans constructed the cell phone. The ethnography was based upon traditional anthropological methods of participant observation while living with families in the two sites over the course of a year.[6] We also carried out a general household survey of 100 households and an intensive budgetary survey of 20 households and investigated the commercial and governmental bodies concerned with the provision and usage of new communication technologies (see Horst and Miller n.d.). Given the project's focus upon policy and poverty, our study concentrated on low-income households, with low income being defined as less than JA$3,000 (US$50)[7] per week in the rural area and JA$5,000 (US$80) in the urban one.

The rural site is located in the hills of central Jamaica, where Horst has been visiting and working for over ten years. The "town" we call Orange Valley has only around 500 core residents but serves a hinterland of some 14,000 persons living in small districts and individual homesteads in the surrounding hills. Depending upon the season, as little as 10% of the population is formally employed, but most residents grow some of their own food. Men typically work intermittently as labourers in construction or as seasonal labourers for crops such as oranges and cocoa, while women market foods or raise chickens. Were it not for the income provided by remittances from relatives and friends living abroad, it is likely that the area would be rather less populous. Since until recently Cable and Wireless Jamaica supplied no landlines to much of this area, our rural research is, in many respects, a study of the introduction of the telephone.

The urban site, here called Marshfield, is a low-income (relative to other urban areas) settlement in Portmore, a dormitory community of 200,000 developed by the government with the aim of providing the opportunity for

3. Jamaica is party to the World Trade Organization's General Agreement on Trade in Services of 1995, including the annex on basic telecommunication services, and also subscribes to the Connectivity Agenda for the Latin American and Caribbean Region.

4. The other ethnographies were led by Don Slater in Ghana, Jo Tacchi in India, and Andrew Skuse in South Africa.

5. Indeed, most of the Internet access we observed for low-income Jamaicans was through the cell phone, not the computer.

6. Horst spent the year in Jamaica, while Miller made three visits of a month each. Both Horst and Miller divided their time between the two sites.

7. Throughout 2004, the exchange rate was approximately $JA60 to $US1. Mean per capita consumption in Jamaica was estimated at $JA2,277 weekly in 2004 from figures provided by the Planning Institute of Jamaica (2003) and the Bank of Jamaica (2005).Our definitions of low income reflect the national profile of higher urban incomes. Our analysis of 20 low-income households revealed average weekly consumption of JA$3,983 for a household of 2.7 persons in Orange Valley (or JA$1,475 per capita) and JA$6,584 for a household of 3 persons in Marshfield (or JA$2,194 per capita).

home ownership to people living in the violent garrison communities of downtown Kingston. While architects and other planners remain sceptical about the scheme's prospects, the elderly in Marshfield consider this move a blessing and are convinced that they would have died young had they remained in central and western Kingston, which continues to have one of the world's highest murder rates.

In contrast to the yards and tenements of Kingston (Brodber 1975), Portmore consists of tiny starter homes that look like small shipping containers. Each unit comes with indoor plumbing, electricity, water, and toilet facilities and a small plot of land allowing for limited expansion. Most working adults in Marshfield cross a causeway to the centre of Kingston for work as shop assistants, nurses, or government utility employees. As in other areas of Jamaica, youth unemployment is high: 27.2% compared with 9.1% for those over 25 years of age in 2003 (Planning Institute of Jamaica 2004: table 21.8). A property common to the two sites is a staunch Pentecostalism.[8] While Orange Valley was one of the areas from which Pentecostalism initially developed in Jamaica in the nineteenth century (Austin-Broos 1997), Portmore has come to symbolize home ownership, domesticity, and respectability, all of which are associated in the Caribbean with increased religiosity.

Cell Phone Lists

The substance of our research consisted of participant observation, and our evidence relates to the use and presence of the phone in activities ranging from religion and commerce to child rearing. Our initial survey of 100 households revealed several unexpected features of phone usage, and we developed further investigations based on these preliminary findings. We found, for example, that many Jamaicans could instantly tell us how many numbers there were in their cell phone's internal address book, both on the phone itself and on the SIM (Subscriber Identity Module) card stored in it. Intrigued, we asked 25 individuals to work through all their stored numbers and tell us how they knew the individuals concerned, when they had last phoned them, and what they had talked about. Participants seemed comfortable with divulging this information as long as anonymity was preserved, although one or two preferred to gloss over a few names or delete others as they appeared on the list. Most of the participants featured prominently in the more general ethnography, and this allowed us to contextualize and interpret the material presented here.

8. According to formal statistics, Jamaica is primarily Protestant (61.3%), with the categories of Church of God and Pentecostals comprising only 28.8% of the population (Country Reports 2005). Our fieldwork suggests that, whatever their nominal affiliation, the majority of low-income Jamaicans possess a worldview that incorporates a version of Pentecostal belief and practice (see also Austin-Broos 1997). Similarly, we found that although they were not formal practitioners, many men's perspectives have been influenced by Rastafarianism, particularly in Marshfield.

Although individuals were often aware of the precise extent of their phone lists, there was no evidence that they were using it as a quantitative manifestation of social popularity in the manner observed for Norwegian youths (Ling and Yuri 2002). Clearly this list could not be equated with the entirety of an individual's social network. One reason lies in the technology itself. Most phones allowed the owner to save only 200 names, with 200 more on the SIM card (though many participants were aware of only one or the other). Cell phones are often lost or stolen, in which case SIM cards, which can be transferred between phones, are no safer a repository than the phones themselves. We heard many a person cursing the failure to have provided written back-up for patiently accumulated contacts lost when a phone fell down the toilet or was stolen on a bus. In fact, the owner of one of the smallest phone lists kept only 13 names in his phone because he had recently lost another phone, which he estimated had contained over 60 names. However, names and numbers can be accumulated (or reaccumulated) quite rapidly. It took 16-year-old Tameka less than a week to gather 30 numbers to enter into her phone book, the process aided by her excitement over the novelty of her first cell phone.

A basic description of the 25 phone lists is provided in table 1. On average, individuals saved 95 names and numbers, the smallest list containing only 11 and the largest 209. Three of the individuals we interviewed had more than one phone. Typically the largest lists came from Digicel phones, followed by Cable and Wireless and MiPhone. Since a few numbers were not disclosed and some phones were recent purchases, our sample may underestimate the typical phone list. It was never intended, however, that this group be taken as a sample of the population. It represents our concentration on low-income individuals and the relative scarcity of phones amongst the elderly. Some of the smaller lists represent recently purchased phones rather than the actual size of individuals' networks. Kin are clearly a minority within these networks.

The basic figures disguise a number of quite different concerns, each of which may lead to the accumulation of an extensive network. For example, there are many individuals whose lives are consumed by their service to their religious beliefs. Damian, 17 years old, had saved 126 names in his phone book, the majority of them numbers for his church sisters and brothers and church-oriented groups. For example, he kept a list of individuals in his phone whom he might call upon to play music in the church or help him organize church meetings or to summon large numbers to a youth camp he is organizing. Hoping for a good turnout, he would simply scroll though his list, texting or phoning everyone on it who might be persuaded to attend. Similarly, a young Baptist man who was also a religious dub poet used his phone both as a church youth leader and to recruit an audience for performances. A Pentecostal man in Orange Valley used the phone to arrange transportation to concerts and conventions for his church band. Church-based networks can be even more extensive in urban areas. For example, in

TABLE 1
Phone Lists

Name	Number of Names	Kin	Non-kin	Gender	Age Range	Location	Economic Status
Allison	16	6	10	F	30s	Urban	Supported by baby-father
Bijei	209	17	192	F	10s	Urban	Employed full-time retail
Bridgette	34	11	21	F	10s	Urban	Former student, sells phone cards
Camille	95	18	77	F	20s	Rural	Helps out in family business
Charmaine	12	6	6	F	40s	Urban	Supported by baby-father
Damian	126	13	113	M	10s	Rural	Student, street vending
Donnovan	39	16	23	M	10s	Urban	Student, supported by mother
Dorothy	42	19	23	F	40s	Rural	Runs small shop
Grace	154	26	128	F	20s	Urban	Student/teacher
Joydene	11	5	6	F	20s	Urban	Supported by father and baby-father
Junior	176	16	160	M	20s	Urban	Employed full-time retail
Keisha	102	21	81	F	30s	Rural/Urban	Supported by baby-father, sells phone cards
Lisa	90	15	75	F	30s	Rural	Unemployed, supported by boyfriend(s)
Marlon	183	8	175	M	20s	Urban	Student, supported by mother and father
Michael	13	0	13	M	30s	Rural	Drives taxi
Michelle	45	10	35	F	10s	Urban	Former student, supported by mother and boyfriend
Monique	166	11	155	F	30s	Urban	Supervisor at shop
Peter	171	22	149	M	30s	Rural	Supervisor at shop, farming
Robert	195	7	188	M	20s	Urban	Unemployed, supported by uncle
Romeo	193	31	162	M	10s	Rural	Student, supported by mother and girlfriends
Sonia	85	5	80	F	30s	Urban	Works part-time, domestic help
Tameka	30	8	22	F	10s	Rural	Helps out at family shop, supported by father
Tyrone	98	11	87	M	30s	Urban	Employed full-time, shift work
Winston	51	16	35	M	40s	Rural	Works part-time, construction
Yvette	33	9	24	F	30s	Urban	Supported by baby-father/ boyfriend
Average	95	13	82				

Portmore there are churches that require a relay of services on a Sunday morning to accommodate the 9,000 congregants who regularly attend. Many of the younger congregants used the phone to check on the times of services, arrange to pick up church members, or organize activities.

However, the most extensive form of phone-based networking revolves around the potential of sexual liaisons. For example, Robert's phone book contained 195 names and numbers, most of them belonging to women he hoped to have, was having, or had had some kind of relationship with. Among these he identified a designated principal relationship, second and third principal relationships that were ongoing, and other, far more extensive links with women he described as "less good-looking" who constantly called him, though he rarely called them back, and women he designated as particularly attractive, whom he called quite often but who only rarely called him back.

For females this kind of networking often has a quite explicit additional objective—finding a man sufficiently solvent and reliable to support them (Chevannes 1993). This aspiration is something readily attested to even by young girls of 15 or less, who begin this quest as schoolgirls. While they may have relationships with schoolboys, they prefer to associate with older men whose "pockets run deeper." Lisa, a 32-year-old mother who had engaged in such activities while still a schoolgirl, remained reliant upon the economic viability of the older man and operated with a highly developed version of this male-female engagement. Over the past decade, she had been cultivating relationships with men of various ages and marital statuses, constantly on the lookout for someone with whom she might be able to settle down to support herself and her son. Over the years she had had numerous boyfriends, many of whose numbers were still saved in her phone. She called them on a regular basis to "check them" and keep the relationships viable. Boy-

friends whom she may have loved but who "could do nothing for her" were often dispensed with for more transient relationships, such as local big men who could provide her with a few thousand dollars every few months but for whom she would never settle entirely. While some of these relationships involved sexual encounters, other relationships were merely friendships. Yet, it was difficult to differentiate between these, given the flirtatious tone of the conversations ("Still sexy girl?") and text messages sent back and forth between Lisa and her male friends.

In addition, Lisa was keen to cultivate relationships with men who traveled or lived permanently abroad. When she stopped working, she survived on the basis of her relationships with two men—her Jamaican boyfriend, who sent her JA$5,000 monthly, and her boyfriend in "foreign," who sent JA$5,000 monthly for her expenses and an extra JA$3,000 for her son (over US$250 per month). Both incomes were almost always collected at the local Western Union office. In fact, she met with her Jamaican boyfriend only every month or two and had not seen her foreign boyfriend since his visit to the island over a year ago. When the foreign boyfriend stopped sending money and the Jamaican boyfriend proved to be keeping another girlfriend, she began scrolling through the 90 names in her phone book, calling men whom she knows "have it" (i.e., have regular paychecks, such as civil servants), old boyfriends, and other potential "friends" to revitalize the links that might help her meet her expenses. One-third of the way through her list she asked a friend to send her a phone card (which he did) so that she could continue to reinvigorate her links. In these calls she did not ask for money but called to ask "wa gwaan" (what's going on) and see if they were "all right." While there were a few names that she skipped over, she noted the potential of certain others, such as Owen ("He is always encouraging me").

The list of names saved in Lisa's phone was complemented by a much larger handwritten list of names that she kept in a file attached to her bedroom wall for safekeeping. There were seven or eight persons whom she claimed to speak to by phone every day, including her current boyfriends and two of the nine men she considered "ex-boyfriends." Such men tended to have regular employment as, for example, firemen or policemen or the potential to help her obtain employment (including two local politicians). There were ten relatives, but these were mostly cousins and easily blended into the general categories of friends or people who might help her in some way. Several of the men were described as flirtatious, always pursuing her by phone. Other names included girlfriends she liked to go out with in the evening and people living in the countryside who sometimes provided her with vegetables or sugarcane.

The maintenance of cross-sex relationships is probably the most visible use of cell phone technology in Jamaica. In practice the phone's use is symmetrical by gender, differing mainly in that men tend to see sexual relations as ends in themselves while women tend to associate them with other needs, most often economic survival.

From Kinship to Link-up

One of the classic works of Caribbean anthropology, R. T. Smith's (1988) *Kinship and Class in the West Indies*, reported the results of a study aimed at gaining a better sense of people's perception of kinship by collecting comprehensive listings of all those considered to be relatives from 51 principal participants, mainly from Jamaica but including a component from Guyana. What was most striking about these lists was the sheer number of kin, with an overall mean of 284, more than twice the number reported by Schneider (1968:49) for white Americans. It was also found that a baby-father's kin[9] became incorporated into a mother and child's network even if the baby-father himself took no further responsibility for the child's emotional, financial, educational, or social upbringing. In short, Smith's book suggested that in Jamaica there might be little concern with the precise definition of kin and little interest in the normative and jural rules of kinship and descent that had dominated much of the early history of anthropology. Instead, kinship was more important as an extensive network of potential connections expressed through the recognition of individuals as relatives. The volume therefore forms a major bridge between the foundational work of Clarke (1966 [1957]) and the current work of Besson (1995, 2002) focusing upon unrestricted cognatic descent and ego-centered bilateral kinship. Together these works demonstrate that kinship relations in Jamaica are extensive and multiple rather than tightly structured.

Smith and other anthropologists of his era were studying kinship and drawing conclusions about kinship. What we cannot determine from their findings is whether the properties that they uncovered pertain exclusively to kinship or whether kinship is merely symptomatic of a wider range of forms of networking. Rather unintentionally, our interviews bore some similarity to those of Smith and his colleagues in that both produced a "universe" of names defined by a certain principle, in our case the list of names saved in the cell phone. Given the tradition of anthropological scholarship in Jamaica and the Caribbean, we expected that kinship would form the bedrock of individuals' social connections. In practice, the prominence of kin varied, but it was much less significant than expected. Family and kin were most important to women, who led relatively sheltered lives and, on average, had fewer than 30 numbers saved in their phones. Kin were almost entirely absent from a surprising number of larger phone lists, especially those of men (see table 1), although a separate survey of 100 low-income households suggested that kin might be called more frequently than some others. On average only 13 of the 95 names were kin. The most common inclusions were immediate relatives such as members of the nuclear family, followed by a number of what are generically called "cousins" and "aunts." The lists also regu-

9. "Baby-father" is a term used in Jamaica for a woman's biological child's father. The use of the term presumes neither the continuation nor the termination of the relationship between the two.

larly featured a prominent category of relatives living in "foreign" (Chamberlain 1988, Goulbourne and Chamberlain 2001, Soto 1987, Thompson and Bauer 2000).

This is not to say that family could never dominate. Dorothy, a woman in her forties living in a district high above Orange Valley, for example, listed 42 numbers, of which 19 were family, including her husband, children, nieces, nephews, sister, brother, and members of her husband's family living in her district. Dorothy regularly phoned her husband, whose job took him away from the area almost every day. She also rang one of her daughters several times a week and called relatives in the area if something needed to be done. She admitted that many of the family members listed would not have been called recently had it not been for a death in the family a few months back that had necessitated a flurry of family networking. Apart from family, 8 of her numbers were connected with her business of raising chickens and the sale of small foodstuffs. Dorothy also spent much of her phone card money on the key leisure activity in Orange Valley, *cashpot* (a lottery scheme). She spoke regularly to her friends, family, and neighbours about what bet to place (i.e., how to "read" her dreams) and to individuals who helped her place bets. Indeed, on many weekdays this activity dominated her phone usage. Other entries ranged from a dressmaker and a taxi driver to a friend's daughter who asked for advice when her baby was sick.

One of the most important uses of the phone in relation to kinship derives from the common practice of having a child looked after by someone other than the biological mother, who in turn usually lives apart from the biological father (Soto 1987). While the baby-mother may not be the primary child care giver, she often sees the phone as a source of daily contact with other child care givers. Relationships with baby-fathers vary considerably, but there are many cases in which baby-fathers and baby-mothers are in daily contact. In other instances, contact remains restricted to issues of economic responsibility and requests for money. The cell phone has become central to child rearing in Jamaica and very likely ameliorates some of the contradictions posed by the frequent separation of child care from a biological connection that is nevertheless acknowledged as critical. Yvette, for example, looked after only one of her own four children, but she was in constant contact with one of her baby-fathers regarding their son and also talked on a weekly basis to her two eldest children, who were living with their baby-father's family.

The case of Bridgette, the 18-year-old daughter of a hairdresser in Marshfield, brings together the relationship between family, parents, and children and more pragmatic concerns. For Bridgette, the distinction between relatives and friends was not particularly important. Most of her calls to relatives (including her father, stepfather, and two sisters who lived abroad) were short and occasional. Her relatives in Jamaica phoned only when they wanted something in particular. For example, her stepbrother called her to "check out" a girl who lived in her road, while an uncle usually rang when he wanted to "beg" a phone card from her. A few basic functional numbers such as a doctor, a teacher, the person who braided her hair, and the person who helped her to obtain cheap phones were also listed. Far more important were those she tended to speak to nearly every day, who included several of her female friends. Although kin were included, it was in much the same way as friends and acquaintances, all of them representing potential connections that were usually operationalized only at the time of a specific need.

The primary way in which Bridgette used her phone can be summarized as "link-up," in which the most important element is not the content of conversations but their use to maintain connections over time. Link-up calls dominate the phone usage of low-income individuals. Calls often consist of exchanges such as "Hi, how is everything?"—"Oh, I'm OK, I'm just enjoying the summer." There are many strategies for maintaining such connections, even if there is little to them at the time. For example, Bridgette summarized the content of a recent call from a male friend: "I haven't called him for a while and him ask if mi get rich an switch—that's what he call mi an' ask mi." In other words, he implied that to fail to keep in touch, even about nothing in particular, would be like her saying that she was too good for him now.

The numbers saved in the majority of phone books are principally relationships of this link-up variety. The potential contacts are much, much greater than those in operation at any particular time, as are the number of kin known to individuals in Smith's study. But the activation of any particular potential relationship is expected to occur only when, in some sense, one person can respond to the need of another. Consequently, even if one has not visited a particular cousin living in town for five years, when one's child receives a place in a school near that cousin it is largely assumed that the cousin's house may represent a possible boarding place. A link to a person one knew from school or met through a mutual friend may remain dormant but can also be activated when the need arises. The only real difference between friendship and kinship is that with the former a minimal degree of sociality to preserve the relationship is preferred. We would therefore argue that Smith's research can be viewed as a study of link-up that can now be expanded from its initial base in the anthropology of kinship.

A primary characteristic of this link-up usage of the phone was the effort and expense put into keeping these lists constantly active; in some cases a large proportion of the names were called every couple of weeks. These were often very short calls. Almost all Jamaicans based their calls on JA$100 (US$1.50)[10] phone cards and used the free service that allowed them to check exactly how much credit they had remaining on their phone after each call. Indeed, Digicel workers credited much of the company's immediate success in Jamaica to charging by the second rather than by the minute. A few of the participants noted that they could make a JA$100 phone

10. With tax, a JA$100 card costs around JA$125.

card (at JA$8 per minute for a Digicel-to-Digicel call) "serve" them for over a week because they knew how to "economize." Others used a timer feature on the phone to limit conversation to a designated limit (typically two minutes), citing the common cell phone proverb "If yu follow da phone, it broke yu." According to Digicel (personal communication), the average length of a cell phone call in Jamaica is a mere 19 seconds. It is no wonder, then, that our initial attempt to concentrate upon the content of conversations as a research tool was largely ineffective.

While our research was limited to low-income households, a recent study of Jamaican university students' use of e-mail reveals an almost identical pattern (Hinrichs 2004). Students sent religious texts or jokes to all of the addresses saved in their computer address book, which effectively served the same function as the cell phone list of numbers. As Hinrichs (personal communication) notes, "It is especially frequent and strikingly common to the European researcher for Jamaican students to write e-mail messages that contain nothing but a reproach to the addressee for not keeping in touch." His results suggest that link-up may be present for other socioeconomic sectors of Jamaican society and other technologies than the ones we studied.

Coping Strategies

Given the goals of our project, we were particularly concerned with the income-generation activities associated with the cell phone. Phone lists may be used for pursuing more conventional economic advantage. Junior, for example, uses the phone to recruit good dancers to attend the dances he organizes, and Peter takes orders for the animals and produce on his farm from local groceries. In general, however, the phone is used much less amongst low-income Jamaicans in connection with either jobs or entrepreneurship than we anticipated. Our study suggested what in some ways was a still more basic role of the cell phone in helping low-income households make ends meet. Indeed, it became both tempting and plausible to account for the existence of link-up in terms of its role in what we shall call coping strategies.[11] Much of the early anthropological interest in personal networks was based on a concern with how low-income individuals managed in difficult situations such as immigration into towns (Mitchell 1966), often with an emphasis upon kin (Stack 1974). Link-up fits well within the conclusions of studies carried out by social scientists working in Jamaica and the Caribbean (Barrow 1986, Clarke 2002, Henry-Lee 2002, Rickets 2002). For example, a recent study that focused upon domestic workers, security guards, and workers in export-processing zones concluded, "One of the most critical finds of the study was the significant reliance on the personal and kinship networks for survival" (Henry-Lee et al. 2001: 37). This finding confirmed the results of an early extensive study of women in the Caribbean that emphasized the centrality of networking to the general project of "making do" (Senior 1991:129–47).

Our own research came to similar conclusions. In a study of rural budgets we found that only 10% of the population were employed formally in reliable, regularly paid jobs (such as cashiers, shop workers, and teachers).[12] Around 20% of households made money through farming, and 30% earned income from work which ranged from somewhat reliable domestic and taxi work to irregular and intermittent work such as building, masonry, and shopkeeping. Another 30% received money almost exclusively through connections with other people. Put another way, more than half the household incomes in our survey came from social networking rather than any kind of labour or sales.

Typically, the individuals we worked with felt that gaining educational qualifications or skills failed to result in employment (even though many were assiduous in trying to gain such qualifications) and emphasized that jobs were always obtained through social connections. Similarly, marked disparities in income were often based upon connections abroad that provided access to remittances. For instance, Keisha, a 33-year-old woman living in a shared rental house in Marshfield with her one-year-old daughter, had worked as a secretary at a factory in Kingston and in telesales at a Portmore company. However, after her daughter's birth she had quit her job to care for the baby. With the support of her married baby-father (JA$10,000 per month) and the small profits from the sale of an average of 25 Digicel phone cards each week, Keisha was able to meet her basic monthly rent payment and food expenses, which totalled JA$8,400 per month, and pay her phone card bill of JA$2,400. It was far more difficult for her to meet additional expenses. When she announced her plan to attend teacher's college, her baby-father, boyfriend, and sister all agreed to help her cover the difference between the savings remaining from her previous employment and the school and boarding fees of JA$60,000. However, books, uniforms, shoes, and other incidentals remained to be paid for. Two weeks before the start of term, Keisha turned to her cell phone and scrolled through the numbers. After passing by Adrian, Alston, Andrea, Bups, and Cuzzi, Keisha saw the name of a local businessman who had always encouraged her to continue with her education. She called him and explained that she had been accepted for school and paid her fees but needed money for books and supplies. He told her that he could not

11. There is a considerable literature that tries to differentiate coping strategies as short-term responses to a crisis as against longer-term adaptive strategies (Clarke 2002, Ricketts 2002), but we have not been concerned with this distinction.

12. Jamaica, like other Caribbean countries, is marked by occupational multiplicity (see also Besson 2002). All of the individuals in regular jobs utilized other skills and resources to supplement their main income, and those with less reliable sources of income depended on a number of strategies to meet their day-to-day expenditures. As a result, these figures should be understood as the main sources of income and provide a picture of the range of possible money-generating activities.

help her at the moment, having recently extended himself helping others. Next she scrolled through her list and called Doreen, an old co-worker from her telesales days, "Miss D," her office-procedures teacher, Shernette, a friend with whom she used to go out, and Tomoya, another friend from school days. Over the weekend she also tried her niece, who had a good job in Spanish Town, another former co-worker, a former teacher, a friend, and her daughter's godmother, for a total of 14 people. She asked some of them for money for her school books and others for money for uniforms. She asked Tomoya for help with school shoes and her daughter's godmother for money for towels, saying that her "yard" towels had become so tattered that she was embarrassed to take them to school. In the end, she received JA$1,000 for the towels from her daughter's godmother and a total of JA$2,500 from her teacher, a former co-worker, and the friend who worked in Spanish Town. These three people had managed to "have it" at the time and had been willing to share their money with her. In addition, her sister in Florida sent her JA$6,000 (US$100) to help her out.

Keisha's SIM card contained 100 numbers. She had regular contact with two sisters, a niece, her mother, a boyfriend, and a baby-father, some on a daily basis, but the vast majority of numbers were friends whom she contacted "once in a while." Link-up was the most important foundation for her coping strategies and her main source of income. It hardly seems surprising, therefore, that the purchase of a cell phone is regarded as a priority by those who might otherwise be considered least able to afford them. This dynamic is quite unapparent to wealthier Jamaicans, who often denigrate impoverished individuals for continuing to buy and use cell phones when they claim to have no income.

Responding with considerable business acumen to the specifics of Jamaican cell phone usage, Digicel introduced the "call-me" text to facilitate the often complex negotiations over paying for a call. With this feature a person with only JA$3 (US$0.05) credit remaining could send text messages to more than 20 others with the words "Please call me at" followed by the number. These "call-me" texts quickly became the primary form of texting used by many low-income Jamaicans; according to Digicel, Jamaicans sent 21 million "call-me" messages per month (personal communication). Even prior to this innovation, Jamaicans had established a complex system for the buying and reselling of phone cards that appropriated the commercial system and extended it into a local informal economy (for details see Horst and Miller n.d.).

The temptation was to analyse "call-me" in terms of anthropological theories of the gift and reciprocity (Mauss 1966, Godelier 1999), but our evidence failed to support any such analysis. Individuals recognized that "call-me" could be abused and took offence if individuals who were approximately equal in terms of income constantly tried to persuade other people to use their credit, but this response was confined to very sustained and exploitative asymmetries. There was no evidence for a more careful monitoring of "call-me" or even the conceptualization of "call-me" in terms of general reciprocity, despite our attempts to discern them. Rather, "call-me" worked within an established pattern of small-scale begging of favours without the expectation of reciprocity. The same lack of reciprocity seemed characteristic of link-up more generally. The issue was not, as many Jamaican journalists contended, why people felt free to ask or "beg" (in local terms) but why individuals who seemed to have no particular obligation or reason to give actually agreed to do so. We found this question critical in many arenas, including the day-to-day survival of children. The individuals who contributed to a child's education and upkeep included not only close relatives but also neighbours, friends, and others. Rather than pointing to any expectation of reciprocity, many people who contributed to the development of others' children reported that they chose to give simply because they liked or felt sorry for the children.

The implication of all this is that this general system of asking and giving is part and parcel of the powerful concern for the building of extensive social networks. What many low-income Jamaicans found difficult was the rejection of any opportunity to establish a relationship that might one day turn into something more substantial. Giving a JA$50 bill (less than US$1) or replying to a "call-me" request seemed generally worthwhile if it initiated or maintained a connection that helped develop a larger social network. To regard this practice as approaching some kind of long-term generalized reciprocity would be misleading. First, it is clear from our study of "call-me" texting that Jamaicans generally do not see it this way, even in the short term. Rather than force the evidence to fit a given anthropological model, it seems to us preferable to recognize that much of link-up is autonomous from any such instrumentality, becoming instead a continual search for opportunities to expand the universe of connectedness in and of itself.

Moreover, the link-up mode of "wa gwaan" calls bears little resemblance to the usage of cell phones observed in various European countries or Japan (Katz and Aakhus 2002, Ito 2004). In Norway, for example, women have dominated phone usage as an extension of their responsibility for the maintenance of a family's wider social networks (Ling 1998; see also Wellman and Wellman 1992). In Jamaica, men's cell phone books were often larger than women's (averaging 126.5 names as opposed to women's 74), reflecting the assiduity with which they collected potential sexual partners. In contrast, women's networking was primarily concerned with coping strategies, which often subsumed sexual relations. The constant concern with budgeting among low-income Jamaicans makes each call look superficially similar to those of children in the United Kingdom whose phone usage depended upon pocket money (Taylor and Harper 2003), but while reciprocity seemed central to the U.K. children's usage it was far less important for low-income Jamaicans.

Link-up does not constitute a complete network in the anthropological tradition established by Mitchell (1969) or as exemplified by networks such as *guanxi* in China

(Yan 1996). Nor do we view our account as an example of formal social network analysis (exemplified by *Social Networks*). It is tempting to view link-up as an unprecedented development of personalized networking facilitated by these new technologies and as signifying the increasing importance of what Castells (1996) has called the network society (for a critique, see Miller and Slater 2000:8). It may be the case in other parts of the world that the spread of the cell phone leads to the rise of individual-centred networks (Wellman 1999, 2001), and much of the literature on social networking makes the point that an ego-centred web of relationships is becoming the dominant form of sociality in the modern world. This is taken to be itself a response to both technological changes such as the advent of the cell phone that make it possible and social changes such as the decline of community that make it desirable. Our evidence, contextualized by R. T. Smith's work on the nature of kinship networks over the past 30 years, does not support this conclusion.

What Smith's work demonstrates is that this type of extensive rather than intensive ego-centred networking has been prevalent in Jamaica for quite some time. As a result, there is no case for a technological determinism. It is, however, entirely possible that the prior importance of these networks created an affinity for the cell phone and has been responsible for the particular pattern of usage we have described. Although there are common strands to kinship and social relations in the Caribbean, our ethnography suggests that the particular type of individualism and ego-focused networking that Smith reports for kinship and that we found more generally present in our own study goes much farther in Jamaica than, for example, in Trinidad (Miller 1994:135–202). Indeed, Miller and Slater's (2000) work in Trinidad also examined the specific use of the Internet for the development of relationships, showing how it strengthened family relationships that had previously been in jeopardy. It is reasonable, therefore, to suggest that the particular form of social relations characteristic of low-income Jamaicans may contribute to an understanding of cell phone use in Jamaica.

Conclusion

Although coping strategies emerged as an important feature of link-up, it cannot be reduced to any particular social or economic imperative. After all, Smith and his associates reached an analogous conclusion regarding the quantity of social connections when focusing specifically on kinship. Just as Smith could assume that this was an attribute of kinship, we could easily have concluded that it was the coping strategies of low-income Jamaicans that were primarily responsible for this phenomenon. But each study simply reflects its particular interests.

The similarities between the two studies are striking. For example, Smith argued that rather extensive kinship links could be expanded via fragile initial connections such as an otherwise uninvolved baby-father. We found the same in non-kin networks. A friend may be the conduit for an attachment to the friend's own network that persists after the friendship has ended. The dissolution of a sexual relationship does not necessarily break the links that followed from that relationship; indeed, they may provide the route to the next sexual relationship. Often the two networks are intermixed; a family may develop a close relationship with its neighbours and through them become involved in an extensive network of its neighbours' kin. Members may, for example, feel obliged to attend the funeral of an "auntie" who is actually a quite distant relative of their neighbours somewhere "up-country." One may equally become involved with the extensive network of a relative's friends. The use of kinship terms is often quite loose. From the point of view of our analysis what is important, however, is not who would be regarded as kin or indeed fictive kin[13] but the fact that very little differentiation is made between kin and non-kin with respect to link-up.

When viewed in relation to coping strategies, it is the instrumental aspects of link-up that come to the fore. Indeed, some Jamaicans almost delight in giving a cynical, manipulative account of what they generalize as typically Jamaican behaviour. But what this ignores is our evidence that attempts to find other people to pay for one's phone calls and an unwarranted and almost inexplicable generosity (for example, in sharing the burdens of child care) are two sides of the same coin. If this generosity is not based on reciprocity, then it seems reasonable to suggest that it is asking and giving that promote link-up.

In short, any division of relationships into particular domains of enquiry looks artificial. One Jamaican may know another mainly through the church or a flirtation, but the two may also be friends or indeed distantly related and may help each other in finding or promoting work. From an anthropological perspective the term "link-up" is useful because it is not just people who are thereby connected but also separate domains of anthropological research. As with the relationship between the study of commerce and the state as against the study of consumption with which we began, there are many plausible and effective accounts which may explain these differences. For instance, it would be simple to explain the contrast between Trinidadians' adoption of the Internet and Jamaicans' affinity with the cell phone through a study of the companies and the different responses of the state to liberalization. After all, if it had been given a licence there, Digicel would have gone first to Trinidad not to Jamaica. We also might have effectively argued the point largely in terms of differential income, given that Trinidadians' income is nearly three times Jamaica's. The study of link-up provides a com-

13. Smith (1996) noted that his interviews on kinship identified a wide range of individuals who were not kin but "like family," and he struggled with how to account for them. In the end, he counted them as "kin" only if a shared relative (however distant) could be established.

pletely different account of these differences. In our ethnography, Jamaicans showed very little of the boundless enthusiasm for the Internet encountered in Trinidad, even when they had experience of it and found an affordable or even a free connection. By contrast, the evidence for Jamaican enthusiasm for the cell phone appeared quite similar to Trinidadian reactions to the Internet. It was difficult to take at face value the common claim made by Jamaicans that house phones were being cut off in favour of cell phones for reasons of expense when our evidence suggested that cell phone use resulted in increased expenditure at a household level. Rather, it seemed that cell phones were well suited to the particular kind of communication that is represented by link-up calls. These calls focused more on individuals than households, and usage often consisted of large numbers of very short calls, with the emphasis upon making the connection rather than the content of the call. In addition, individually based calls provided the added benefits of privacy and individual control. But, again, this does not imply technological determinism; elsewhere work on the social consequences of cell phones concludes that cell phones tend to be used for intensifying a limited number of existing relationships (Haddon 2004: 81–82). While in many contexts the Internet lends itself to lengthier communications, there is evidence that Jamaican students have also created a link-up genre of usage.

One of the aims of our research was to understand the nuances of phone conversation. We became increasingly frustrated by the perfunctory nature of phone calls until, as is common in fieldwork, we realized that we needed to focus on a different dynamic—the absence of conversation. While house phones are potentially excellent and inexpensive media for long, deep, and protracted relationships, they are not well suited to the link-up nature of Jamaican social networks, which often require individual privacy. Link-up provides an alternative to the study of commerce and the state in accounting both for the differential interest in cell phones and for differences in usage patterns.

Just as we would not wish to adjudicate between kinship and coping strategies as more important in accounting for link-up, so we would not wish to favour either link-up or liberalization as a factor in the differential adoption of technologies. Rather, there is a constant interaction between production and consumption. Boyett and Currie's (2004) work on the way Digicel as a company has had to change its structure and ways of working to adapt to Jamaican conditions shows the importance of localization in the study of capitalism (see also Miller 1997). Equally, Digicel demonstrated its understanding of the issues involved in link-up by its introduction of the "call-me" text in 2004, and this, in turn, extended the love affair between low-income Jamaicans and the cell phone in general and Digicel in particular.

In conclusion, it seems better not to privilege any one perspective because, in the long and honourable tradition of anthropological holism, the primary concern may be not the retention of bounded, integrative categories such as society, culture, and community but the recognition of the irreducibility of social and economic practice to any one of its constitutive dimensions—in a word, link-up.

Comments

DIANE AUSTIN-BROOS
Department of Anthropology, University of Sydney, Sydney, NSW, Australia (diane.austin-broos@arts.usyd.edu.au). 20 VII 05

Returning from a period of fieldwork in Jamaica, I am always struck by the absence in my own society of a Jamaican practice of touching in most interactions—a passing tap on the shoulder, back, or arm as one greets or farewells another. This is shown in a well-known etching called *Labrish*, "gossip," in which two young women quietly exchange information with their arms lightly resting on each other. The touching or connecting is also verbal: "Wha'appen?" "Come nu," "Cho man," "Come nu, man", "Al right." These short phrases that open, punctuate, or close a conversation act serve to touch the other person with the lightest of connections. There is a motorcar equivalent in crisp "beeps" that say "Hi there!" "Look out!" "Coming through!" "Thanks!" "You're welcome!" and "Bye-bye!". In middle-class idiom, being "on the road" is driving to connect with friends or family—just dropping in and then saying "Good night" and departing again. The lower-class voluntary saving circles known as Partner rest on networks that may be neighborhood-or lane-based or associated with a church, a village, or even a cultivators' group. Anyone who has visited Browns Town in St. Ann Parish and reflected on its current and historical role as market centre feels the networks that resurface in Kingston—at Papine or the Harbour View roundabout or the supermarket at Liguanea.

This idiom of speech and practice produces super-egos: the market woman who knows how to "marry" produce for sale better than her associates and, as a consequence, receives verbal deference; the don in his neighborhood sauntering down a street with his lieutenants around him, greeting and being greeted by baby-mothers and sometimes holding up a child—"Al right P ___" and "Al right W ___"—with an appropriate wave or smile. A politician on a walk in downtown Kingston exhibits a similar style as both men and women rush to touch this nexus of connections (Austin-Broos 1994). Most striking for me is that when I appear again, having been unconnected by telephone, mobile or other, a common comment from lower-class Jamaican friends is "Wha' appen Diane? Me jus call yu nem yesterday." In short, even if we seemed disconnected, this was only a surface appearance; we have been connected all along. Undoubtedly link-up is a style—social, embodied, spoken, and performed—that extends across different domains. Horst

and Miller are correct to propose that this usage interprets technology rather than being created by it.

My recent fieldwork in central Australia among the Western Arrernte has focused on the dynamics of association among ego-centred bilateral networks of kin that seem to have expanded with the advent and increasing circulation of "things." These networks expand and contract through dynamics that involve testing relatedness by demanding and sharing in response. Relatedness is regarded as a resource in itself, and the medium for testing it is a demand for *ngkweltye*, a small piece of something. The term is used as a euphemism for small amounts of cash. In Strathern's terms, this demanding makes relatedness "appear" out of the potentiality of a larger field of relations (Austin-Broos 2003). Within a sociality that is still kin-based, all of these relations are kin relations. I have been struck by the similarity of this Australian networking to the sociality of a market-based Jamaica in which laterally extended networks of kin are significant but not the only forms of relatedness involved. Both versions seem to be indicative of economic marginalization in which networks maximize the options available *even when they are also social styles* that have value in themselves.

Horst and Miller's argument seems to be that holistic analyses of link-up could supersede kinship studies, but R. T. Smith did not suggest that Caribbean societies were kin-based in the way that classical ethnography understood a range of African societies to be. He used kinship analysis to comment on race and class. His point was a Weberian one—that power comes through status as well as the market. With regard to the latter, Horst and Miller argue that link-up is a basic form of "social and economic practice," though it is not "a functional response to poverty." Later they revise this latter assertion and acknowledge that link-up may be "a particular form of social relations characteristic of low-income Jamaicans." This seems the more appropriate point, given that link-up is not economy as such but rather a form of circulation of information and some modest goods. It is as true today as it was in the time of the Manchester School that networking of this type becomes a pervasive social style in just those situations in which people experience marginalization from powerful systems of production and consumption—in a word, economies.

ELAINE BAUER
154 Clark St., London EH1 3HD, UK
(elainebauer59@yahoo.com). 18 VII 05

Horst and Miller's research is certainly a new and inventive approach to the study of social networking. In general it is also a striking demonstration that particular cultures can foster very different patterns of use of the same technologies.

Although the focus of this article is on the relationship between kin and social networks in cell phone usage, the research revealed that kinship was much less significant than expected. At the same time, it revealed similarities in function between kinship networks and the social networks created by cell phone usage. Horst and Miller note that "one of the most important uses of the cell phone in relation to kinship derives from the common practice of having a child looked after by someone other than the biological mother." Like Jamaican kinship networks, cell phone networks provide mutual aid and coping strategies for families. Indeed, "the only real difference between friendship and kinship" is that while kin connections are latent and can be revived after long intervals, with friendship "a minimal degree of sociality that preserves the relationship is preferred."

Horst and Miller present a telling analysis of gender differences in the use of cell phones in Jamaica. They found that although "the most extensive form of phone-based networking revolves around the potential of sexual liaisons," men were more likely "to see sexual relations as ends in themselves" while women tended "to associate them with other needs, most often economic survival," which was often provided by men. They found that women used their cell phones as a means of contact with their baby-fathers for economic support and contact with children living with their baby-fathers' families.

Through this interpretation, their analysis is linked to a key current issue in Caribbean anthropology—the role and responsibilities of Caribbean men in family life (see e.g., Barrow 1998, Black 1995, Chamberlain 2003). Thus, Black (1995; 65), investigating the "connection of kinship and gender ideology and practice" in Antigua, concluded that

> while mothers are responsible for the everyday things and rearing practices that people take for granted, for things that are so commonplace as not to count, many Antiguan children have the experience of going to their father to get important necessities that their mothers cannot afford to provide—things like school fees or money for books or new shoes. Commodities that are marked as "important" and "unusual" are things that one gets from a loving father.

In our own research on Jamaican transnational families (Bauer and Thompson n.d.) we have similarly found that Jamaican fathers, grandfathers, uncles, and brothers were all important in the functions and relationships of the kinship network not only in Jamaica but also across the Atlantic.

Horst and Miller argue that "Smith's research can be viewed as a study of link-up that can now be expanded from its initial base in the anthropology of kinship," and I would add that Clarke's (1957) and Besson's (2002) research on family land, with its emphasis on pragmatism along with rights, provides another parallel with the working of "link-up." Horst and Miller demonstrate the pragmatic and inalienable value of link-up relationships: "the activation of any particular potential relationship is expected to occur only when, in some sense, one person can respond to the need of another. Consequently, even if one has not visited a particular cousin living in

town for five years, when one's child receives a place in school near that cousin it is largely assumed that the cousin's house may represent a possible boarding place."

Lastly, there is another parallel with more recent research on transnational families (Goulbourne and Chamberlain 2001, Bauer and Thompson n.d.). Horst and Miller maintain that "the most important element is not the content of conversations but their use to maintain connections over time." As with local link-up among transnational Jamaican families, telephones—cell phones and land lines—are crucial in maintaining connections with the larger family network over time and space and sometimes simply as a means of just keeping in touch. Additionally, as with Horst and Miller's research on cell phones, research on transnational families also demonstrates the importance of friends in providing mutual aid and support and the strategies used to create an extensive network not just locally or nationally but also globally. Thus, just as R. T. Smith's (1998) work on Jamaican kinship networks forms a bridge between the work of Clarke (1957) and Besson (2002), so Horst and Miller's research forms a link between those works and our studies of Jamaican transnational kinship networks.

JAMES G. CARRIER
Department of Anthropology, University of Durham, Durham DH1 3HN, UK (jgc@jgcarrier.demon.co.uk). 6 V 05

Horst and Miller have addressed an important question—the relationship between the technical or material nature of objects (technology) and their social use (consumption). In much of the Western world the popular stress is on technology and the vistas it opens, including those opened by newer communications technology. In this situation it is important to be able to remind those outside the discipline, as well as ourselves, that perhaps we ought to attend not so much to the vistas as to the use.

Echoing the point that people use many objects in ways that allow them to maintain and extend valued social relationships (Douglas and Isherwood 1978), Horst and Miller locate the use of mobile or cell telephones among poor people in Jamaica in their sociality. What they call "link-up," which, they say, is typical of the country, involves the maintenance of an extensive web of weak social connections. The study that they present is exemplary in relating patterns of telephone use to the maintenance of such networks and in showing how the leading telephone company in Jamaica, Digicel, has adapted its marketing and service to take advantage of those patterns, thereby reinforcing them. Thus the potentials in the technology interact with the social practices of Jamaicans and the strategies of the pertinent company to generate the existing form of telephone use.

Like any stimulating work, theirs raises questions. I want to mention two.

The first concerns telephone use and sociality generally. It would be interesting to know if there are other places that have the sort of sociality that Horst and Miller describe and what sort of telephone use these places have. For instance, they note that Trinidad has a different form of telephone use. Is sociality amongst poorer Trinidadians characterized by this web of weak ties? If so, why is telephone use different?

More broadly, while this sort of sociality may be pronounced amongst poorer Jamaicans, it is not restricted to them. As Horst and Miller indicate, it seems to exist among university students in the country. Perhaps more unexpectedly, it was noted in the United States several decades ago (Granovetter 1973), and presumably it continues to exist there, in light of the salience of such weak ties for important aspects of people's lives. It would be interesting to know how weak ties are maintained in other settings where they are significant or, indeed, in places where mobile telephone technology is not available (e.g., Jamaica of 20 years ago). Is Jamaican telephone use the equivalent of, perhaps, sending lots of Christmas cards in the United States or the United Kingdom?

The second question is more peripheral to the article's core argument but is intriguing even so. It concerns Horst and Miller's consideration of how Jamaican sociality fits with existing anthropological models of exchange. They argue that it does not fit, even with a model of long-term, generalized reciprocity. I am not sure about this. The reciprocity they seem to be thinking of does not, as their discussion implies, entail alternating obligation: because I have helped you, you owe me. It can imply only that those to whom I grant favours are those from whom I may request a favour in the future, should I find myself in need.

This in turn raises the question of the nature of social obligation in Jamaica and its converse, social expectation or right. This is a complex issue. However, descriptions of family land in Jamaica and elsewhere in the English-speaking Caribbean (e.g., Clarke 1971[1953], Olwig 1997) suggest that expectation and obligation within extensive groups are tied to need in a way that is not stressed in normal anthropological accounts of generalized reciprocity (e.g., the description of open-handed transactions within ego's group in Sahlins [1974: chap. 5]). The apparent significance of need for expectations in Jamaica may complicate the analytical apparatus somewhat, and certainly it deserves investigation. However, it seems likely to offer a useful way of framing the sociality that Horst and Miller describe in a country where many people suspect that need may well be right around the corner.

These two questions are, in some sense, tangential to the focus of Horst and Miller's article, but they are questions that can help us extend our understanding of the sorts of processes that this rewarding article describes.

BARRY CHEVANNES
University of the West Indies, Mona, Jamaica (barry.chevannes@uwimona.edu.jm). 10 VII 05

If ever there was any doubt about the value of the ethnographic method, with its reliance on the cultivation

of trust between researcher and researched, Horst and Miller's article should go a long way toward dispelling it. That the authors were able to produce valuable insights into the culture of globalized Jamaicans by being allowed into the very private lives of men and women they spent only a few months living among is testimony to their skills in gaining the trust of their informants that the information they freely gave would not be used against them or theirs. In light of the Central Intelligence Agency's planting of trainees in anthropology programmes under the Pat Roberts Intelligence Scholars Program, I believe it important to reaffirm that as human beings we cannot live without trust. The membership of the American Anthropological Association must be commended for voting to rescind the 86-year-old censure of Franz Boas for publicly opposing four of his colleagues' using anthropology "as a cover for their activities as spies."[1]

Globalization as the interconnectedness brought about by the new communications technologies flows largely one way—southward, given the technological advantages of the North. This fact has raised concerns about cultural imperialism and the threat to the cultural identity of recipient countries. What Horst and Miller in this article and Miller in his Trinidad and Tobago work (Miller 2005*a*) show is that the uses made of the technologies are very much determined by local cultural (my word) and social imperatives. The implication of this is that, as far as the technologies go, globalization is not much to be feared, for whatever capacities (or contents?) they bring are subject to local mediation, interpretation, and even innovation.

In the Jamaican case, the use of cell phone technology by low-income earners is determined by the need for extensive personal networks of friends and kin but mainly friends, who may prove instrumental for one's economic or sexual needs. The network is maintained by "link-up"—short simple calls or text messages devoid of content in which the link is the message, establishing a kind of visibility that may prove useful to one's future needs.

That such extensive networking already existed prior to the introduction of cell phones, as Raymond Smith found in his study of kinship as far back as the late 1960s, leads Horst and Miller to conclude that the peculiar Jamaican adaptation is prompted neither by government's liberalization policy nor by company promotion but by "a continual search for opportunities to expand the universe of connectedness in and of itself." In other words, Jamaicans have a compulsion to be connected. This, they argue, provides an adequate explanation and not any theory of reciprocity, which, although they do not entirely dismiss it, they find not to fit the facts mainly because those who give say they do so out of generosity and not, presumably, to build up credit.

1. See *Anthropology Today* 21(3):27.

In research I conducted in 1988,[2] Jamaicans explained their volunteerism as doing to others what they hoped others, not necessarily the recipients of their generosity, would do to them if and when they were in need. Linking this to their deep-seated belief in the inevitability of retribution, I concluded that they viewed the world as being in a kind of equilibrium such that good would never go unrewarded or bad unpunished. Could this be at work here in the link-up networks?

Every link-up establishes a dyadic relation in which the linker is a potential recipient and the linked a potential giver. The linked gives because in her/his own network there are potential givers including the recipient of her /his generosity. The wider the network, the greater the possibilities. This is not the same as reciprocity as commonly understood, but it produces the kind of symmetry implied in systems of reciprocity. Jamaicans are contemptuous of asymmetrical relations. People who always receive but seldom if ever give are appropriately called "parasites." People who are always giving and seldom receiving are called "boops," a disparaging term that reserves its sharpest edge for men who satisfy the material wants of women but are not recipients of their sexual favours. In the universe of link-up networks, everyone is linking and being linked in a process of asking and giving that in the end allows everyone to cope.

Horst and Miller are dead-right on the importance of the cell phone to low-income earners but possibly too quick to rule out reciprocity and mutual dependence.

LARS HINRICHS
University of Freiburg, Freiburg D-79106, Germany (lars.hinrich@uni-freiburg.de). 10 VII 05

My comment consists of an elaboration of the parallels between Horst and Miller's findings and my own and a suggestion for a theoretical improvement.

As they mention, my work on computer-mediated communication among Jamaican university students provides evidence that "link-up" is not confined to low-income Jamaicans or to the medium of the cell phone (Hinrichs 2005). For this comment, I will concentrate on my primary corpus, a collection of 209 e-mails (ca. 40,000 words) written by students or recent graduates of the University of the West Indies Mona in Kingston.

The type of extensive, individually based social networking that Horst and Miller describe as emerging on the basis of the cell phone is demonstrably rooted in much older, specifically Jamaican kinds of kinship networks. This type of communicative and networking strategy, which gains its unique qualities from the ease and efficiency characteristic of the new electronic media, is evident even in e-mails by informants who are fully independent economically, that is, who came from the higher spheres of society. This supports Horst and Mil-

2. Volunteerism in Jamaica, AFS International, New York and Social Welfare Training Centre, University of the West Indies, Mona, Jamaica, 1989.

ler's claim that the impetus toward extensive, individually based link-up-network building is "autonomous from any . . . instrumentality" and not primarily geared toward creating economic subsistence, even though the trading of favors in these networks can contribute to subsistence.

They report a high frequency of interactions devoted exclusively to the aim of staying in touch, interactions which are not known in any similar prominence or frequency from studies of other geographical settings, as an important feature of link-up. While e-mails that are written only for the sake of staying in contact are not unheard of in other parts of the world (cf. Georgakopoulou 2004 on e-mails among London Greeks, where this type is called "keeping-up messages"), they are strikingly frequent among Jamaicans. They also show a specific local quality in their use of code-switching into "Patois," the island's English-based creole language (in linguistic terminology, Jamaican Creole). I reproduce here a complete e-mail message, one of about 20 in my corpus which are obviously aimed at nothing except maintaining contact:

> I THINK U DESERVE THE BIGGEST TRACING EVER IN YOUR LIFE TIME.
> WHY U NUH CALL MI. WHAT HAPPEN U DASH MI WHEY. [*Why don't you call me? What happened, have you abandoned me?*] WELL UR PUNISHMENT IS THAT U WILL NOT BE RECEIVING ANY EASTER BUN[1] THIS YEAR. By the way Easter Monday is my birthday I at least deserve a card.
> How are things over there. Life could not be so hard that I cannot even get a phone call. Anyways I have something to tell u but u have to call me to hear it.
> Hail up [name] for me and hail up u mother and the ahhhhhhhhhhh the police guy (can't remember his name right now (ur stepfather).
> Love
> [name]

As in several other e-mails of this type, this message takes the form of a reproach: a quite direct reprimand for not having been in contact for a while, complete with the threat of punishment (the speech act could be interpreted as the performance of a mother-type role). The insertion in Patois functions as a repair device. Jamaican Creole is the informal code in the Jamaican sociolinguistic spectrum, complementing Standard Jamaican English, which is the code used in official settings such as education. Since no orthographic standard for written Jamaican Creole exists, its use in writing amounts to the transcription of oral language and therefore comes at a certain cognitive cost, which explains the quantitative dominance of English over Creole in the material (Hinrichs 2004). The discourse function of the Creole code-switch here is to soften the blow of the reproach (cf. Brown and Levinson 1987 on linguistic face-saving strategies). In combination with the code-switch, the reproach at the start of the message is altogether quite harmless—it is practically neutralized—and it is clear that the act of writing and sending an e-mail was the writer's only goal. The high frequency of messages like this can certainly be considered evidence that link-up is a strategy reflected in e-mails of educated young Jamaicans as well.

Language use among the informants who supplied e-mails to my corpus is certain to be different from that among Horst and Miller's informants. Since the level of education is considerably higher among the university students in my study, their proficiency in written standard English is also very likely to be higher. As Devonish (1996) points out, this crucial social skill in turn makes for a "linguistic confidence" among Jamaican university students that allows them to use Creole in writing more freely and experimentally and in fact to produce two distinct codes, English and Patois, in writing. Thus, link-up networking employing two codes, as in the above example, might be more restricted to educated Jamaicans. Because of the limited uptake of the Internet in Jamaica compared with Trinidad and compared with that of the cell phone, e-mail is probably the more elitist means of communication. Nonetheless, both the cell phone and computer-mediated communication have become the sites of a new kind of social interaction based on traditional Caribbean types of kinship network.

For future uses of the link-up concept it may be useful to distinguish more clearly between link-up as a kind of social network and as the communicative strategy designed to create and maintain such networks. The term is probably best suited to denoting the communicative practice, bearing in mind the meaning of the Patois to *link someone* 'to get in touch with someone.'

1. Easter Bun is a roll of sweet white bread seasonally shared among family and friends.

AISHA KHAN
Department of Anthropology, New York University, 25 Waverly Place, New York, NY 10003, U.S.A. (akhan@notes.sunysb.edu). 7 VII 05

Identifying a particular pattern of cell phone use among low-income Jamaicans that they call "link-up," Horst and Miller conclude that technological determinism does not accurately explain the use or significance of new communication technologies and call for investigation of specific sociocultural contexts of local use. Fitting squarely within abiding anthropological premises, their conclusion is a reliable one. In addition, to extend this reasoning, we need to ask why certain cultural representations of cultures, peoples, and countries are the touchstones against which our surprise at prediction failure is registered. What is required, then, is a simultaneous investigation of ethnographic specificity and of the cultural assumptions that foster that surprise.

The paper's presenting kinship in terms of wider forms of networking and other social relationships rather than as a bounded domain points to a social science proclivity for reifying interpretive categories and to Caribbean studies' long tradition of treating kinship (primarily family

and household) almost as an independent variable, a key foundation of society but allegedly riddled with pathology (see, e.g., Simey 1946; cf. Barrow 1996). Kinship's alleged foundational status (or alleged lack thereof) in Caribbean societies, however, has been a reflection of other concerns, largely those of imperial rule (e.g., Khan n.d.). And as a means of creating and making sense of certain kinds of social bonds, the forms that kinship takes and the work it performs are diffuse. As this paper suggests, R. T. Smith considered kinship extensive rather than tightly structured in his discussion, for example, of West Indian dual marriage system principles which are not enunciated in oral tradition or documented but "must be inferred from a wide range of manifestations, both historical and contemporary" (1982:120–21). From this vantage point, we can incorporate "ambiguity, uncertainty, and contradictions," which, Smith argued, are indispensable considerations and which in turn presuppose the unlikelihood of kinship's being a concentrated phenomenon.

The paper's call for ethnographic specificity raises other interesting issues, especially in connection with kinship and its articulation with other domains of social life such as reciprocity and coping strategies. One is the distinction between cell phone conversation content and connection ("link-up"). Averaging 19 seconds, conversations are important not for their content but "as a means to maintain connections over the longer term." This raises the issue of what culturally constitutes "content." Cell phone conversations 19 times longer than 19 seconds may appear vapid to those overhearing them, and two or three words can speak volumes. While massaging sociality with conversation appears not to be a factor in cell phone use in Jamaica, clearly something deeper is being communicated in the few words exchanged, as this paper implies, in terms of the ties that bind people together.

The second issue concerns coping strategies and reciprocity. An important finding of the research is the role of cell phones in coping strategies, countering what is often a misguided moralizing indignation leveled at low-income people everywhere about their supposedly misplaced economic priorities. The paper spends more time, however, arguing that link-up should not be seen as "an emanation of reciprocity," that link-ups are "autonomous from any such instrumentality, becoming instead a continual search for opportunities to expand the universe of connectedness in and of itself," irreducible to "any particular social or economic imperative." Yet coping strategies could be viewed in terms of instrumentality (e.g., sources of income or other "continual search[es] for opportunities") without the connoted disapproval that Horst and Miller seem to want to avoid. There is nothing necessarily objectionable or reductive about instrumental objectives, which are culturally meaningful and ethnographically specific and carry diverse moral valences. (One might think of, for example, Michel de Certeau's [1984] concept of the "tactic.") The broader question here is pinpointing what "connectedness" is about if it is not about reciprocity. It seems that there is an implicit suggestion of altruism, even if the researchers would not directly express it as such. If people agree to give without the pressure of obligation (whatever both "pressure" and "obligation" might culturally entail), what is the precise relationship with coping strategies if reciprocity is not a factor? As we know from Marcel Mauss and others, reciprocity can come in many forms and interpretations. Indeed, sentiments (e.g., "liked," "felt sorry for") can be their own reward.

KAREN FOG OLWIG
Department of Anthropology, University of Copenhagen, Øster Farimagsgade 5, 1353 Copenhagen K, Denmark (karen.fog.olwig@anthro.ku.dk) 8 VII 05

Horst and Miller's article provides a fine example of the way in which a study of a fairly narrow topic, the use of cell phones in Jamaica, can bring fascinating new insights into a much broader subject matter, the nature of social relations in modern society. The authors convincingly demonstrate how this new piece of communication technology has fed into and reinforced local practices for the building up of extensive networks in which lines to as many individuals as possible are kept open. Thus, they show that link-ups through calls on the cell phone have become an important mode whereby networks of relations are constructed and maintained in that they allow individuals to engage in extended conversations with a large number of people through regular but ultra-brief and cost-effective conversations that manage, somehow, to keep social relationships going. This ethnographic study therefore points to the emergence of what one might call, using Appadurai's (1966) notion of the "-scape," a "chatscape"—a fluid, mobile, multipurpose ego-centered form of sociality based on fragmentary, informal chats that is negotiated by individuals in accordance with their particular life circumstances.

The large lists of phone numbers that individual Jamaicans develop to maintain these networks apparently involve a wide variety of people. The callers, according to Horst and Miller, do not distinguish between family and kin, on the one hand, and friends, on the other, except that they note that more effort has to be put into maintaining a relationship with non-kin. Relations, apparently, assume importance when they are incorporated into individuals' social worlds as they continuously construct the social networks that frame their lives.

This approach to social relations ties in well with R. T. Smith's 1988 study of West Indian kinship, which also demonstrated the great significance of extensive networks of relations, but also raises a number of questions that need to be addressed. Thus, if, as Horst and Miller assert, the Jamaicans studied do not distinguish between kin and friends, except for the fact that the relations with friends need to be maintained whereas kin are expected to offer help whenever needed, how are we to understand the nature of kinship? What goes into the making of kinship as a more permanent relation of expected reliability in this world of shifting relations of give-and-take,

adapted to changing circumstances of life? Recent theory on kinship (Carsten 2000), drawing on the approach developed by David Schneider (1968) and R. T. Smith (1988), has argued that kin ties, like all human relations, are socially constructed and need to be examined within a wider framework of ethnographic research on the "indigenous" statements and practices in which notions of relatedness emerge. Kinship therefore does not precede social life but emerges as a special domain of relations as it is practiced and given particular value in social life. How, then, do Jamaicans establish the domain of kinship that, as Jean Besson (2002) has shown, is associated with more stable relations, often anchored in family land or family homes? And what is the relationship between notions of relatedness that emphasize the rather flighty sociality played out in the "chatscapes" and notions of relatedness that emphasize more permanent relations called kinship? Are the two domains of relatedness antithetical, or do they offer complementary contexts of equal importance to people in their everyday lives? And how do individuals juggle the two domains at various vital conjunctures (Johnson-Hanks 2002)?

Horst and Miller do not address these questions, largely because theirs is primarily a study of the social life of cell phones, not of the social life of the people who use the cell phones. While they have produced an interesting "holistic account" of the significance of cell phones in Jamaican social networks, they do not provide an ethnographic study of the role of cell phones in Jamaican social life in general. This would require a focus on people's everyday lives and the many different relations that they construct and engage in the course of this life, including those not maintained through cell phones.

DON SLATER
London School of Economics, Houghton Street, London WC2A 2AE, UK (d.slater@lse.ac.uk). 12 VII 05

Writing as a sociologist, I feel that Horst and Miller's paper moves the study of "media and society" towards a sophistication (and "ethnographic holism," as they put it) that only anthropology seems able to provide. I strongly endorse their conclusion that "from an anthropological perspective, the term 'link-up' is useful because it is not just people who are thereby connected but also separate domains of anthropological research." Indeed, separate domains of social analysis more generally, particularly sociology and media studies, are drawn together. Broadened by the concept of link-up, the study of the mobile phone becomes the study of different patterns of *connectedness*. Because they testify to the ways in which people innovate in relation to more long-term local modes of social networking, we cannot expect these patterns to observe disciplinary distinctions.

Moreover, this approach lays the basis for more comparative analysis. My ethnography of new media in Ghana (part of a programme comparing Jamaica, Ghana, India, and South Africa) indicates that link-up, defined as a prioritization of connectedness over content, is if anything more extreme there than in Jamaica. The vast majority of mobile phone use took the form of "flashing": one person dials a contact and breaks the connection after one or two rings; the receiver of this "call" interprets it contextually. Hence, most calls are far shorter than the 19 seconds Horst and Miller cite for Jamaica—they are in fact uncompleted, *entirely* "contentless," and intended to effect or simply signify connectedness. Many aspects of this can be interpreted entirely in line with Horst and Miller's argument, as a locally typical aggregation of networks that is continuous with older modes but technologically extends and materializes them in a new form. Similarly, Ghanaian users often ritualize this process: one person flashes another and says, "Now you've got my number," and the recipient stores it and then reciprocates, thereby acknowledging right of access to the other and an extension of their networks.

The major difference between Jamaica and Ghana concerns reciprocity and the role of new media in managing the *cost* of social connectedness. Ghanaian social and kinship networks are certainly crucial resources in coping strategies, as in Jamaica, but they are also perceived as obligations or burdens to be carefully managed. The mobile phone reduces quite diverse costs: for example, one can discharge a familial obligation to look after a relative by flashing rather than making a time-consuming visit. Mobile phones are common gifts from abroad; while valued by the receiver, the gift reduces the cost of staying connected but usually enrols the sender in the ongoing cost of keeping the connection active.

There is another comparative twist that emerges from the Ghana research: different media can be appropriated to produce quite different kinds of connectedness. Whereas mobile phones are understood in terms of the practical management of real social networks, most Internet use involved random chat or e-mail with mainly northern foreigners in the hope of money, visas, invitations, or foreign contacts. This use was entirely consistent with a central livelihood strategy—emigration and escape—but opposed and unconnected to the equally central livelihood strategies effected through mobile phones. In the Ghanaian case, we need to look at the *opposition* between two different technological modes of connectedness in order to achieve the anthropological holism that Horst and Miller advocate.

The issue here is rather more than the pointing out that Ghana is different from Jamaica. Horst and Miller ask us to look at connectedness by analogy with Smith's analysis of kinship as an "extensive network of potential connections expressed through the recognition of individuals as relatives," and they pursue this analogy by investigating the "'universe' of names defined by a certain principle, in our case the list of names saved in the cell phone." In the Ghanaian case, I would point to multiple, ambivalent and changing principles by which people define connectedness and to the mobile phone (and mobile/Internet opposition) as both reflecting and effecting the complexity of these principles. For example, a major Ghanaian mobile operator talks about "funeral

traffic": a significant proportion of mobile phone use is to manage the complex arrangements of this central social institution, which usually involves the coordination of large numbers of dispersed people. The mediation of funeral arrangements by mobile phone both reflects and performs changes in kinship structures as these networks extend into urban and foreign contexts with a consequent hybridity of kinship connections.

What is valuable here is the capacity to convey a sense of ethnographic integrity to the particular Jamaican contextualization of the mobile phone while at the same time hinging the analysis on a concept that allows a more general and comparative consideration of "connectedness" that is not substantively confined to one technology or one locally particular kind of social network.

KARLA SLOCUM
Departments of Anthropology and African & Afro-American Studies, University of North Carolina, CB#3115, Chapel Hill, NC 27599-3115, U.S.A. (kslocum@unc.edu). 16 VII 05

Horst and Miller make a much-needed contribution to Caribbean studies of global telecommunications, an area scarcely covered in the literature. Specifically, they widen our understanding of the intersection of local patterns of sociality and cell phone use in one Caribbean context (nicely distinguished from others). Further, by centering their inquiry on modes of telecommunications consumption on Jamaica and addressing how these modes influenced the prospects and possibilities for a developing cell phone industry on the island, Horst and Miller push the debate regarding the determinacy of globalizing strategies. Indeed, their point that the state and foreign capital were not the only shapers of the island's industry is an important one, reminding us that globalizing processes must contend with existing and developing local formations. I also find especially important the distinction they accentuate between the uses of cell phones and the Internet in Jamaica and Trinidad, underscoring that the particularity of locality is essential in mediating how and whether globalizing projects unfold. Not only is the point instructive regarding the ways in which "global" and "local" inform each other but also it presents Caribbean people as actively engaged with modern technology rather than as necessarily socially or economically marginalized by it. In this regard, I appreciate the sense we get of how Jamaican cell phone users participate in the path that global processes follow.

Horst and Miller's attention to the organization of social networks around global technologies also builds upon a rich tradition in Caribbeanist anthropology. For more than half a century, North American anthropologists have been examining the shape and shaping of family and extrafamily networks in the Caribbean. This article intersects with current studies on modes of engaging and extending social ties transnationally and within the contemporary global political economy. It is refreshing to see the authors pick up on this work and extend it into the area of global technologies. As they stress the extensive nature of cell phone users' social networks, Horst and Miller reveal to us that a social facet of Caribbean life that has long been documented (by R. T. Smith and others) remains significant amidst monumental economic and technological shifts.

In this context, their analysis points to the (numerical) centrality of nonkin in cell phone users' activities, but their discussion leaves me with a few questions. First, if calls to specific kin are more frequent and calls to a variety of nonkin are more numerous, what can we take from this difference? The relative frequency of calls to kin seems significant to an understanding of the potential differential intensity and richness of the relations maintained with kin versus nonkin. Second, if calling kin who live abroad is one of the main features of kin calls, what might this suggest about the transnational ties that cell phones engender *for kin in particular*? What is it about kin relationships that could lead to more overseas and more frequent calls? Is it possible that kin ties are more intensive (more frequent and engaged in across greater distances) and nonkin ties more extensive? What might this say about the quality and meaning of kin versus nonkin relationships? Also, with comparative information on uses of land lines in rural versus urban areas, we might better understand whether cell phones (and not other forms of telecommunications) are particularly important to transnational kin relationships. Third, I am uneasy with the suggestion that women work cell phone lists primarily to secure economic benefits through liaisons with males. I wonder if more research into the quality and experience of those liaisons might show economic motivations to be only part of the package. There has been a long-standing suggestion in the literature that Afro-Caribbean women engage in serial and shifting sexual relationships from which they derive financial support, but there is also evidence that the relationships are more complex than this one feature. Perhaps an extended study on this topic would yield more insights on this possibility for cell phone contacts. Of course, studies are limited by space and time, but exploring some of these questions would round out an already intriguing and insightful study.

Finally, the connection that Horst and Miller draw between cell phone lists and networking may indeed return us to R. T. Smith's seminal study, but it also returns us to other Caribbean literature on social networks. They reference some of this material but measure their findings most directly and systematically against those of Smith, which I think narrows the conclusions they draw. I am thinking in particular about the vast amount of work on flexibility in Caribbean social interactions, relationships, and modes of social organization. If cell phone users shift ties rapidly as Horst and Miller describe, this seems to signal a flexibly resourceful approach to building long-range social ties not unlike an approach noted elsewhere in the region by other researchers.

These issues notwithstanding, the implications and contributions of this study are important, particularly its

interventions into work on intersections of the global and the local.

RICHARD WILK
Department of Anthropology, Indiana University, Bloomington, IN 47405-7100, U.S.A. (wilkr@indiana.edu). 19 VII 05

This is an important and innovative paper which uses new methods to study very contemporary issues but connects with venerable and still important issues in general anthropology and Caribbean studies. The ethnographic detail on phone lists and the extension of networks is particularly fascinating.

I have to admit to being alarmed by the introductory section, in which Horst and Miller set up an opposition between the kind of ethnographic analysis of technology they are doing and the supposedly simpleminded and unsuccessful work of economists and other vulgar types. The dot.com bubble and the failure of many technology schemes are fascinating and complex phenomena, hardly something that can be blamed on technophilia. And it is hardly news to experts, even some economists, that the consumption, marketing, and use of technologies are mediated by culture. These are central topics these days in science, technology, and society studies, media studies, and consumer research.

There is nothing novel, therefore, about an argument that local cultures make a difference in how new technologies are accepted, adopted, and positioned. Even hard-nosed neoconservative economists and political scientists are now willing to admit that "culture matters" (though their sort of cultural determinism [e.g., Harrison and Huntington 2000] would give many anthropologists pause). The really important question is *how much* difference culture makes. Would a cultural analysis like the one presented here have been able to *predict* that poor Jamaicans would love their cell phones while Trinidadians would connect with the Internet? Would you be willing to bet a few million dollars on that prediction, or does the analysis derive its weight from hindsight?

Horst and Miller's analysis leaves out everything *but* culture and local social organization. It would help us to assess their argument if they had developed the initial contrast with Trinidad a bit further. What are the comparative prices of air time in the two countries? How much does the physical size of the islands make a difference? Are Trinidadians, with better roads and more cars, able to meet and connect more easily than Jamaicans? Since telecommunications monopolies and the massive profits they produce for rich multinationals are a major political issue in the region, how did Jamaica manage to open their market?

The section of the paper that deals with extensive nonkin link-up networks dramatically emphasizes one aspect of working-class Caribbean social life—the fluidity of social relationships, a lack of clear distinction between kin and nonkin, flexible parenting, and explicit economic expectations in sexual relationships. This all rings true with the Afro-Caribbean people I have worked with in Belize. But the Caribbean kinship literature is also replete with more stable long-term kin-based groups that are not ego-centered, often being formed around family land, yards, and houses. Horst and Miller tell us that the people they surveyed all live in households but give us little information about how those households are socially and economically linked to and through individual networks.

To my mind, the most interesting question posed but not answered by the paper is how these two kinds of networks connect and influence one another. For instance, does the cell phone lower the transaction costs of the link-up network to the point where people invest less in their face-to-face domestic household arrangements? Or do the individual networks of close kin *interconnect* into larger structures that might actually reinforce some householding groups? Can we expect a long-term increase in the fragility of kinship groups? And how does cell phone use differ among older people who have established more stable conjugal unions?

The only section of the paper I found obscure was the one that tries to show that the calling networks are not based on reciprocity. I am not sure exactly what the authors are arguing against. Would anyone seriously suggest that people link-up just to express some primal need for reciprocity? That people have few expectations, show unexpected generosity, or refuse to reciprocate can hardly be seen as proof that something other than reciprocity (at least as I understand it) regulates interpersonal relationships. Perhaps the argument is actually against a simplistic utilitarian approach, but I can see several very fruitful ways in which exchange theories could be used to understand how these networks grow and change and why some connections persist while others evaporate.

These complaints aside, I found the ethnographic examples in the paper riveting and will look forward to the book, as well as the collaborative comparative studies, which will undoubtedly address many of the issues I have raised here. Horst and Miller are to be congratulated on a creative and fruitful project which is sure to have a major impact.

KEVIN A. YELVINGTON
Department of Anthropology, University of South Florida, Tampa, FL 33620-8100, U.S.A. (yelvingt@cas.usf.edu). 21 VII 05

Horst and Miller persuasively proffer "link-up" as a kind of a "concept-metaphor" (Moore 2004) through suggestive and evocative ethnography of cell phone use in Jamaica. The idea of link-up is based on a composite of emic notions and resonant with and related to even if not exactly coinciding with a local semantic domain. The question is whether it is theoretically robust enough to become an etic/analytical category through which to understand the "concrete real."

Horst and Miller call upon R. T. Smith' s (1988) classic

research suggesting an extensive quality to the kinship system, and they question whether kinship per se can account for link-up strategies or kinship-making is itself a form of link-up. This is an important and creative point of departure, but they might have also called upon another classic source. Mintz (1996:915, 931–37) discusses the *individualism* characteristic of Caribbean social formations and cultures, attributing it to the long-term effects of plantation slavery and the concomitant organization of economic life, as well as the (related) pattern of kinship, sexual unions, and domestic arrangements. While he is careful to acknowledge that community- and kinship-based groupings do exist in the Caribbean, he contrasts their relative weakness there with both Western and non-Western counterparts. Instead, he highlights the existence of strong dyadic relationships. Social groupings like the church groups which Horst and Miller mention exist in complex and contradictory interaction with these strong dyadic ties.

Horst and Miller say that "much of link-up" is "autonomous" from "instrumentality." However, as they show, women's networking was "primarily concerned with coping strategies" even if these subsumed sexual relationships. By taking the instrumentality out of link-up, are they contradicting their own assertion that "any division of relationships into particular domains of enquiry looks artificial"? Don't we need to understand the nature of these relationships emically, as they themselves suggest? They dismiss the classic accounts of reciprocity beginning with Mauss but seem perplexed as to the dynamics of "begging" and giving apparently without obligation to do so. But "begging" implies that the "beggar" must touch some part of the norm of reciprocity in the potential benefactor. Shouldn't we also investigate those norms? How, too, are we to reconcile Horst and Miller's findings that kin are a minority in phone lists with their report of a separate survey of 100 poor households that suggests that kin are being called more often than nonkin? Isn't it possible that kin are expected to deliver certain "goods" that nonkin aren't and vice versa?

Horst and Miller locate their study of cell phones in Jamaica in an analysis of consumption with the proposal that "there is a constant interaction between production and consumption." I am always interested in the implications of the relationships between production and consumption (see, e.g., Marx and Engels 1986:28–29). Link-up could provide anthropological understandings of these connections, showing us how networks leading to informal and formal work are managed and what gender has to do with their form and content (Browne 2000, 2002, 2004) and illuminating Caribbean women's "triple shift" of formal work, informal work, and housework (Freeman 1997). The implications of link-up facilitated through cell phone use might be pursued further to explore what I have long thought of as a "fourth shift" (Yelvington 1991), that of finding the support that would enable the reproduction of labor and ultimately link us up—ethnographically and theoretically—to production.

The late William Roseberry once railed against the idea that social change as represented by the advent of new technologies or "globalization" in general could be simply incorporated into existing cultural categories. The kind of perspective he criticized is found in the "globalization-localization" studies of which Miller has been a pioneer, and the danger is that historical transformations will not be recognized. Rather than emphasizing cell phone use as reflecting an underlying pattern, I would make a stronger case, using theoretical tools incorporating a systematic dialectical perspective, for the advent of cell phone's having profoundly transformed the extent and content of these relationships.

Will "link-up" take its place alongside other "gatekeeping" concepts (Appadurai 1986, Fardon 1990) in Caribbean ethnology, such as "respectability and reputation," "plural society," "socialized ambivalence," "matrifocality," and "creolization" (see Trouillot 1992)? With some of the queries and caveats mentioned above kept in mind, it has the potential to become a productive paradigm and, perhaps more important, a guide to further methodological refinement, hypothesis testing, and theoretical development.

Reply

HEATHER HORST AND DANIEL MILLER
Los Angeles, Calif., U.S.A. 8 VIII 05

The supportive comments above extend the arguments of our paper in a number of important directions. It is particularly helpful that several of them not only request more contextual information but ultimately, as Olwig suggests, constitute an appeal for a general ethnography of the social uses of the cell phone. This is precisely how we see the relationship between this publication and our forthcoming book (Horst and Miller n.d.), which is intended to demonstrate the advantages of an ethnographic study as a contribution to the anthropology of communication. In the larger format we are able to present detailed discussions of issues that can only be briefly alluded to here. For example, there is a chapter on production and commerce, as called for by Yelvington, that incorporates the details on both the telecommunications industry and phone usage that Wilk requests. We also present the evidence for many of our unexpected findings, such as the reasons cell phone use has not led to a significant expansion of employment or entrepreneurship.

One particularly welcome contribution from these comments is their celebration of cultural specificity despite the continued march of globalization. It is evident that some of us are entranced by the poetics of Jamaican communication, and both Austin-Broos and Hinrichs help convey the subtle character of these brief communications. Although Hinrichs demonstrates that certain additional qualities may characterize the communication of his highly educated informants, parallel points could be made for some of the low-income pop-

ulations we worked with, as is exemplified in the extensive literature on Jamaican music (Cooper 2004, Stolzhoff 2000) and religion (Austin-Broos 1997, Besson 2002, Chevannes 1994). For instance, it is quite possible that the emphasis on "softening" the reproach has a class element to it. Hinrichs's attention to linguistic detail contributes a great deal to our own analysis of communicative content.

We were well aware that our rejection of reciprocity as a feature of link-up would be a red flag to an anthropological bull. Yelvington's statement that "begging" implies that the "beggar" must touch some part of the norm of reciprocity in the "benefactor" and Carrier's contention that if the frame of reciprocity were sufficiently generalized we would see our exchanges as reciprocity expose a generic anthropological stance that has become an axiom or even a tautology. Once it is assumed that no one would give but for the norm of reciprocity, anyone who identifies some other underlying imperative must be missing something. Let us be clear: We are not claiming that reciprocity, whether immediate or generalized, does not play an important role here. Chevannes makes the entirely reasonable point not only that some of what we are dealing with represents generalized reciprocity but that reciprocity may be used by those involved as the explicit legitimation for giving because for Jamaicans as for anthropologists it makes clear sense of such actions. He notes that Jamaicans have their own clear norms with respect to reciprocity. We also have no particular problem with calling a motivation altruistic for the same reasons Khan applies to reciprocity, and there is a rich local discourse concerning the ideals of altruism in Jamaican forms of Christianity. Indeed, if one wants to insist on generalized reciprocity, then the Christian belief that one's rewards will come in heaven rather than on earth seems to fit the situation quite well. Finally, one also has to allow for pragmatism. A person who does not respond to a "call-me" text may be assumed to have run out of credit or to need that credit for some other purpose at the time. In addition, if one has is less than $JA3 on one's phone, a "call-me" text can be returned, indicating to the recipient that the sender also has no credit but still wants to acknowledge the relationship.

There have been several major revisions to the contributions of writers such as Mauss and Sahlins in establishing this concept of reciprocity. Parry (1986), for example, illustrates a quite different set of relationships between reciprocity, altruism, and pragmatism, and Weiner (1992) argues that the reductionist use of "reciprocity" may disguise more fundamental concerns. Therefore there is considerable anthropological precedent for our hesitation to call all exchange reciprocal. During our ethnography we observed, detailed, and discussed many instances of the making and receiving of phone calls and therefore feel confident in stating that there were many cases which did not appear to accord with any notion of altruism or generalized reciprocity. Rather, they seemed to evince a compulsion to make connections, which may be more convincingly explained in terms of an anthropology of communication than in terms of one of exchange. There is a precedent in the compulsion to communicate of Caribbean males who call out to passing females on the street. Ideally, men want to feel that they have said something clever, but, given the lack of response by most women (who often find these calls aggressive or disrespectful), it is clear that the main aim is not necessarily to create a relationship but to assert presence verbally (Abrahams 1983). In contrast to such calling out, in link-up there is a mutual desire to create a relationship, but a relationship based on communication is not necessarily one based on reciprocity. Sometimes giving money seems to us to be an extension of this communicative imperative. From our perspective, relationships created on the basis of this compulsion to communicate are as interesting theoretically as reciprocity and exchange.

Closely connected to this issue of reciprocity is the discussion of instrumentality. Hinrichs's independent evidence supports our contention that link-up transcends the more obvious forms of instrumentality, but the comments also raise questions concerning what we mean by this. Ultimately, it seems just as absurd to say that nothing is instrumental as to say that everything is instrumental. We agree with Khan that there is nothing necessarily objectionable about instrumental objectives and acknowledge that it is almost impossible to talk about coping strategies without recognizing instrumentality. Similarly, instrumentality remains a key element in the connections people are trying to establish with the Jamaican diaspora even if, as Bauer notes, these connections cannot be reduced to instrumental concerns (see Horst n.d.). Although we feel that there is a theoretical level at which a term such as "instrumentality" becomes indefensible, it would be a pity to miss out on a useful analytical concept out of a desire to remain, as it were, philosophically pure (see Miller 2005*b*:43–46).

Allowing for the use of a concept of instrumentality is, however, a long way from reducing everything to that imperative. Therefore our implied critique of a certain simplistic and narrow economism is not, as Wilk suggests, a straw man, No doubt Wilk can find some culturally sensitive economists, but there remain a vast number of practicing economists, from Gary Becker onwards, who are anything but attentive to cultural considerations, Moreover, the related contention that we have left out everything *but* culture and local social organization seems an example of the dismissive stance that Wilk seems otherwise to criticize. Elsewhere we are able to discuss in more detail the ways in which cell phone usage corresponds with local communication ecologies, including the articulation between cell phone networks and the transport system, markets, and other spaces (Horst and Miller n.d.) and the use of cell phones in the organization and coordination of activities ranging from church services to the receipt of remittances. It is equally unfair to characterize Miller's previous work as presenting change as a seamless accommodation to the past when his emphasis has always been dialectical in both theory and ethnographic exemplification.

Perhaps the sharpest critique has been provoked by our emphasis on the prominence of nonkin in the cell phone lists, and we concede that this is not just because anthropologists have a great deal invested in the study of kinship. As Slocum points out, it is also because kinship remains important. We therefore wholeheartedly agree with Wilk, Yelvington, and Slocum that an examination of the differences in networking between kin and nonkin would be a natural extension of this article, but here we have focused upon the difference between extensive and intensive social networks (see Horst and Miller n.d.). While more intensive networking may involve kin, it also includes neighbors from whom food and other goods are purchased or borrowed, coworkers who may also share meals or transport, and boyfriends and then baby-fathers, whom one can regard as kin. Extensive networking developed as link-up may include a similar lineup of friends, coworkers, old boyfriends, and family.

This relationship between kin and nonkin is a common point of discussion in the anthropology of the Caribbean, and we were interested in the ways in which the cell phone engaged with this well-established tension. As Abrahams (1983), Wilson (1966), and others have argued, friendship is often associated with the domain of "the street," where men and women (Besson 1993) acquire reputations, but is also viewed as important and necessary to maintaining the equilibrium of social life. Yet friends are also potentially divisive to the family, which is associated with respectability, the house, and the yard. In the past, a woman who was more oriented toward the house and household met with other women only when she left her yard on approved tasks, such as going to the market or making formal visits to houses. These brief encounters on the street and at the market, deftly sketched in Austin-Broos's commentary, provide an opportunity for keeping in touch. Yet, these engagements also possess the potential to spawn gossip, and there is great disdain for women who sit "diaper-style" (with their skirts tucked under their legs) and *labrish* (Sobo 1993). By contrast, the cell phone facilitates personal, private communication between girlfriends and religious confidants outside of the family, but because it is not evidently gossip this communication is compatible with family dynamics. We would, however, tend to stress the contrast rather than the similarity with Aboriginal kinship in Australia. What we found striking was the degree to which Jamaicans seem to ignore the quality of relatedness itself, making the case very different from the recent examinations of this concept by Strathern (1992) and others.

Equally, we acknowledge Slocum's point that the paucity of kin in phone lists does not preclude some sense of kinship as a particular relationship, for example, one of intensity or obligation. Transnational communications via the cell phone have dramatically enhanced the connection between many children and their parents living abroad. A number of children saved their lunch money in order to be able to call parents living in places such as Miami, Birmingham, and the Cayman Islands, and the increased contact fostered a feeling of closeness and sometimes even co-presence. In addition, many children note that with the improved communication comes a heightened sense of obligation on the part of their parents (see Horst n.d.*a*). Our aim was *not* to repudiate Smith's significant analysis, which we certainly do not view as having reduced Caribbean studies to kinship, but to examine how the principles that he found for kinship could be extended to Jamaican sociality more generally.

Similarly, we did not intend to give the impression that women's networking (particularly with men) was reducible to economic motivations. As Slocum suggests, these relations are far more complex, involving similar combinations of economic, social, and emotional support and an important element of flexibility and autonomy that is also found in the relationships between parents and children. This understanding of gender relations has been extended recently, as Bauer notes, with the realization that the role of men in the Jamaican family and social life is richer and more integrated than much of the previous work on the marginalized male has suggested.

In addition to kinship, Yelvington draws our attention to the focus on individualism in studies of Caribbean sociality by Mintz and many others. This issue is pertinent even at the level of a question raised by Wilk about defining the household. As part of our work on coping strategies, we committed ourselves to surveying 100 households concerning (among other things) their weekly, monthly, and annual income and expenditures. We soon learned how difficult this was and decided to return to 20 households to carry out in-depth daily analyses of budgets. One conclusion was that the household was an even more tenuous category than we had imagined. In effect we were studying complex flows around individuals that involved both those living in the same house and many living elsewhere. (For example, it was relatively rare for a baby-father to be living in the household of his child.) Indeed, the preference for the individual cell phone over a land line was probably based above all on the preference for individual over household billing systems.

Despite the strong tradition of individualism in Jamaica, Wilk and Bauer remind us of the importance of balancing this with more collective forms of kinship and social groupings such as the Baptist free villages and maroon communities (Besson 1995, 2002). Austin-Broos (1997) has highlighted the importance of religious community and its solidification through the use of sibling terminology in Jamaican Pentecostal churches. But this literature also contains many observations about the quarrelling and contentiousness that arise precisely out of this tension between collective and individual perspectives, something that is highlighted in recent studies of Caribbean migration and return migration showing that returnees from the UK perceive the lack of desire of returnees from the United States to join the community-oriented returning-resident associations as selfish (Horst n.d.*b*). This tension is perhaps most prominent in the work of legal anthropologists who detail court cases and local disputes over individual claims to corporately

owned family land (Lazarus-Black 1994, Maurer 1997). Wilson's (1966) term "crab antics," intended to highlight this individualistic tradition, inspired decades of debate in Caribbean anthropology. From our perspective, what is interesting is that communication becomes central to the expression of this tension, with lack of communication being perceived as "selfish" and too much communication or gossip as too communal or "fas" (see Abrahams 1983, Chevannes 1999, Sobo 1993).

These debates implicate a final topic brought out by the discussants, the importance of comparison. Carrier suggests that link-up is a common feature of the introduction of the cell phone more generally, but this is not the case. Our description of the impact of cell phone use in Jamaica contrasts sharply with the main conclusions of early research on cell phone use elsewhere, which suggest that the cell phone is used to intensify immediate relationships rather than to maintain extensive ones (Haddon 2004; Ling 2004:192). The Jamaican evidence stands as a critique of some of the assumptions being made in the literature about the shift from communal to individual networking (see Wellman 1999, 2001; Castells 2000). For this reason we look forward to building on contributions such as that of Slater, which forms part of a general comparison that is a major feature of our project. The initial results from his Ghanaian study already provide pointers with regard to the use of the different technologies to exploit distinctions in modes of communication in different regions (see Miller and Slater 2005). Ultimately, of course this is the way forward, inasmuch as all the ambitions that pertain to this paper depend on comparative work that seeks to determine the extent to which the concept of link-up is generalizable both within the Caribbean and more widely. Such comparisons are essential not only to the project behind this paper but to a more general anthropology of communication which is linked to an anthropology of the media and an anthropology of relationships but cannot be reduced to them. We hope that this exchange will be a step in that direction.

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