"Call Me in the Dorm"

Mobile Communication and the Shifting Topographies of Intimate Relationships in Bangladesh

HARALD STERLY / DANIEL GERADS*

Abstract

In Bangladesh, as in many other national and cultural settings, intimate relations and intimacy between married and especially non-married couples are restricted by strong socio-cultural norms. These restrictions vary across different places, and thus distinct topographies of intimacy can be discerned. Mobile communication is currently challenging such topographies by enabling interaction and "virtual intimacy" across physical barriers and over spatial distances, or by helping to conceal relationships and interactions. This study examines these spatial shifts with three examples. First, the maintenance of long-distance relationships for rural-to-urban labour migrants; second, the establishing and conducting of relationships through phone calls, sometimes with random partners and over arbitrary distances; and third, the way in which students make use of the mobile phone in order to circumvent the strict gender separation between dormitories.

Keywords
Mobile communication, intimacy, space, social transformation, gender, Bangladesh

1. Introduction

In a 2013 article Barry Wellman and Lee Rainie use the example of Shakespeare's Romeo and Juliet having mobile phones to illustrate the dramatic changes in (adolescent) intimate relationships brought about by modern information and communication technology (ICT): the young lovers would have been able to overcome the strict group boundaries, to escape their fam-

* HARALD STERLY, Department of Geography, University of Bonn; sterly@giub. uni-bonn.de. DANIEL GERADS; gerads.daniel@gmail.com. The authors would like to thank the editors of the volume and two anonymous reviewers for their valuable and helpful comments.

ilies' surveillance and to effectively conceal their relationship. "Nowadays, Juliet would routinely text or call Romeo via their mobile phones 'What are your feelings about me?; Can you get away from your family?; When will you be coming?'"(Wellman / Rainie 2013: 166). This analogy could just as easily apply to contemporary South Asia and Bangladesh, given the socio-cultural setting and the restrictions regarding intimate relationships that – not only, but especially – adolescents face there. An important difference is that many young people *do* have access to mobile phones in Bangladesh, and that conversations such as those imagined above take place probably several thousand times per day. As Gerard Goggin has put it, with mobile communication, there have emerged "new protocols, genres and practices for mediated communication for romance" (Goggin 2006: 127).

Mobile communication has been one of the fastest spreading tech-nologies in human history since its general introduction in the late 1970s. Bangladesh is no exception to this, with 132 million mobile phone subscribers in October 2015 (BTRC 2015), out of a total population of approximately 160 million in December 2015 (BBS 2015a). Data from our own surveys and studies, although not statistically representative, support this, indicating an especially high prevalence of mobile phones among the students in Dhaka, and – to a lesser but still high extent – also among rural-to-urban labour migrants.

Bangladesh provides an interesting case with regard to this topic, given the relatively recent adoption of mobile communication there and the rigid regulation of intimate relations and their practicing, as noted by authors such as Lazeena Muna (2005). Social regulations exhibit marked social and spatial differences: intimacy for individuals is restricted or allowed depending on their social position and location. For unmarried couples, sitting together in a public place might be frowned upon, whereas being together unchaperoned in a private place would be wholly unacceptable.

Mobile communication and ICT are challenging and shifting such spatialities to a certain extent, by enabling interaction and virtual intimacy across physical barriers, over spatial distances or by helping to conceal relationships and interactions. As communication is a fundamental part of relations, changes in communication practices can be expected to affect the quality of relations (Höflich/Linke 2011). In this paper we focus on the changing spatiality, i.e. the places within, from and across which relation-ships are conducted, and how this is linked with the rise of mobile com-munication. There is a certain amount of research and literature on this nexus; however, despite the substantial attention that ICT and new media generally receive in both research and public discourses, the scientific literature body is still limited, and most of the publications refer to contexts of "post-

industrial" societies.[1] Research on mediatisation in the Global South focuses to a large extent on the topic of "ICT For Development" (ICT4D), with studies on social practices and cultural change being the exception.[2] We are aware of increasing media convergence and crossmediality also in the South-Asian context (Schneider 2011); however we concentrate our study largely on voice and text communication via mobile phones, as this is (still) the predominant mode of mediated communication for large parts of the population in Bangladesh.

2. Theory and methodology

For this study, we employ the concept of affordances, as it allows us on the one hand to acknowledge specific characteristics of a given technology, and on the other hand to take into account the practices of people, as well as the social and cultural context in which these two are positioned.[3] Introduced by James J. Gibson (1979) and further developed in the field of communication studies[4], affordances bridge the gap between perspectives of technical determinism and of social constructivism. They condition – both enable and constrain – action, without determining it: a mobile phone's backlit screen for example can be used also as a (dim) source of light, although this usage is not "built in". Affordances can be seen as extended, interactional and emergent properties of an object-human relation that result from the inter-action of an object's technical or material properties and the subjective perceptions, imaginations and experiences regarding its utility (Hutchby 2001; Faraj / Azad 2012; Leonardi 2012). Affordances are thus embedded in and emerge from the practices of technological usage. Communicative affordances of mobile phones are shaping communication practices, but are also a product of these practices (Schrock 2015). For our study we concentrate on three communicative affordances of mobile phones: 1) translocality[5] and

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[1] For North America, for example, see Duran et al. 2011; Hall et al. 2014; Goluboff 2015; for Europe, for example, see Kasesniemi / Rautiainen 2002; van den Abeele et al. 2012; or Döring 2015.

[2] See, for example, Archambault 2011 on the conflictive effects of mobile communication for couple relations in Mozambique, Cui 2016 on the usage of messaging services for relationship management in China, or Anwar / Johanson 2012 on the management of distance relationships of Indonesian micro-entrepreneurs.

[3] See Licoppe 2004; Faraj / Azad 2012.

[4] See e.g. Gaver 1996; Hutchby 2001; Schrock 2015.

[5] With "translocality" we refer to the linkages of distant places through flows, practices, structures, imaginaries and identities, cf. Brickell / Datta 2011; Greiner / Sakdapolrak 2013; Sterly 2015.

synchronicity[6], contributing to the capability to communicate from place to place and across distances, across physical boundaries and without significant temporal delay; 2) individuality, contributing to the capability to communicate from person-to-person, with the calling and called person identifiable individually, which is especially relevant for the practices of intimacy studied here; and 3) portability, contributing to the capability to communicate, to a certain extent, independent of location and while underway.

With "intimate relationships", we specifically denote "committed couple relationships" (Prager / Roberts 2004: 47), in contrast to "intimate relations" of a non-romantic nature, e.g. between siblings or friends, whereby the degree of both commitment and romanticism can of course be relative. Thus we include here a broader spectrum of couple relations, spanning from explicitly romantic love relations to the more routinised and functional relations between long-time married couples. Building upon a relational and dialectical understanding of relations, we consider them as being constituted by "structural" (the actors, their embodied knowledge, their positionalities and the relations between them) and "agential" factors, i.e. the practices that are part of the intimate relationship.[7] We focus our analysis on the "spatialities" of communication practices – that is, how actors embed mediated communication into their practices of intimacy and how the sites of such practices of intimacy shift. With practices we refer to routinised and social actions, involving also motivations, relevant knowledge and technology use, among others (cf. Reckwitz 2002).

In our empirical material, actors engage with the communicative affordances of mobile phones in different ways, overcoming different constraints to their desire to practice intimate relationships. Following Anthony Giddens (1984)[8], we summarise these constraints in the two categories of: 1) material constraints, for example the spatial separation of migrant couples or the walls and buildings separating the male and female university dormitories; and 2) normative constraints, for example the restrictions regarding

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[6]   Translocal and synchronous communication is not an affordance unique to mobile phones, but also applies to landline phones. It was included here, as for the majority of the population in Bangladesh the mobile phone was and is the first means of mediated communication.

[7]   We ground our understanding of the relationship between structural and agential factors in structuration theory (Stones 2005; Giddens 1984).

[8]   Giddens (1984: 174–177) refers to the second as "constraint associated with sanctions"; he further adds the category of "structural constraint", denoting constraints stemming from the "contextuality of action" (p. 176), for example the inequalities, power imbalances and structural forces for labour migration, such as rural poverty and the availability of industrial labour in urban centres. We leave out these structural constraints, as mobile communication in our cases does not contribute significantly to overcoming structural constraints.

the display of affection in public places, or the behavioural expectations especially towards women and adolescent girls, regarding interaction and mobility. The illustrative cases cover different aspects of these constraints, and the various communicative affordances the actors employ to overcome them.

We base our study on data that was obtained through fieldwork in Dhaka and two villages in Northern Bangladesh (Hasanpur and Dosmouza in Rangpur district) in three field stays between 2011 and 2013. These include semi-structured interviews with students of the University of Dhaka (16 men and 4 women), villagers (16 men and 4 women) and rural-to-urban migrants (20 men and 8 women); a focus group discussion with students of the University of Dhaka; a survey conducted among 145 village households and 46 migrant relatives of those households living in Dhaka; as well as observations. Part of the empirical study (involving the 20 student interviews, and a survey with 32 participants) was explicitly dedicated to research on the effect of mobile communication on couple relations among university students in Dhaka (Gerads 2013); the other part was conducted on more general aspects of ICT and translocality (Sterly 2015). The interviews and the focus group discussion were recorded, transcribed and translated, and the texts were analysed with qualitative content analysis using MAXQda.

It was clearly a limiting factor that only a small number of women were interviewed, and that both the researchers and their translators were male. Nonetheless, there were surprisingly open discussions on topics such as intimacy, harassment, fidelity, etc. with interview partners, sometimes also when in a group and at places in public but not audible to others (e.g. university lawn, courtyards). Interviews with villagers and migrant workers were conducted with translators, those with students directly by the researchers. Students reported being quite open about these topics also with their friends. To create an open and trustful atmosphere, other interviews were conducted at people's homes or at places ensuring privacy. Interview partners were usually visited more than once; in some cases the first author met them repeatedly over the course of three years. In the case of the students interviewed, it was helpful that the second author was a student himself at that time, sharing the same life phase with those interviewed.

In the interviews with migrants and their families, questions regarding intimacy were only one of the topics covered, making it easier to broach the issue and gauge the openness of the interview partners, rather than insisting on covering the topic. All interview partners were asked for their oral consent and were advised that they could at any time skip questions or end the interview entirely if they felt uncomfortable. When the researchers or the translators had the impression that interviewees were uneasy with particular topics, those questions were skipped. It was made clear that all information

obtained would be used for research purposes only, and that all names would be anonymised.

3. Changing topographies of intimacy and distance in Dhaka and Bangladesh

In order to contextualise the topic of mediatised intimacy, it is important to consider certain spatial aspects of gender relations in Bangladesh.[9] In Bangladesh, as in other South Asian countries, one particularly strong aspect of gender inequality relates to women's mobility and access to public space. *Purdah* (literally "veil") is the socio-spatial expression of this, a set of practices and norms referring to the spatial separation of women from (non-related) men. One strong underlying reason for this is the objective of restricting inter-gender interactions, especially of adolescent girls with boys or men, an objective largely grounded in notions of purity and family honour (Rozario 2007). This often means the females' exclusion from public space in order to prevent (intimate) encounters of women and especially of adolescent girls with men, and, in effect, their confinement to the courtyard or the immediate neighbourhood – the private or semi-private space where a woman and her social status will be safely known to others (Ghafur 2002; Feldman 2010; Hackenbroch 2013). Outside of these spaces, male guardianship is important for women's security, status and identity. These restrictions severely limit the chances for many women to participate in social, economic and cultural life – including access to markets with the resulting limit in access to resources and inputs, access to schooling, apart from religious schools, and access to general and reproductive healthcare – and it often means social isolation and limited access to networks outside the immediate family.[10]

This does not go unchallenged and unchanged: in the past decades in particular, the large-scale employment of women in the garment industry has contributed to changes, and for many women mobility and participation have increased. These changes are gradual, however, and there are currently strong struggles between proponents advocating women's rights and conservative, often religious groups opposed to them (Hussain 2010). The set of

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[9]   Although these descriptions and assumptions are reductive to a certain degree, we want to highlight that it is difficult to ascribe general gender patterns to such a diverse society as in Bangladesh, where gender relations vary with factors such as religion, age, social status and connectedness, employment status, wealth, ethnicity or locale, and are also in transition (van Schendel 2009).

[10]   See Hunt / Kasynathan 2001; Hossain / Kabir 2001.

purdah-related rules and norms apply differently, depending on social position, space and time – the social position determined by, among others, age, marital status, gender, wealth and income, occupation and education (Dannecker 2015). For middle-class urban Bangladeshi women, for example, unaccompanied walks in the general public would threaten their reputation, whereas for women from poorer income strata, their presence in the public space is generally accepted for the sake of income generation (Hackenbroch 2013).

The public display of intimacy is generally regarded as inappropriate in Bangladesh. Urban settings tend to provide a more liberal space than rural or village settings (Muna 2005), but also within urban areas there are regions or quarters known for their more liberal or more conservative attitudes regarding intimacy (e.g. Old Dhaka is considered to be more conservative than university campuses). Other examples include the spatial separation of students in male and female dormitories, or "special" places in Dhaka where the public display of affection, in the form of holding hands or light hugging, is tolerated. Examples of such places are the recreational area around Dhanmondi Lake, parts of the University of Dhaka's campus like the Teacher Student Centre or Curzon Hall, cinemas, cafés and restaurants, especially in the Dhanmondi area, and on rickshaws (Gerads 2013). Students interviewed by Daniel Gerads (2013) note that especially in certain cafés, the level of acceptance of couples has increased in the past years, to an extent that such places are now explicitly designed to offer privacy for couples.

Thus a multi-scalar and fine-grained "topography" of intimacy emerges. At some places the norms pertaining to the practices of intimacy change also with the time of day: certain meeting points in public parks are more frequented by couples in the afternoon, but there are also places where intergender contacts are restricted at certain times, e.g. the student dorms that are strictly off-limits for members of the opposite gender during the night. These norms are changing and being challenged, in some places and by some groups of society which are opening up, for example by young middle-class people in urban areas and by students, as mentioned above. But there is also a growing pressure for compliance with traditional norms, reflected by high levels of domestic violence and sexual harassment, driven both by the growing participation of women in the economy and their presence in the public space, as well as by increasingly polarised discourses on gender equality, tradition and modernity, and religious orthodoxy and liberty (Hussain 2010; Rozario / Samuel 2010; Feldman 2010).

3.1   Intimacy at a distance

Rural-to-urban migration, albeit becoming less dominant compared to other migration patterns (e.g. rural-to-rural due to changing agricultural production systems), remains a major phenomenon of population dynamics in Bangladesh: approximately 1.77 million migrants came to Dhaka between 2010 and 2015 (BBS 2015b). One consequence of this is the frequent separation of couples due to migration, when one partner – often, but not exclusively the husband – moves to urban centres such as Dhaka for work. Only about 10 per cent (23 out of 191 surveyed households) of the households interviewed in the quantitative survey had a spouse living in another place, Dhaka or the village respectively, but given the large number of migrants, there is certainly a significant number of long-distance relationships.

For those couples mobile communication is an important way of staying connected across distance. Before mobile phones were available for personal use, migrants in cities would usually rely on privately owned call shops that offered calls at affordable rates, while the family left in the village would rely on relatives' or neighbours' or also public phones. Few migrants can afford the money and time needed to visit their family in the village on a weekly basis, for example, and thus visits by spouses take place on average every two months among the 191 surveyed migrants. Most of the interviewed long-distance couples exchange daily phone calls. Frequent and regular calls, and more so, the possibility of phoning at any time, are important for the everyday practicing of long-distance couple relationships. These entail the exchange of information on "family matters", for example what people are doing, their wellbeing, household and livelihood matters, as well as the experience of shared moments. Sajeda[11], a village resident, reports on the most important topics about which she usually speaks with her husband:

> Are the kids all right or not, have they eaten or not? What happened, what is the situation? Do we have money or not?[12]

A frequently occurring motif in the interviews was a sense of insecurity, resulting from not knowing the whereabouts and the wellbeing of the distant partners and other family members, both in the village and in Dhaka. The mobile phone was perceived as helping to reduce this tension, by enabling partners to quickly and instantaneously enquire about each other's wellbeing.

> [If we did not have mobile phones] it would be a kind of suffering. We can't know or tell what goes on here or there. If they do not call for one or

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[11]   All names of persons interviewed are changed to ensure their anonymity.

[12]   Interview with Sajeda, housewife in a village, husband pulls rickshaw in Dhaka; interviewed in Rangpur, 16 November 2011.

two days, our hearts becomes restless: how are they or what is their situation?[13]

When I had no mobile, I got more afraid. After passing seven days, I was full of tension about what was going on there in my house, as I don't go home, no news could be found. Now I get informed with day-to-day news, even minute-to-minute news.[14]

Here, actors clearly make reference to the mobile phone's affordances for translocal and synchronous communication to overcome the spatial constraints resulting from their separation. In addition to, and often overlaying such more practical and functional aspects, the experience of co-presence, shared time and attention, of "hearing the voice" of and being near to the other are also important parts of practicing relationships:

If I communicate I feel that I am able to get the news from home every day, [I] don't feel the distance.[15]

The communication by phone, compared to face-to-face interaction, does not seem to negatively affect the quality of their relationship. Forid explains[16]:

Interviewer: Do people visit personally or do they communicate by mobile?
Respondent: [They] communicate by mobile.
Interviewer: [They] communicate by mobile.
Respondent: Yes, [they] communicate by mobile, people value the time now.
Interviewer: Okay, [if] they are communicating by phone, does this damage the relationship?
Respondent: No no.
Interviewer: Because, look, if you visit personally and speak, it creates love and affection.
Respondent: No, if you speak by mobile, it also creates love. It does not destroy the attachment.
Interviewer: Okay, the attachment is the same if you visit personally or speak by mobile?
Respondent: Yes, [when] you speak by mobile, it stays the same.

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[13]   Interview with Rahim, vegetable trader, living in Dhaka with a wife and family in the village in Rangpur; interviewed in Dhaka, 8 March 2013.

[14]   Interview with Jalal, rickshaw puller in Dhaka with a wife in the village in Rangpur; interviewed in Dhaka, 6 November 2011.

[15]   Interview with Forid, factory worker in Dhaka with a wife and family living in the village in Rangpur; interviewed in Dhaka, 9 March 2013.

[16]   Interview with Forid, factory worker in Dhaka with a wife and family living in the village in Rangpur; interviewed in Dhaka, 9 March 2013.

About two-thirds (15 out 23) of spatially separated (migrant worker) couples reported that communicating by mobile phone meant an improvement ("improved" or "improved a little") in their couple relationship, compared with about half (12 out of 23) who reported an improvement in relations with other relatives (see Figure 1).

FIGURE 1: Changing relationships: couples with spatial separation vs. other relatives ("How did having and using the mobile phone change your relations with the following people?")
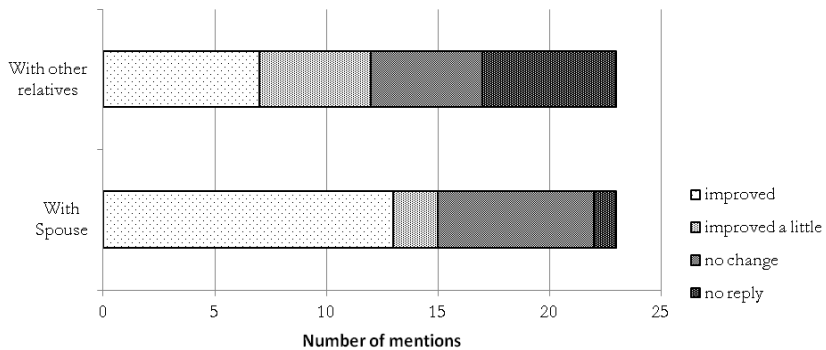
Source: Household survey (n=23 spatially separated couples)

One of the interviewed students recounts that he had a girlfriend in his native village at the time when he came to Dhaka for his studies:

> Hmm, actually I met her [face to face] after 4 to 6 months. In that case there was no other way without a mobile phone. Every day we talked and we talked after my class and whenever we got free time we talked. […] Average two or three hours […] per day. She was a village girl and stayed very busy with her daily chores and talked with me at night. [We] talked more by mobile, and face-to-face [only] after a couple of months. When I went home or went there for any work. Then we talked [face-to-face].[17]

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17   Interview 20, with male student, Bangladesh University of Engineering and Technology, Dhaka, 20 March 2013.

The translocal connectivity that mobile communication affords is obviously the most important factor in linking places both over distances and through walls, and in getting and "staying connected" with spatially distant partners. The synchronicity affords the experiencing of shared time and of co-presence that are important aspects of intimacy. The individuality and personalisation afforded by mobile phones seems not so important for most migrant workers, and many of them share their phones with other family members. Some of the interviewed migrant workers reported that they prefer to make calls to their partners from their homes or private places, in some cases because they enjoy more privacy at these places, but also because there might be other relatives who take the phone during or after the conversation to participate as well. However Rabiul, one rickshaw puller, comments on the quality of communication, when it comes to talking to his wife, indicating a need for privacy also in some of these cases:

> It is one type of conversation from [your] own mobile and [laughs] it is another type of conversation from another's mobile.[18] (Interview Rabiul).

Portability, affording communication from person to person and relatively independent of place, is of some relevance for migrants' relationships, as it enables them to reach their partners at any place and thus (and this is more central) at any time, wherever they may be – an option that is important, for example, in situations of emotional distress.

3.2 Mobile romancing

In Bangladesh, the term "mobile romancing" is commonly used to describe the practice of calling another's (mobile) telephone and attempting to enter into a romantic relationship, or to sustain such a relationship largely by telephone. The numbers of potential contacts are sometimes dialed at random; sometimes the numbers are given by acquaintances or also bought from prepaid balance vendors:

> [You can get numbers] from flex load shops; sometimes girls leave their numbers because they need to recharge and then I go to the guy to ask for the girl's number; sometimes you need to pay him a little bit.[19]

Mobile romancing – although not in its "mobile" form – seems not to be a new phenomenon. Farah Ghuznavi (2005) notes that already in the pre-mobile-phone era, it was a "common activity for bored [urban middle class] teenagers (usually in the afternoon, when their parents were asleep) […] to

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18 Interview with Rabiul, village, 15 November 2011.

19 Interview 23, with male student, Dhaka University, 20 March 2013.

ring up random numbers in the hope of chatting to someone of the opposite sex". We would however argue that the most important motivation for "mobile romancing" is not boredom, but rather the normative constraints that bar adolescents and women, in particular, from interacting with members of the opposite sex and from entering into intimate relationships with them.

Establishing a relationship through calling an unknown person necessitates some negotiation and persuasion, often also involving highlighting or pretending to have been "introduced" by a person known to both caller and called:

> Suppose, a call or message comes to someone's mobile. In fact there is no relation or identification of that girl. Suppose a boy has got a number of a girl and she is from some place, suppose from Dhaka to Rangpur. "From where have you got my number?" "From that person." In that way people talk to an unknown number.[20]

In many cases mobile romance partners will try to meet at a certain point in their relationship, but sometimes adolescents pursue mobile romances also "just for fun":

> If they fall in love, whether the boy falls in love or the girl falls in love, then they must meet one another, at some point they must meet. Doesn't it happen? Yes, in most of the cases it happens. Besides, sometimes they do this just for fun. Okay, they're having fun living at a distant place. Such things happen.[21]

Data from the survey suggests that men are by far the more active callers, but that women also actively engage in mobile romancing (see Figure 2). In the qualitative interviews with rural-to-urban labour migrants, only men answered on the topic directly; those with their own experiences in mobile romancing reported on it mostly positively, for example as a diversion in their daily life, as Maruf, a farmer from a village in Rangpur explains:

> [As] I'm a man, it's a matter of manly emotion. It feels good to talk with other [women]. But it's not possible to talk more freely face-to-face, that is easier by mobile.[22]

However, Bintu, a rickshaw puller in Dhaka, is aware that his calls are also perceived negatively by women:

> I myself annoy people, that's it. Suppose suddenly a woman, a girl called me, I ask again which place is that? How did you make the call? Where did you get my number? [She says:] "The call went to a wrong number",

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20   Interview with Bimol, rickshaw puller, Dhaka, 6 November 2011.

21   Interview with Din Islam, rickshaw puller, Dhaka, 24 March 2011.

22   Interview with Maruf, farmer, Rangpur, 16 November 2011.

> then for a couple of days I call her and talk, then she becomes disturbed and tells me please don't call me at this number.[23]

All interviewed female students perceived mobile romancing (in the sense of getting involved in a relationship) as negative. For them, it does not enable one to find out about the true character of a partner, or even bears the risk of being cheated:

> I really do not think it is a good thing and most of the people, I have seen my friends doing it, they make wrong decisions in this matter, the person might not be the same after you get involved with the person.[24]

The unwanted calls are also seen as a form of harassment[25]:

Interviewer: So do you get sometimes calls from unknown numbers from boys who want to talk to you?

Respondent: Yeah, I did too, and I changed my SIM because of so many disturbing calls.

A recurring motif in many interviews was the loss of control of parents over their children, especially their daughters: many interviewees were of the opinion that having access to a mobile phone would enable adolescents to engage in relationships without their parents' knowledge and consent:

> [S]uppose if a girl has a mobile, [and the] girl is not married yet […] that girl builds a relationship with a boy, is it not bad? […D]on't we have to control her, don't we have to restrict her in an environment? […] Are not girls a bit desperate? They will become desperate and will [want to] know more. Then, after knowing that, wouldn't girls, wouldn't they leave their parents?[26]

One interviewee[27] recounted the story of her 13-year-old daughter who, through repeated phone calls, fell in love and engaged in a relationship with a boy, whom she married in a civil ceremony. The girl's mother contested the marriage, as the girl was not of legal age, and because she repeatedly ran away with the boy, she was held in custody in a children's home for a while. Such stories, however, can be read from two sides: on the one hand as adolescents and especially girls being victims of their inexperience and of abuse or cheating by untrustworthy men and the resulting perturbations of family life. But on the other hand it also means the escape of adolescents (and again

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23   Interview with Bintu, rickshaw puller, Dhaka, 22 March 2011.

24   Interview with female student, Dhaka, 20 March 2013.

25   Interview with female student, Dhaka, 20 March 2013.

26   Interview with Anwara, housewife, Rangpur village, 12 November 2011.

27   Interview with Shilpi, housewife, Dhaka, 6 December 2011.

especially of young women) from the rigid and strict control over their mobility and social networks.

The motivations for engaging in and the character of the relationships established vary – and of course change over time: from diversion and curiosity for something new, to serious kinds of engagement (with the potential for marriage and thus legitimation of the relationship), to extramarital affairs conducted and managed secretly through the phone. One interview partner told the story of the husband of his cousin, who had a secret extramarital relationship with an unmarried woman for several months while they were both living in the same housing compound in Dhaka. As the man was living there together with his wife (both working in a garment factory) and many of the inhabitants of this housing complex were migrants from the same rural area, social control was tight. They were thus only able to practice their relationship while communicating over mobile phone, calling each other while being in their rooms, during work breaks, or when the man was walking through the streets alone.[28]

At least among the individuals covered by the survey, the phenomenon does not seem to be marginal; data from the survey suggest that nearly 15 per cent of interviewed villagers (21 out of 145) reported that they had experienced mobile romancing before, while for interviewed migrants in Dhaka, the figure was 70 per cent (33 out of 46). This difference results largely from the Dhaka migrants' reporting a higher incidence of actively calling others. We interpret this as resulting from the larger freedom of mobility and thus privacy that men – who make up the majority of the migrants – enjoy, as well as from a higher level of acceptance, for example in the group dormitories of the rickshaw garages. In both the village and the city, however, the number of those reporting active engagement in mobile romancing was significantly higher than those only passively receiving calls (17 vs. 4 in the village, and 31 vs. 2 in Dhaka; see Figure 2). The data from the survey also indicates that about half (urban) and a little less than half (village) of those who reported being actively engaged in mobile romancing are married, with men seeming to be two to three times more active callers than women (however this may be attributable to the fact that men more easily report being active callers than women).

The example of mobile romancing shows how actors employ all (translocal, individual and portable) affordances of mobile communication to overcome spatial and normative constraints; the ability to communicate across distances and through walls matters for avoiding normative sanctions,

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28   Interview with Maruf, village in Rangpur, 16 November 2011.

as it helps to hide the relationship as well as the interaction. Person-to-person connectivity is very important, as it would not be possible to keep the relationship secret to that extent when using a shared phone (be it mobile or fixed, e.g. through a phone shop). For getting connected to a partner for mobile romancing, individual connectivity is also essential. For anyone involved in mobile romancing, the ability to call from places where they are alone or in an anonymous social context often necessitates also the portability of the phone, as in Bangladesh in both urban and village settings there is not much space for privacy in, for example, housing compounds.

FIGURE 2: Mobile romancing practices, by gender and by location ("Have you ever experienced mobile romancing, being called repeatedly by other persons?"; "Have you ever practiced mobile romancing yourself, calling someone?")
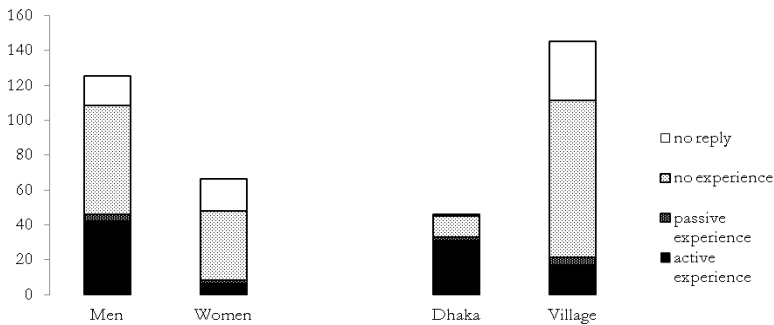
Source: Household survey (n=191)

3.3   "Call me in the dorm" – students' night talks

Of the various practices of intimacy that students engage in, we will focus here on the mutual calling of partners when they are in their dormitories. This could be considered as a special form of mobile romancing, but with the important difference that for the students this is largely an additional way of practicing intimacy (in addition to the possibility to meet face-to-face in various places), and in most cases their intimate relationships are regarded as legitimate, at least in their immediate social environment (friends, other

students). The students value the possibilities for couples to meet and spend time face-to-face in Dhaka:

> That is quite easy in Dhaka, like this campus […] is a good place, other places like shopping malls or restaurants, but outside of Dhaka it is quite tough, you will not get a good place […] this is quite risky outside of Dhaka, but Dhaka is a secure place.[29]

More than two thirds of the interviewed students report that they have been friends in one form or another before entering their intimate relationships; the option of establishing a relationship through mobile communication in the first place seems to apply only for a few students.

The majority of the interviewed students were living in dormitories inside the University of Dhaka campus, where access for students of the opposite sex is generally limited, and entry and exit are prohibited after 9:30 pm. The night is the preferred time for engaging in long conversations with their intimate partners, for a number of reasons: the strict separation in male and female dormitories poses significant material and socio-spatial constraints, rendering face-to-face encounters difficult after nightfall; during the daytime the students often engage in other activities (classes, meeting friends, etc.); and during the night, usually after midnight, the mobile communication providers have special offers with much cheaper rates. Thus the students reported that they and many of their friends frequently call their partners at night, with calls lasting between one and three hours per night:

> Generally [we] talked a lot by mobile at night. In the day [we] talked less by mobile. She is busy and me also.[30]

> I call most of the time from my department, but at midnight I call her then, calling one to two hours, 1 am to 3 am.[31]

> […] communicating with your girlfriend and mostly in the night hours, then you are staying in the dormitory or in your house, you can talk with […] with the lowest call rate.[32]

Topics that students talk about cover "anything, just random talking, just having a conversation with my partner […] even serious topics, stupid talk, anything"[33], from everyday topics such as classroom issues, to arranging meetings the next day, to romantic topics. These night-time talks sometimes also turn to erotic topics:

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[29]   Interview 21, with student, Dhaka, 20 March 2013.

[30]   Interview 20, with male student, Dhaka, 20 March 2013

[31]   Interview 2, with male student, Dhaka, 20 March 2013.

[32]   Interview 13, with male student, Dhaka, 20 March 2013.

[33]   Interview 1, with male student, Dhaka, 20 March 2013.

> By mobile what was … we were both adults. So, there were erotic issues. So, we talked a lot about erotic things on the phone. That mainly … what should I say, everyone has some attraction towards the opposite sex. So, in that case we talked about this. […] Again what I said, we have a crisis for private locations, so we never talked about those [issues] in front [of others].[34]

A remark from a female student hints at the lack of time-space opportunities (and the acceptance) for private talks as a motivation for shifting romantic conversations to mediatised communication:

> You can talk, you can share your soul emotions and also your very core, very deep feelings through your mobile. I used to share like that. I'm not that comfortable in front of my friends, also in front [of] my close friends, also maybe on campus or any other place. I don't feel that comfortable. So the mobile phone is that place where there's only [the] two of us at this stage. So [on the mobile phone], as I said, [I] share my very inner feelings and romance also.[35]

A minority of the interviewed students stated that talking with their partner over the phone does replace face-to-face meetings to some extent, when there is no other chance or time to meet:

> Sometimes they don't meet because maybe they don't have time to meet, but then they can just talk over the mobile phone instead of meeting personally.[36]

For the students these night-time talks are an important spatio-temporal extension of practicing intimate relations, supplementing the daytime face-to-face meetings with interactions in the night and in the translocal sphere:

> Yes, obviously because we keep in contact through mobile phones, texting, talking, as we do not live together at night.[37]

With this night-time extension of practicing intimacy, the students employ in particular the translocal and individual affordances of mobile communication and thereby overcome material/spatial and normative constraints. Portability is of secondary importance for these night-time talks (if they had individual fixed-line telephones in their dormitories, they could still call each other during the night), however in many other contexts of the students' communicative intimacy it is relevant as well, for example for calls on-the-go, or for quickly rearranging meetings with their partners.

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[34]   Interview 12, with male student, Dhaka, 20 March 2013.

[35]   Interview 16, with female student, Dhaka University Campus, 20 March 2013.

[36]   Interview 17, with male student, Dhaka, 20 March 2013.

[37]   Interview 1, with male student, Dhaka, 20 March 2013.

4. Mobile communication and changing practices of intimate relationships

Actors in the three examples face very different constraints regarding practicing their couple relationships, and thus employ different communicative affordances to overcome them: the migrant couples, being mostly engaged in legitimate marriage relationships, are separated by spatial distance, and by financial and temporal constraints for face-to-face visits. For them the translocal and synchronous communication is the most relevant aspect of mobile phones. The portability of mobile phones is somewhat important, as it enables calling and being called at any time, whereas the individuality seems to be of less relevance and more a matter of convenience. Partners engaging in mobile romancing have to overcome spatial, but especially normative constraints prohibiting their mostly illicit relationships. Thus they depend on the ability to communicate translocally – as women, especially, enjoy limited spatial mobility. The individuality and – to a lesser extent – also portability of mobile phones help to keep relations secret and hidden from the social context. For their nightly calls from dorm to dorm, the students rely on the translocality and synchronicity of mobile phones, whereas the person-to-person connectivity is important in the context of shared dormitories.

4.1 Quotidianisation, escape control, extension in space-time

The migrant couples in the first example can be seen as "truly translocalising" and "quotidianising" their relations: before mobile phones, the structural aspects of their relations already spanned distances, but the agential or practice aspects were mostly limited to occasional – and mainly local – face-to-face visits in the village. With frequent calls (and the ability to make them), the occasional and thus extraordinary communication became a daily, quotidian practice. The high amount of money that even poorer labour migrants spend on calling their distant family and partners indicates that they value this quotidianisation.

For those engaging in mobile romancing, the most notable change is probably the ability to "escape control", in the sense of overcoming the strong normative constraints and restrictions regarding mobility and intimacy: for them it might not be so important when or how often they can call their – mostly secret – partner, but *that* they can do so at all. Especially for women and adolescents (assuming that they don't feel harassed in the particular case), we interpret this ability to subvert or transgress restrictive regimes of control as an important widening of their scope of agency.

The students engaging in night-time conversations are considerably extending their practices of intimacy in space-time – calling from dorm to dorm and during the night. As they enjoy some degree of freedom to meet face-to-face, and as their relations are regarded as legitimate by their peer groups on the campus, their nightly calls from dorm to dorm enable them to continue and to supplement their daily practices of meeting and communicating in person.

4.2   Shifting topographies: translocalisation and re-regionalisation

The three examples – of long-distance relations, romancing and dorm-calling – show that actors are translocalising the topographies of intimacy. This happens on different scales, linking for example persons and/or places over long distances in the case of migrant workers, but also over shorter distances, as the example of the dorm-to-dorm calls show, or possibly even from within the same building. The communicative practicing of intimate relationships – sharing everyday news, experiencing jointly spent time, hearing the other's voice – takes place synchronously at different sites.

This comes very close to our understanding of translocality, explicitly aimed at capturing the "simultaneous situatedness across different locales" (Brickell / Datta 2011: 4). In addition to being spread between locations, intimate communication is also extended to other and new places and times – new in the sense that intimacy was not part of the set of practices previously associated with and performed at those places and times. We conceive these changes as a re-regionalisation of practices of communicative intimacy, a restructuring of the spatial and temporal ordering of everyday life (Giddens 1984). Existing and new practices of intimacy are literally "taking (new) place(s)": they are extended or sometimes shifted to places beyond (but still including) rural and urban homesteads – to roads and footpaths, study and workplaces, rickshaws and libraries, student dorms, etc.

Furthermore, and although our data does not allow general statements about changes in power relations, we would argue that the cases outlined above show an increase in the actors' scope for agency and in their capabilities of overcoming constraints. Students and migrant couples make use of their increased capacity to practice their intimate relations, and mobile romancing partners engage in new intimate practices and relations, trespassing normative regulations. The dynamic along the axis of freedom and control is, however, complex, especially from a gender perspective: some of the interviewed women express the fact that they are deliberately creating or sustaining a sense of control on the part of their husbands or guardians, while enjoying a higher degree of mobility and freedom.

The role of the mobile phone in this interplay of control and freedom would be both that of an "electronic leash" (used to control and trace people, Caron / Caronia 2007: 210) as well as a "portable *purdah*": analogous but much more subversive, than adopting the custom of wearing a *burkha* in order to gain access to public space (a strategy described by Feldman / McCarthy 1983) or to re-define *purdah* as a "state of mind" that women "carry" with them and that thus enables more mobility (Shehabuddin 2008: 4).

5.   Conclusion

The rise of mobile communication has contributed to significant changes in what we call "topographies of intimacy" in Bangladesh, by enabling actors to partly translocalise and re-regionalise their practices of intimacy, and also to engage in new forms of intimate relationships. They also integrate other places and times in their everyday practices of intimate relationships, thereby re-regionalising this topography. To a limited extent, we can interpret this mediatisation as a form of "virtualisation" of communication.

People do not substitute face-to-face interaction with mediated inter-action, but rather they make use of and blend both modes into a hybrid form of intimate communication that fits their specific circumstances and needs. Thus "a complex co-evolution, articulation and synergy between place-based and telemediated exchange" (Graham 1998: 172) emerges from the specific practices, constraints and affordances relevant in the Bangladesh context. Actors actively engage in the employment of the affordances of the technology to achieve their subjective goals – here to communicate daily with spouses over distance, to escape control and interact with someone secretly and/or over distance, or to extend the practices of intimacy in time and/or space.

The differentiation of constraints and affordances was helpful for revealing the mechanisms of mediatisation in the practicing of intimacy, and to make inferences about structural changes. The use of the same technology (mobile communication) for basically the same purpose (the practicing of intimate relationships) may have very different structural outcomes: through overcoming material (and spatial) constraints, the sense of place and distance, and of material and spatial separation, is changed. Through overcoming normative constraints through employing the personalisation and portability affordances of mobile communication, social norms and expectations are subverted and challenged.

Our data would not be sufficient to infer larger changes in important dimensions of gender structures such as power relations, positionalities or institutions such as marriage. However, we can assert an increase in many

women's scope for agency, with regard to the ability to communicate and interact with people outside their immediate (and often limited) social context, confirming Hossain / Beresford's (2012) findings of the high potential of mobile communication to improve the social embeddedness of women. We suppose that it is not by chance that in a country with mobility-restricting structures such as the *purdah*, mobile romancing seems to be fairly wide-spread. The mobile phone, combining characteristics of an "electronic leash" (Caron / Caronia 2007) and a *portable purdah*, affords a higher degree of mobility for women, but also increased control through family and male guardians.

To conclude, if Romeo and Juliet were living and growing up in contemporary Bangladesh, they would most probably be mobile phone users. As such they would be able to effectively conceal their relationship from their families, and they would be able to stay in almost constant contact, thus avoiding a whole range of tragic events (however they – most likely Juliet – might also be subject to newly emerging forms of intrigues and harassment). They would be able to stay connected and sustain their "intimacy at a distance" (Wajcman et al. 2008: 647) even if separated through labour migration. And although growing up in what would be frequently labelled as a "developing context" or the "Global South", they would form part of co-occurring processes of global social change, a fundamental re-orientation from spatially bound communities towards more mobile and fluid, networked and individual forms of social organisation (Castells 1996).

References

Anwar, Misita / Johanson, Graeme (2012): Mobile Phones, Family and Personal Relationships: The Case of Indonesian Micro-entrepreneurs. In: Karl Aberer / Andreas Flache / Wander Jager / Ling Liu / Jie Tang / Christophe Guéret (eds): *Social Informatics. Proceedings of the 4th International Conference SocInfo 2012, Lausanne, Switzerland, December 5–7, 2012*. Heidelberg: Springer, pp. 216–231.

Archambault, Julie Soleil (2011): Breaking up "Because of the Phone" and the Transformative Potential of Information in Southern Mozambique. *New Media & Society* 13(3), pp. 444–456.

Bangladesh Bureau of Statistics (BBS) (2015a): Total Population Statistics. BBS, http://www.bbs.gov.bd/Home.aspx (accessed 27 December 2015).

Bangladesh Bureau of Statistics (BBS) (2015b): Population and Housing Census 2011. http://203.112.218.69/redbgd/docs/SED_REPORT_Vol4_lf.pdf (accessed 27 December 2015).

Bangladesh Telecommunication Regulatory Commission (BTRC) (2015): Mobile Phone Subscribers in Bangladesh October 2015. BTRC, http://www.btrc.gov.bd/content/mobile-phone-subscribers-bangladesh-october-2015 (accessed 18 December 2015).

Brickell, Katherine / Datta, Ayona (2011): Introduction. Translocal Geographies. In: Katherine Brickell / Ayona Datta (eds): *Translocal Geographies. Spaces, Places, Connections*. Surrey: Ashgate, pp. 3–22.

Caron, André H. / Caronia, Letizia (2007): *Moving Cultures. Mobile Communication in Everyday Life*. Montreal & Kingston: McGill-Queen's University Press.

Castells, Manuel (1996): *The Rise of the Network Society*. Malden, Mass.: Blackwell.

Cui, Di (2016): Beyond "Connected Presence": Multimedia Mobile Instant Messaging in Close Relationship Management. *Mobile Media & Communication* 4(1), pp. 19–36.

Dannecker, Petra (2015): Conformity or Resistance? Women Workers in the Garment Factories in Bangladesh. Working Paper 326, Faculty of Sociology, University Bielefeld, https://www.uni-bielefeld.de/(en)/tdrc/ag_sozanth/publications/working_papers/wp326.pdf (accessed 8 June 2016).

Döring, Nicola (2015): Smartphones, Sex und Social Media: Erwachsenwerden im Digitalzeitalter. *TeleviZion* 28(1), pp. 12–19

Duran, Robert L. / Kelly, Lynne / Rotaru, Teodora (2011): Mobile Phones in Romantic Relationships and the Dialectic of Autonomy versus Connection. *Communication Quarterly* 59(1), pp. 19–36.

Faraj, Azad (2012): The Materiality of Technology: An Affordance Perspective. In: Paul. M. Leonardi / Bonnie. A. Nardi / Jannis Kallinikos (eds): *Materiality and Organising: Social Interaction in a Technological World*. Oxford: Oxford University Press, pp. 237–258.

Feldman, Shelley (2010): Shame and Honour: The Violence of Gendered Norms under Conditions of Global Crisis. *Women's Studies International Forum* 33(4), pp. 305–315.

Feldman, Shelley / McCarthy, Florence E. (1983): Purdah and Changing Patterns of Social Control among Rural Women in Bangladesh. *Journal of Marriage and Family* 45(4), pp. 949–959.

Gaver, William W. (1996): Affordances for Interaction: The Social is Material for Design. *Ecological Psychology* 8(2), pp. 111–129.

Gerads, Daniel (2013): Mobilkommunikation und die Räumlichkeit von Partnerbeziehungen. Das Beispiel von Studenten in Dhaka, Bangladesch. Master Thesis, University of Cologne.

Ghafur, Shayer (2002): Gender Implications of Space Use in Home-based Work: Evidences from Slums in Bangladesh. *Habitat International* 26(1), pp. 33–50.

Ghuznavi, Farah (2005): Complex Communications. *The Daily Star Weekend Magazine* 4(64), 23 September. http://archive.thedailystar.net/magazine/2005/09/04/food.htm (accessed 23 November 2015).

Gibson, James J. (1980): *The Ecological Approach to Visual Perception*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Giddens, Anthony (1984): *The Constitution of Society. Outline of the Theory of Structuration*. Cambridge: Polity.

Goggin, Gerard (2006): *Cell Phone Culture: Mobile Technology in Everyday Life*. London / New York: Routledge.

Goluboff, Sascha (2016): Text to Sex: The Impact of Cell Phones on Hooking up and Sexuality on Campus. *Mobile Media & Communication* 4(1), pp. 102–120.

Graham, Stephen (1998): The End of Geography or the Explosion of Place? Conceptualising Space, Place and Information Technology. *Progress in Human Geography* 22(2), pp. 165–185.

Greiner, Clemens / Sakdapolrak, Patrick (2013): Translocality. Concepts, Applications and Emerging Research Perspectives, *Geography Compass* 7(5), pp. 373–384.

Hackenbroch, Kirsten (2013): The Spatiality of Livelihoods. Negotiations of Access to Public Space in Dhaka, Bangladesh. Stuttgart: Franz Steiner Verlag.

Hall, Jeffrey A. / Baym, Nancy K. / Miltner, Kate M. (2014): Put down that Phone and Talk to Me: Understanding the Roles of Mobile Phone Norm Adherence and Similarity in Relationships. *Mobile Media & Communication* 2(2), pp. 134–153.

Höflich, Joachim R. / Linke, Christine (2011): Mobile Communication in Intimate Relationships: Relationship Development and the Multiple Dialectics of Couples' Media Usage and Communication. In: Richard Seyler Ling / Scott W. Campbell (eds): *Mobile Communication. Bringing us together and Tearing us apart*. New Brunswick, N.J.: Transaction Publishers, pp. 107–126.

Hossain, M. K. / Kabir, M. (2001): Purdah, Mobility and Women's Empowerment and Reproductive Behaviour in Rural Bangladesh. *Social Change* 31(3), pp. 84–102.

Hossain, Sarah / Beresford, Melanie (2012): Paving the Pathway for Women's Empowerment? A Review of Information and Communication Technology Development in Bangladesh. *Contemporary South Asia* 20(4), pp. 455–469.

Hunt, Juliet / Kasynathan, Nalini (2001): Pathways to Empowerment? Reflections on Microfinance and Transformation in Gender Relations in South Asia, *Gender and Development* 9(1), pp. 42–52.

Hussain, Naseem Akhter (2010): Religion and Modernity: Gender and Identity Politics in Bangladesh. *Women's Studies International Forum* 33(4), pp. 325–333.

Hutchby, Ian (2001): Technologies, Texts and Affordances. *Sociology* 35(2), pp. 441–456.

Katz, James E. / Aakhus, Mark A. (2002): *Perpetual Contact. Mobile Communication, Private Talk, Public Performance*. Cambridge: Cambridge University Press.

Krotz, Friedrich (2007): *Mediatisierung: Fallstudien zum Wandel von Kommunikation*. Wiesbaden: VS Verlag.

Leonardi, Paul M. (2012): Materiality, Sociomateriality, and Socio-Technical Systems: What Do these Terms Mean? How Are they Different? Do We Need them? In: Paul. M. Leonardi / Bonnie. A. Nardi / Jannis Kallinikos (eds): *Materiality and Organising: Social Interaction in a Technological World*. Oxford: Oxford University Press, pp. 25–48.

Licoppe, Christian (2004): "Connected" Presence: the Emergence of a New Repertoire for Managing Social Relationships in a Changing Communication Technoscape. *Environment and Planning D: Society and Space* (22), pp. 135–156.

Lundby, Knut (2014): Mediatisation of Communication. In: Knut Lundby (ed.): *Mediatisation of Communication*. Berlin / Boston: De Gruyter Mouton, pp. 3–35.

Muna, Lazeena (2005): *Romance and Pleasure. Understanding the Sexual Conduct of Young People in Dhaka in the Era of HIV and AIDS*. Dhaka: The University Press Limited.

Prager, Karen J. / Roberts, Linda J. (2004): Deep Intimate Connection: Self and Intimacy in Couple Relationships. In: Debra Mashek / Arthur Aron (eds): *Handbook of Closeness and Intimacy*. Mahwah, NJ: Ehrlbaum, pp. 43–60.

Reckwitz, Andreas (2002): Toward a Theory of Social Practices. A Development in Culturalist Theorising. *European Journal of Social Theory* 5(2), pp. 243–263.

Rozario, Santi (2007): Outside the Moral Economy? Single Female Migrants and the Changing Bangladeshi Family. *The Australian Journal of Anthropology* 18(2), pp. 154–171.

Rozario, Santi / Samuel, Geoffrey (2010): Gender, Religious Change and Sustainability in Bangladesh. *Women's Studies International Forum* 33(4), pp. 354–364

Schneider, Nadja-Christina (2011): Media Research beyond Bollywood. Some Thoughts on a Systematic Media Perspective in India-related Research. *Internationales Asienforum* 42(3/4), pp. 223–238.

Schrock, Andrew R. (2015): Communicative Affordances of Mobile Media: Portability, Availability, Locatability, and Multimediality. *International Journal of Communication* 9, pp. 1229–1246.

Shehabuddin, Elora (2008): *Reshaping the Holy: Democracy, Development, and Muslim Women in Bangladesh*. New York: Columbia University Press.

Sterly, Harald (2015): "Without a Mobile Phone, I Suppose I Had to Go there". Mobile Communication and Translocal Social Constellations in Bangladesh. *Asien* 134(1), pp. 31–46.

Stones, Robert (2005): *Structuration Theory*. Basingstoke / New York: Palgrave MacMillan.

Van Schendel, Willem (2009): *A History of Bangladesh*. Cambridge: Cambridge University Press.

Wajcman, Judy / Bittman, Michael / Brown, Judith E. (2008): Families without Borders: Mobile Phones, Connectedness and Work-Home Divisions. *Sociology* 42(4), pp. 635–652.

Wellman, Barry / Rainie, Lee (2013): If Romeo and Juliet Had Mobile Phones. *Mobile Media & Communication* 1(1), pp. 166–171.

Worldbank (2012): Information and Communications for Development 2012. Maximising Mobile. Worldbank, http://www.worldbank.org/ict/IC4D2012 (accessed 30 May 2014).