

Translocal Social Constellations and Mediated Communication in Bangladesh

HARALD STERLY



Cumulative Dissertation
University of Cologne
Faculty of Mathematics and Natural Sciences
Date of Disputation: 11.09.2020

Translocal Social Constellations and Mediated Communication in Bangladesh

Inaugural-Dissertation

zur

Erlangung des Doktorgrades

der Mathematisch-Naturwissenschaftlichen Fakultät

der Universität zu Köln

vorgelegt von

Harald Sterly

aus Essen

Berichterstatter: Prof. Dr. Frauke Kraas
(Gutachter) Prof. Dr. Boris Braun

Tag der mündlichen Prüfung: 11.09.2020

Erklärung zur Dissertation
gemäß der Promotionsordnung vom 12. März 2020

Diese Erklärung muss in der Dissertation enthalten sein.
(This version must be included in the doctoral thesis)

„Hiermit versichere ich an Eides statt, dass ich die vorliegende Dissertation selbstständig und ohne die Benutzung anderer als der angegebenen Hilfsmittel und Literatur angefertigt habe. Alle Stellen, die wörtlich oder sinngemäß aus veröffentlichten und nicht veröffentlichten Werken dem Wortlaut oder dem Sinn nach entnommen wurden, sind als solche kenntlich gemacht. Ich versichere an Eides statt, dass diese Dissertation noch keiner anderen Fakultät oder Universität zur Prüfung vorgelegen hat; dass sie - abgesehen von unten angegebenen Teilpublikationen und eingebundenen Artikeln und Manuskripten - noch nicht veröffentlicht worden ist sowie, dass ich eine Veröffentlichung der Dissertation vor Abschluss der Promotion nicht ohne Genehmigung des Promotionsausschusses vornehmen werde. Die Bestimmungen dieser Ordnung sind mir bekannt. Darüber hinaus erkläre ich hiermit, dass ich die Ordnung zur Sicherung guter wissenschaftlicher Praxis und zum Umgang mit wissenschaftlichem Fehlverhalten der Universität zu Köln gelesen und sie bei der Durchführung der Dissertation zugrundeliegenden Arbeiten und der schriftlich verfassten Dissertation beachtet habe und verpflichte mich hiermit, die dort genannten Vorgaben bei allen wissenschaftlichen Tätigkeiten zu beachten und umzusetzen. Ich versichere, dass die eingereichte elektronische Fassung der eingereichten Druckfassung vollständig entspricht.“

Teilpublikationen:

Sterly, H., Etzold, B., Peth, S. A., 2019. Bangladesch - Beweggründe für Binnenmigration und translokale Lebensrealitäten. Geographische Rundschau (3), 18–23.

Bork-Hüffer, T., Etzold, B., Gransow, B., Tomba, L., Sterly, H., Suda, K., Kraas, F., Flock, R., 2016. Agency and the Making of Transient Urban Spaces. Examples of Migrants in the City in the Pearl River Delta, China, and Dhaka, Bangladesh. Popul. Space Place 22 (2), p. 128–145. DOI: 10.1002/psp.1890.

Sterly, H., 2015. “Without Mobile Suppose I Had to Go There” — Mobile Communication in Translocal Family Constellations in Bangladesh. In: ASIEN (134), 31–46.

Sterly, H., Sakdapolrak, P., 2020, Multiple dimensions of mediatised translocal social practices. A case study on domestic migrants in Bangladesh. Mitteilungen der Österreichischen Geographischen Gesellschaft 162 (accepted for publication)

Sterly, H., Gerads, D., 2016. “Call Me in the Dorm” - Mobile Communication and the Shifting Topographies of Intimate Relationships in Bangladesh. Internationales Asienforum 47 (3-4), 273–296. <https://crossasia-journals.ub.uni-heidelberg.de/index.php/iaf/article/view/3684>

Sterly, H., 2018. Regionalization revisited. Mediatization of translocal social practices and the spatial reconfiguration of life in rural-urban Bangladesh. In: Felgenhauer, T, Gäbler, K. (Eds.), Geographies of digital culture. Routledge, London, New York, 52–68.



Hier Text eingeben

29.06.2020, Harald Sterly

Datum, Name und Unterschrift

Danksagung

From the first ideas to its final publication, this dissertation had quite a way, along which I have received a great deal of support.

I would first like to thank my supervisor, Professor Dr. Frauke Kraas, who has given me all the support and direction that I needed, but also all the necessary freedom to develop my own approach and thinking. I would also like to thank Prof. Dr. Boris Braun who acted as a second reviewer and who provided me with helpful insights and contacts in Bangladesh.

The whole research and especially my field stays would have not been possible without my work for the Priority Program 1233 “Megacities-Megachallenge. Informal Dynamics of Global Change”, funded by the German Science Foundation DFG, who has also supported the digitalisation of my survey data.

I am particularly grateful to Mr. Md Sohel Rana, Mr. Shuvankor Shusmoy Roy, Mr. Salimul Alam Shahin and Mr. Md Biozid Jessorey, who have been much more than fieldwork assistants. They provided valuable feedback on the topic and on methods, and acted as organizers, cultural brokers, teachers, and friends. Without them, I would have never been able to conduct this research in the desired intensity and reflexive manner.

I would also like to thank the enumerators, transcribers and translators on whom I was relying for collecting and preparing data: Mr. Al Emran, Dr. Mehedi Hasan, Dr. Mokter Hossain, Mr. Sami Al Jaber and Dr. Arif Masrur were implementing the quantitative survey, and Mr. Rezwana Uddin Ahammed, Mr. Md Mohammad Ali, Mr. Mohammed Ashikullah, Mr. Md Mukibuzzaman Khan, Ms. Meherunnessa Ferdousi Korobi, Mr. Md. Arafat Rahman, Mr. Md. Nasim Fardose Sajib, Ms. Kazi Tahmina and Ms. Tanaya Tanzim were translating and transcribing the qualitative data. Mr. Daniel Gerads was assisting to supervise the survey in the urban destination areas, and Ms. Simone Jogwisch was digitalising the survey data.

I am indebted to numerous colleagues and friends, who were always supportive and helpful, providing inspiration and inputs, as well as advice on writing and staying engaged, namely Prof. Dr. Patrick Sakdapolrak, Prof. Dr. Hannes Hamhaber, Prof Dr. Tabea Bork-Hüffer, Dr. Benjamin Etzold, Prof. Dr. Markus Keck, Prof. Dr. Abdul Bayes, Dr. Ananya Raihan, Dr. Kirsten Hackenbroch, Dr. Shahadat Hossain, Dr. Pamela Kilian, Dr. Sabine Beißwenger and Ms. Susanne Müller. Many experts, colleagues and friends from Bangladesh provided me with in-depth knowledge and insights into social, economic and political structures and processes that were indispensable for understanding the context of my research, namely Mr. Khorshed Alam, Mr. Taimur Islam, Dr. Salma Shafi, and Prof. Dr. Roxana Hafiz.

I am very grateful to Ms. Selina Akhter, who has given me, the research team and my family the opportunity to be guests in her family’s home in the rural research sites.

And I am very thankful to my family—over all my wife Simone and my two children Charlotte and Johannes—who have always encouraged me and allowed me to spend so many evenings, weekends, and holidays on this project, and to my parents Peter and Heilwig who have provided me with all the opportunities for life that enabled me to follow this path.

Finally a big thank goes to all the research participants in Bangladesh, who, with their time and knowledge, perspectives and experiences that they shared with me, have made this project possible at all.

Contents

1	Introduction	1
2	Embedding in research and literature	7
2.1	Translocality—from transnationalism to translocal social resilience	7
2.2	Mediatization and mobile phone studies	10
2.3	Migrants, translocality, and the mediatization of communication	15
3	Theoretical approach and conceptual framework	17
3.1	Theoretical and ontological scope	17
3.2	Differentiating levels of abstraction: <i>ontology-in-situ</i> and <i>ontology-in-general</i>	19
3.3	Conceptual framework	21
3.3.1	Translocal Social Constellations	22
3.3.2	Translocality: place, relations, resources	23
3.3.3	Relational structure: position-practice relations, networks, networks of relevant relationships	25
3.3.4	Resources	30
3.3.5	The actor, agency and practice	32
3.3.6	Mediatization, affordances and constraints	32
3.3.7	The reproduction of social structure and space	35
4	Methodology, research design and applied methods	39
4.1	Epistemology and methodology: between naïve empiricism and radical constructivism	39
4.1.1	Iterative theorizing: from the general to the locally approximated	40
4.1.2	Mixed methods research: combining the qualitative and the quantitative	40
4.1.3	Multi-sited approach: from the bounded to the connected	41
4.1.4	Reflections on the positionality and its implications	42
4.2	Research ethics	44
4.3	Research design and procedure	46
4.4	Site selection	48
4.5	Research methods employed	50
4.5.1	Qualitative interviews	50
4.5.2	Focus Group Discussions	52
4.5.3	Quantitative Survey	55
5	Regional research context: Domestic migration and mobile communication in Bangladesh	59
5.1	Domestic migration in Bangladesh	59

5.2	Mobile communication in Bangladesh	63
6	Articles and chapters	65
6.1	“Bangladesch - Beweggründe für Binnenmigration und translokale Lebensrealitäten”	66
6.2	“Agency and the Making of Transient Urban Spaces: Examples of Migrants in the City in the Pearl River Delta, China, and Dhaka, Bangladesh”	67
6.3	“‘Without Mobile Suppose I Had to Go There’ – Mobile Communication in Translocal Family Constellations in Bangladesh”	68
6.4	“Multiple dimensions of mediatised translocal social practices. A case study on domestic migrants in Bangladesh”	69
6.5	“‘Call Me in the Dorm’ - Mobile Communication and the Shifting Topographies of Intimate Relationships in Bangladesh”	70
6.6	“Regionalization revisited. Mediatization of translocal social practices and the spatial reconfiguration of life in rural-urban Bangladesh”	71
7	Synthesis and discussion	73
7.1	Conceptualising the mediatization of translocal social constellations and practices	73
7.2	The mediatization of translocal social practices: constraints, affordances and mobile phone usage	73
7.3	The influences of changing communication practices on social structure . . .	79
7.4	Changing spatial and temporal organisation of social life	85
7.5	Limitations: Critical reflection on concepts and methodology	88
8	Conclusion: Empirical, conceptual and methodological contributions	91
9	References	97
10	Annexes	115
10.1	Annex 1: List of qualitative interviews	116
10.2	Annex 2: Guideline for interviews (phase 4)	118
10.3	Annex 3: Interview protocol sheet	120
10.4	Annex 4: Transcription guidelines	121
10.5	Annex 5: Survey questionnaire	123

List of Figures

1.1	Landline and mobile phone subscriptions in Germany and Bangladesh, 1960-2018	3
2.1	Thematical categories of mobile communication literature	11
3.1	Key concepts of this study on several ontological levels	20
3.2	Overview of the theoretical framework	21
3.3	An ontology of relational structures	26
3.4	Relational components of social systems	31
3.5	'Basic' and 'intermediate' affordances and practices	34
3.6	Modes of engagement with structure, the reproduction of positions	36
3.7	Outcomes of the reproduction of social structure and of space	37
4.1	Phases of the dissertation research	47
4.2	Rural research sites in Rangpur	53
4.3	Focus Group Discussion in village 1	54
4.4	Urban destinations of rural-to-urban migrants	56
5.1	Domestic migration with and between districts in Bangladesh	60
5.2	Net migration in Bangladesh 2005-2010, by districts and divisions	61
5.3	Reasons for domestic migration in Bangladesh, 1951-2010, by gender	62
5.4	Reasons for domestic migration to selected districts of destination	63
7.1	Fields of relevance of mediatized translocal practices.	76
7.2	Emerging affordances-in-practice as intermediaries between technology and practices	77
7.3	Modes of actors' engagement with social structure	82
7.4	Modes of the reproduction of positions	83
7.5	Modes of the reproduction of relations and structure	84
7.6	Modes of the reproduction of place	87

List of Tables

3.1	Basic approaches to structure and agency, and technology and society	19
3.2	A multidimensional, relational and dynamic concept of space	23
4.1	Overview over empirical data, by type and site	48
4.2	Overview of population and poverty statistics for Bangladesh, Dhaka and Rangpur Districts	49
4.3	Wealth strata and migration in villages 1 and 2	57
7.1	Mapping mobile communication practices against affordances and constraints	74
7.2	Intermediate affordances by dimensions of structure, space and time	78
7.3	Synoptical overview over the interactions of structure and agency	81

1 Introduction

If I communicate and I feel that I am able to get the news from home every day, I don't feel the distance.
[Forid, factory worker in Dhaka, 09.03.2013]¹

Dear, how much is the importance of mobile phone or how good it is in keeping the relationship between the families is only known to those who use it and whose sons and daughters live outside.
[Tahmina, farmer and NGO worker in Rangpur, 08.03.2013]

These two statements exemplify how important the mobile phone has become for many millions of migrants and their families and household members at places of origin, not only in Bangladesh, but all over the world. Forid, aged 45 at the time of the interview, had moved from a village in Northern Bangladesh to Dhaka in 1995 and since then has been working in a factory to support his wife, children and elderly parents who remain in the village. He can only afford to visit them three to four times in a year, and before they had access to mobile phones, the rural family members had to travel to the town of Pirganj and visit a call shop in order to talk with him. This kept the communication as well as living their relations expensive, time-consuming, and, most important, something extraordinary. That changed profoundly, when Forid bought mobile phones for his family and himself in 2008—since then they talk almost every single day. Forid and his family use the mobile phone also to organise the sending of remittances, and they coordinate pick-ups and meetings when he visits the village or family members come to Dhaka. For them, the mobile phone has become an indispensable part of their translocal life.

The context: migration and mediatization

Forid and his family can be seen as exemplary for many millions of people for whom two important and globally occurring processes of our time converge: *migration* on the one hand, and *mediatization* on the other. Migration—and mobility in general—has always been an important part of human life; however, with improving transportation and communication facilities, globalisation and urbanisation, we seem to live in an “age of migration” (CASTLES ET AL. 2014). While the estimates for the number of international migrants have been improved in the past decades, especially with the creation of a multi-year origin-destination database (UNDESA 2019), global or internationally comparative numbers for domestic or internal² migrants are much more difficult to conclude, given the varying scope, availability and quality of domestic statistics and the disparate spatial and temporal definitions of domestic migration in the different countries (SKELDON 2018).

¹Interviewee names have been pseudonymised to keep their confidentiality.

²“Domestic” and “internal” migration is used synonymously in this thesis.

The United Nations give a number of 272 million *international* migrants in the year 2019, which has increased from 153 million in 1990 (UNDESA 2019); however, as DE HAAS et al. (2019) note, given overall population growth, the share of international migrants relative to the global population has only slightly increased from 2.9 to 3.5 percent in the same period of time. For *domestic* migrants, the authors of the Human Development Report 2009 approximate the number to 740 million, based on census data for 21 countries from the years 1998-2002 (UNDP 2009). The most comprehensive internationally comparative data for domestic migration has been systematized by the IMAGE Project (Internal Migration Around the Globe, <https://imageproject.com.au/>), and BELL AND CHARLES-EDWARDS (2013), using such data, come to a figure of 763 million domestic migrants in 2005, extrapolating census and survey data from 70 countries. Although these figures should be treated with caution, as they are based on varying spatial and temporal definitions and probably underestimate migration numbers, they still provide an idea of the magnitude of domestic migration. There are only few time-series data on domestic migration, however BELL et al. (2017) and CHARLES-EDWARDS et al. (2019) find that domestic migration rates generally declined since the 1990ies, with notable exceptions for example in China or some countries in Subsahara Africa.

Regardless of the spatial and temporal scope, and also for the various motivations and reasons for these mobilities, in most cases migration does not mean that migrants just move away and cut their relationships with people and places at their origin: they have certain positions in society, roles, obligations and entitlements that they 'take with them' when they move. Thus, migration and mobility entails a geographical spread of social relations, household and livelihood systems, identities and imaginaries across places and spatial distances—but this means also a spatial and physical separation of hundreds of millions of migrants and mobile persons from their family, households and communities at places of origin.

At the same time, the past two decades have seen an unprecedented increase in connectivity, enabled by the rapid technological development and geographical and social spread of Information and Communication Technologies (ICT). Particularly mobile communication has diffused around the world at a higher pace than any other communication technology before (CASTELLS et al. 2007), prompting for example authors like LEDGARD (2011) to dub the best-selling mobile handset ever, the Nokia 1100, as the "AK-47 of communication". Although mediatization refers to a larger context of digitalization and the spread of ICT in general, including for example internet based platforms and services, this study specifically focuses on the spread of mobile communication, as at the time of the fieldwork in 2011-2013, and even now, in 2020, the access to smartphones and internet services is still limited in many developing countries (in Bangladesh for example, the number of mobile broadband subscriptions per 100 inhabitants was 0.3 in 2013 and 50 in 2018, ITU 2019).

But even while there still is a considerable "digital divide" (HILBERT 2014), the access to and availability of mobile phones have literally exploded in the time between 2000 and 2010, and hundreds of millions of people in the world have got access to (at least basic) mediatized communication. The processes of technology diffusion are spatially and temporally highly unequal: in the so called Global North, the transition from *face-to-face* communication to mediated *place-to-place* communication via landline phones, and then to *person-to-person* (WELLMAN 2001) communication via mobile phones has taken almost a century and involved several intermediate steps, including widely used exchange of written letters, and later the area-wide spread of

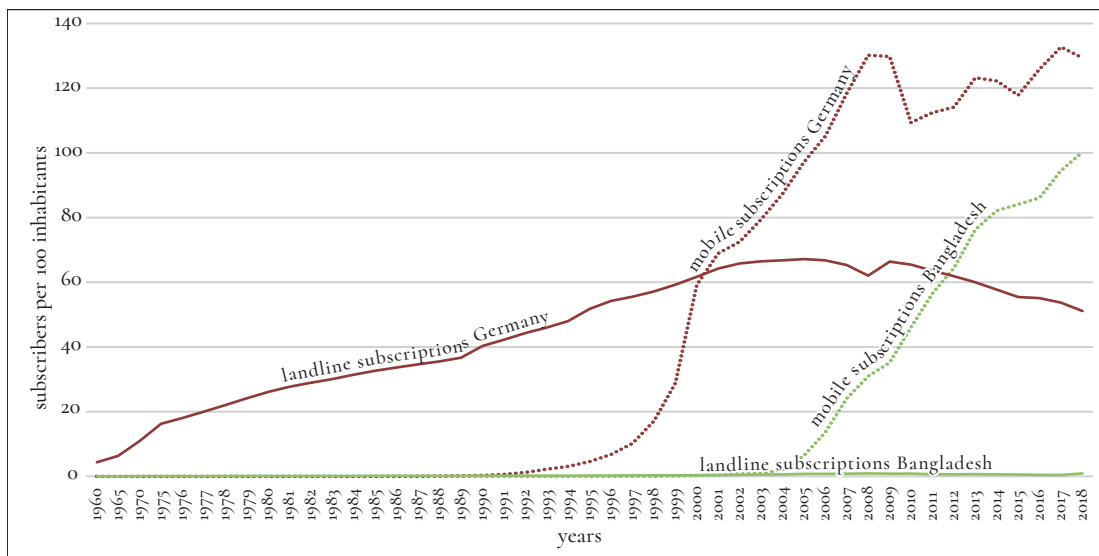


Figure 1.1: The diffusion of subscriptions to landline and mobile phones in Germany and Bangladesh, 1960-2018 (Source: author’s draft, data: ITU 2019)

landline³ phones.

In many countries of the Global South, the writing of letters was never as wide spread as in countries of the Global North, due to lower literacy rates and unequally well-established postal services (KENNY 2004): in 1980, the average annual number of letters posted per inhabitant was about 3 in Bangladesh, which even declined to less than 1 in 2015, as opposed to 175 in 1980 and 2016 in the year 2018 in Germany (UPU 2020). Access to landline phones is, until today, marginal in many countries, with 0.9 landline phone subscriptions per 100 inhabitants for example in Bangladesh, compared to 51 in Germany (ITU 2019, see also figure 1.1). For large parts of the population in developing countries, electronically mediated communication became available for the first time in the more centralized form of commercially or, in some cases also community operated call shops in the early 2000s. It was mainly after 2000 when mobile communication became widely accessible and affordable also beyond urban centres of developing countries.

Thus, whereas most countries of the Global North underwent at least a twofold mediatization of (electronic) interpersonal communication, involving the gradual spread of the landline phone in private households, and the much quicker advent of mobile phones, people in the Global South have largely leapfrogged the first of these transitions (JAMES 2009).

Aims and research questions

Forid, as many million other migrants, is experiencing the convergence of these two large processes; and as mundane and general they might seem at first, they *potentially* entail profound shifts in spatial and temporal patterns of social organisation, and in the way how situatedness,

³I use “landline” synonymous to “fixed line”.

distance and time matter to, are perceived and are produced by humans, as CASTELLS argues (1999, 2007), and as GIDDENS has posited already in 1984. For Geography, these are important topics, as “time and space are central to the construction of all social interaction”, and “[s]ocial structure... cannot be divorced from spatial and temporal structure”, as THRIFT (1996, p 71) notes. What is interesting, then, is to what extent such changes can be traced in the real world, which causal mechanisms are at play, and, further down the line, what consequences this might entail in the social and political realms.

Thus, the aim of this thesis is to contribute to an improved understanding in how far, and through which mechanisms these processes and phenomena—the mediatization of social practices, as well as changes in social and spatial structure—do become manifest in the life-worlds of rural-to-urban migrants and their families in Bangladesh.

The following overarching research question is formulated in order to reach this aim:

Q: How does the mediatization of communication through mobile phones relate to changes in translocal social constellations of rural-to-urban migrants in Bangladesh?

With mediatization here I focus on the uptake and increasing use of mobile phones in interpersonal communication. The concepts of social practices and structure are grounded in structure-agency and practice theory: *social practices* are here understood as socially shared and habitualised ways of acting. *Social structure* refers to the positionalities, institutions, values, and distribution of resources and power that are more or less enduring and that condition the actions of individuals and groups. The question addresses the *relations* between mediatization and social change and not the *impact of one on the other*, as I consider the relation between technology and society as mutually influential and co-constituting; with this I seek to avoid assumptions of unidirectional and deterministic causal relationships.

With *translocal social constellations* I aim to include several aspects of the translocal life-world: it encompasses the socio-cultural, economic and/or statistical unit of the *translocal household*, the socio-economic and rather functional notion of translocal *livelihoods*, as well as the socio-cultural idea of translocal *family and kinship* relations, and both enacted as well as latent aspects of these relations.

For addressing the overarching research question, the following subordinate questions are formulated:

Q1: How can the translocal social constellations of rural-to-urban migrants and the relations of the former with the mediatization of practices be adequately conceptualized and operationalised?

Existing approaches and frameworks did not allow to fully cover the different fields of the study (translocality, social relations, mediatization). This necessitated to elaborate a coherent frame and operationalise the latter for data collection and interpretation.

Q2: How do actors in translocal social constellations utilise mobile phones, and how does this influence their translocal practices?

The second question Q2 is directed at elucidating the changes in various dimensions of social practices that emerge from the utilization of mobile phones by migrants and non-migrants,

with a specific focus on translocal practices—practices that directly involve multiple places simultaneously, or that are related to, or referring to other places.

Q3: In how far, and how does the mediatization of translocal practices contribute to changing social structure?

The third question, Q3, is directed at assessing in how far the mediatization of everyday practices has transformative—or stabilizing—effects on translocal social structure, including relations, institutions, and aspects of place, and at determining the causal mechanisms that are at play.

Q4: In how far, and how does the mediatization of translocal practices translate into changes of the spatial and temporal organization of social life, and how space and place are made?

The fourth question, Q4, deals with the ways how changes in practices and social structure influence the spatio-temporality of social life, comprising mobility and interaction, the very places where social practices are being carried out and where positionalities are relevant, but also how place and space are being (re)produced.

Background and empirical basis

This study was conducted in the context of an international research program on urban informality and global change in the Pearl River Delta/PR China and Dhaka/Bangladesh (Megacities-Megachallenge. Informal Dynamics of Global Change, www.megacities-megachallenge.org), in which I was acting as a coordinator from 2007 – 2015. The inspiration for the study emerged from informal talks to rural-to-urban migrants working as tea-vendors near the centre of Dhaka, and from the observation of their mobile phone usage, while organizing a research conference in Dhaka. In the years between 2010 and 2013, while I was in Bangladesh for the Megacities program four times, I have spent a total of 12 weeks in the field—in two villages in the North of Bangladesh, and in numerous informal settlements in and around Dhaka—conducting 69 qualitative interviews, four focus group discussions and a household survey with 194 respondents in rural and urban places.

Structure of the study

In the following, I present the research and literature contexts in which the study is embedded (chapter 2). Chapter 3 presents the theoretical framework with which the questions are operationalized and explains the central concepts used for analysis. Chapter 4 presents and critically reflects on the research design, as well as the methods used for data collection and analysis. Chapter 5 describes the regional and local context in which the data were collected. Chapter 6 essentially consists of the six published articles, which are central parts of this work, each with a short positioning into the overall context of the work: the first article (chapter 6.1) presents an overview of internal migration in Bangladesh; the second (chapter 6.2) provides a theoretical framework for the relationships between agency, social structures and space; the third (chapter 6.3) gives an overview of the topic, the theoretical approach and on key results; the fourth (chapter 6.4) describes and analyzes the mediatization of translocal social practices, the fifth

1 Introduction

(chapter 6.5) analyzes the connections between translocal social practices and changes in social structure using the example of intimate relationships, and the sixth (chapter 6.6) examines the changes in the everyday regionalization and production of space related to the mediatization of communication.

Chapter 3 (theory), in combination with the second and third article (chapters 6.2 and 6.3), answers research question Q1. Article 4 (chapter 6.4) answers essentially research question Q2, article 5 and parts of chapter 7 (chapters 6.5 and 7) answer research question Q3, and article 6 and parts of chapter 7 (chapters 6.6 and 7) answer research question Q4.

Chapter 7 discusses the results with regard to the research questions, as well as the limits of the theoretical and methodological approach to answering the questions. Chapter 8 is a conclusion, it summarizes key insights and gives an outlook. Chapter 9 provides the references for this framing publication—the references for the six individual papers are included in the papers themselves.

The Annexes contain the following additional information:

- a list of qualitative interviews (annex 1),
- the guideline for the semi-structured interviews (annex 2),
- an interview protocol sheet for qualitative interviews (annex 3),
- the transcription guidelines (annex 4),
- and the questionnaire for the quantitative household survey (annex 5).

2 Embedding in research and literature: translocality and mediatization

This section gives an overview over key literature in the three fields of research that my study is embedded in, and building upon. These are i) research on translocality and translocal livelihoods; ii) research on mediatization and especially mobile phone studies; and iii) the intersection of these two—studies on the mediatization of translocal living constellations.

There is a considerable body of literature on various social aspects of mobile communication, for example on youth culture, economic impacts or the potential for development in the “Information and Communication Technology for Development” (ICT4D) subfield. As HEEKS (2007) already notes, lots of this research is geographically biased: while mobile communication and media studies in so called developed countries address broader topics and tend to have a more profound theoretical grounding, studies in developing countries tend to be more focused on ‘development’ topics (health, education, banking, governance, etc.), and are often less deeply grounded in social theory. Considering the nexus of translocality and mediatization or mobile communication, the existing literature body is surprisingly small, given the social relevance of the topic (see also chapter 1); this holds especially true for Bangladesh.

2.1 Translocality—from transnationalism to translocal social resilience

Translocality, both as a contemporary conceptual approach and as a research perspective, has been strongly influenced by the concepts of transnationalism, by concepts of relational space and the relativity of scales, but also by multi-sited ethnography, and by notions of the simultaneity of movement and embedding from the new mobilities paradigm.

From transnationalism to translocality

Transnationalism as a research perspective has emerged in the beginning of the 1990ies, as an answer to earlier research on transnational linkages that was rather focussing on aggregate flows of people, goods and finances between nation states, or on transnational corporations and politics (FAIST 2010). The proponents of transnationalism aimed at transcending the nation state as a central unit of analysis, and to shifting the focus (back) on migrants, their practices, social networks, beliefs, identities, and transnational embedding (GLICK SCHILLER et al. 1992, BASCH et al. 1994). These notions of transnationalism were fruitful for sparking a wave of research that went beyond conceptualising migration and transnational spaces as mere demographic or economic phenomena, and shifted the focus on connections, practices and identities, being expressed for example an agenda for “transnationalism from below” (SMITH & GUARNIZO 1998),

the conceptualisation of “transnational urbanism” (SMITH 2001), or “transnational villagers” (LEVITT 2001).

Although it is (and has been early on) an important concern of the proponents of transnationalism to overcome a “methodological nationalism”, i.e. the conflation of cultures and societies with nation states (WIMMER & GLICK SCHILLER 2002), the concept remains somehow centred around the national state as the a fixed-scale reference (GREINER & SAKDAPOLRAK 2013a). Thus, migration movements that take place within national borders—and that form the vast majority of human migration—are largely excluded; and the methodological focus often remains on flows and structures between sites of departure and origin, leaving out a wider range of scales of spaces and places.

Growing research interest in the ways how transnational networks and flows are anchored in communities, places and practices, and on what scales and with what registers of affiliation they are transacted, has led to an increasing ‘grounding’ of transnationalism research (BRICKELL & DATTA 2011). Examples for this are KOTHARI (2008) who highlights the localised ways how the globalised networks and livelihoods of Asian and African street traders are negotiated in Barcelona; MAHLER & HANSING (2005) who locate the transnational missionary work between Florida and Cuba in concrete local contexts; or SMITH (1998) who traces the construction of a transnational Mexican community in the United States, and the multiple identities of its members in specific local contexts, over the course of 50 years.

Within this transnationalism research strand, ‘translocality’ has been used as a term denoting a stronger local grounding of transnationalism. Authors such as FREITAG & VAN OPPEN (2010), BRICKELL & DATTA (2010) and HEDBERG & DO CARMO (2010) however emphasise the distinctiveness of the translocal approach; FREITAG & VAN OPPEN (2010: 12) even argue that “[t]ransnationalism in this perspective appears more as a special case of translocality.”

Relational space and multi-sited ethnography

The debates on a relational understanding of space and the meaning of place that have emerged from Geography have further contributed to the formulation of the concept of translocality. Especially the spatially and socially dialectical and multi-scalar understanding of “space as product of interrelations, as constituted through interactions, from the immensity of the global to the intimately tiny”, the multiplicity, plurality and heterogeneity of place, and the understanding of space as continuously changing, as “always under construction” (MASSEY 2005: 21), had considerable influences. Debates on the importance and relative character of scale also came from Geography: in the sense of the translocality perspective, socio-spatial scales should be understood as social constructs, sometimes with considerable causal powers, for example in the forms of (material and immaterial) national borders, but certainly not as given *a priori*, rather as fundamentally relational, and as simultaneously fluid and fixed (SWYNGEDOUW 1997, GREINER & SAKDAPOLRAK 2013a).

Some influences also came from multi-sited ethnography (MARCUS 1995, FALZON 2009); in the 1990s, partly under the impression of an increasingly globalising world with stronger interdependencies between states but also smaller places, and with increasing international and domestic migration, criticism was voiced within ethnology that places were conceived as rather closed and independent (which in turn was also inspired by geographers such as Doreen

Massey and Tim Creswell, cf. COOK et al. 2009). HANNERZ (1998: 247) went even further within this debate and called for a re-conceptualisation from *multi-sited* to *translocal* research: “The unit, perhaps, is (in most cases) a *network* of sites, and parts of one’s ethnography may have to be *between* these sites”, to describe “the translocal linkages and the interconnections between these [sites] and the localised social traffic” (emphasis in original).

The New Mobilities paradigm and translocality

Translocality as a research perspective was also influenced by the ‘New Mobilities Paradigm’. Since the late 1990s and early 2000s, a new understanding of the importance of mobility has emerged in the humanities and social sciences. This happened in response to the lack of consideration of mobility in many disciplines, which have long regarded mobility, and partly also migration, as a special case, or have considered mobility rather as a black box (URRY 2007). URRY (2000) thus called “for a sociology that examines the diverse mobilities of peoples, objects, images, information and wastes; and of the complex interdependencies between, and social consequences of, these diverse mobilities” (URRY 2000: 1). Mobilities research asks and theorises how mobilities lie “at the centre of constellations of power, the creation of identities and the microgeographies of everyday life” (CRESSWELL, 2011: 551). A classical example is SELLER & URRY’s (2006) analysis of automobility and how it (as a socio-technical system) impacts on public space, but also on the formation of work and family life and structures, on gender relations and identities, on neighbourhoods, global trade systems and geopolitics of oil.

Important impulses for the concept of translocality from mobilities are the general understanding of the simultaneity of embedding and mobility, the focus on everyday practices and a comprehensive understanding of mobilities, movements and flows, including people, goods, ideas, symbols and meanings (GREINER & SAKDAPOLRAK 2013a).

Translocal research angles

The concept of translocality has been employed in a wide variety of research fields and disciplines, for example on international and domestic migration and the changes in places, relations and identities that these bring with them: VELAYUTHAM & WISE (2005) show the influence of international migration on the moral economy in a South Indian village; PELEIKIS (2003) traces how Lebanese villagers and their migrant relatives in Ivory Coast are producing a “translocal village-in-the-making”; PETH et al. (2018) highlight the importance of and the changes in specific sites such as the Golden Mile for the local embedding and the translocal connectedness of Thai migrants in Singapore. STEEL et al. (2011) demonstrates how mobility shapes the livelihoods of rural households in Nicaragua and underlines the influence of mobility and connectivity on development processes. Translocality research also addresses the production of culture and identity: DE LIMA (2012) for example exemplifies this with the ways how international migrants in Scotland negotiate their identities and sense of belonging; PAGE (2011) shows how global home-town associations of Cameroonians and Tanzanians interfere with local politics, identity and sense of belonging in their ‘home’ villages; and GOODMAN (2006) discusses the changes in spheres of local identity in Shanxi in China through a government’s campaign for the nationwide branding of local noodles.

An important field of study are the linkages of translocality and development, poverty and vulnerability: STEINBRINK (2009) employs a translocal network perspective for studying the vulnerability and risk management of rural-urban households in South Africa; ZOOMERS & VAN WESTEN (2011), in their introduction to a special issue on translocal development, use translocality to challenge the notion of locally bounded development and show how local opportunities and constraints for development are transnationally and globally produced. GREINER (2012) discusses the limitations of ‘multilocal’ households with examples from Namibia and proposes to employ the concept of ‘translocal livelihoods’ instead, as it is better capturing the dynamic relationships of connectivity and mutual support. SAKDAPOLRAK (2014) and SAKDAPOLRAK et al. (2016) have developed a framework for linking translocal livelihoods and social resilience, emphasising the roles of translocal connections between spatially disperse households and their embedding in multilevel human-environment systems for their capacity to adapt to and cope with environmental risks. STERLY et al. (2016) argue that this understanding of translocal social resilience needs to be taken into account also in international and domestic policies of migration, in order not to jeopardise translocal livelihood strategies. ROCKENBAUCH et al. (2019a, 2019b) emphasise the role of coupled local-translocal networks of smallholder farmers for technical and social innovation in agriculture.

2.2 Mediatization and mobile phone studies

Mediatization as a concept and framework was emerging in the mid-2000s in media and communication studies. Until then, the dominant focus of media studies was on the three fields of textual analysis, political economy of media production, and audience or reception studies. Triggered by the massive spread of mobile phones and internet use in the 1990ies, the research focus widened, and “mediatization” as a concept and framework was pushed forward by media researchers such as COULDRY & HEPP (2013: 191), to “capture somehow the broad consequences for everyday life and practical organization (social, political, cultural, economic) of media, and more particularly of the pervasive spread of media contents and platforms through all types of context and practice.” This focus is nothing entirely new to social and human geographical research, and as COULDRY & HEPP (2013: 195) also state, mediatization is “deeply related to social and cultural research as a whole.” The innovative impulse that I took from the concept is the emphasis on the changing and increasing *role of (digital and mobile) media in the communicative construction of the social and cultural world* (KROTZ 2009, COULDRY & HEPP 2017), and hence I have adopted the concept of mediatization for my study.

It needs to be stated that mediatization explicitly refers to a broad inclusion of all types of communication media, and, especially in the digital realm, emphasizes the convergence of mobile and digital media, as well as mass and interpersonal media—smartphones do not only enable mobile and mediated talk (one-to-one), but also access to almost the whole of the internet, including its social media platforms (with *one-to-many* and *many-to-many* forms of mediatized communication, JENSEN 2010). In my study, I have consciously limited my focus on *mobile communication in a much narrower sense*, not including mobile internet use. This includes voice communication, texting, and the use of audio-visual media (music, videos, images), which are shared and consumed also without internet access (I also include mobile banking, as it is

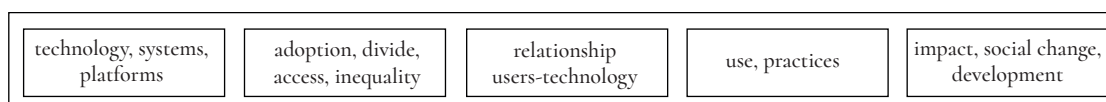


Figure 2.1: Thematical categories of mobile communication literature (Source: own draft, based on HEEKS 2007 and DONNER 2008)

a relevant type of phone usage that in Bangladesh also works without internet access). This focus is a considerable limitation, but it makes sense in the context of the study, as the share of mobile internet users in Bangladesh was low at the time of the study, and still is in 2020, in a global comparison (see chapter 1).

The following overview is thus focused on studies of and research on mobile communication, which partly pre-date the emergence of mediatization in the above sense. In this context it is interesting to note that interpersonal communication via the (landline) telephone has for long played a subordinate role in media research and related disciplines; in the 20th century, the focus of media studies was mostly on mass media (one-to-many), and there was relatively little research on how the spread of landline telephony interacted with social processes. Interesting reads from that time are for example the works by FISCHER (1992) on the early spread of telephony in the USA until 1940, or from POOL (1977) who collates a large variety of perspectives on personal and social effects of telephony. Since the advent of mobile phone technology in the early 1980s, but especially since its rapid spread in the industrialized countries in the 1990s, and in the developing countries since the 2000s, this has changed massively, and a considerable literature body has emerged.

I systematise this literature broadly along the thematic fields of studies. I have selected studies that represent these themes and theoretical approaches over the years, so this overview is by no means exhaustive. HEEKS (2007) categorises the themes of mobile studies in the developing world in four broad fields, based on the information technology lifecycle: the *development of technology*, its *adoption*, its actual *use*, and its *impact*. I modify and broaden these categories and extend them by the topic of the ‘*relationship between users and technology*’, following DONNER (2008), see also Fig. 2.1. It needs mentioning that, although a distinct research community on ICT4D (“Information and Communication Technology for Development”) has emerged over the past decades, with own journals, conferences, research centres and even a UNESCO Chair in ICT4D research, in the following I follow DONNER (2008) and integrate the themes of ICT4D research in the mentioned research fields.

Important themes of mobile phone research

The first category (*technology, systems and platforms*) covers mostly technological aspects of mobile communication, and thus contains the smallest number of publications from social sciences. These include studies in both developed as well as developing economies, for example on the structure and design of affordable platforms and tariff systems (WELLENIUS 2000, REUVER et al. 2011), governmental regulation of the telecommunication market (EHRHARDT 2000, TONGIA 2007, HOWARD & MAZAHERI 2009), affordable handset technology (ETIM 2012) or on organisational competition among operators (BHUIYAN 2004).

The second category (*adoption, divide, access, inequality*) covers a much larger field of work. It includes rather general or even marketing driven studies on the determinants of mobile phone *adoption* and modelling of technology *diffusion* and uptake, both quantitative as well as qualitative (e.g. ADEOTI & ADEOTI 2008, KIM et al. 2008, DE SILVA et al. 2009, LIU et al. 2012, TOBBIN 2012). Studies on reasons, extent and impacts of the *digital divide* and inequalities in access to communication technology form another important and large subgroup. The “digital divide”, originally coined by KATZ & ASPDEN (1997) to describe the unequal access to internet in the United States, is now a standard term to refer to inequalities in access to and usage of internet and ICT (including mobile phones) on regional and global scales (e.g. WEISS et al. 2016 on global differences in broadband access, or the Pew Research Center’s 2019 report on unequal access to mobile phones in emerging economies), within countries (e.g. SRINUAN et al. 2012, on differential mobile internet access in Thailand; TRAN et al. 2015 on changing phone ownership in Bangladesh; or ADELEKE 2020 on regional differences in internet access in Nigeria) and on the intra-household or family scale (e.g. POTNIS 2016 or PASHAPA & RIVETT 2018 on gendered inequality of mobile phone ownership in India and South Africa, respectively). Many adoption studies aim at identifying the determinants or reasons of differential mobile phone diffusion, on micro, national and international scale (DONNER 2008: 146).

Studies on mobile phone *usage and practices* focus on the integration of mobile phone usage in everyday practices, and, often, how such mediatized practices are embedded in social structures and processes of change. These usage and practice studies also cover a broad range of themes: KRAEMER (2017) for example traces how young people’s practices of mobile phone usage in Vanuatu alters how they perform social and intimate relations; PYPE (2016) shows how mobile phone usage practices articulate the relation to the Congolese state—co-production or contestation of power—in Kinshasa’s political society; SVENSSON & WAMALA LARSSON (2015) show the pivotal role of mobile phone practices of market women in Kampala, Uganda for their business, but at the same time how these practices also reproduce patriarchal structures; KRIEM (2009) shows how mobile phone usage practices are intertwined with the management of social relations and the construction of the social self in Morocco.

Studies on the fourth type, *relationships of users and technology*, highlight the complexity and dialectical relationship between society and technology, and the co-construction of communication technology, which cannot be captured by either an adoption or an (uni-directional) impact perspective (DONNER 2008). BELL (2005) for example explores the local re-interpretation of the mobile phone in Asia against the backdrop of its global imaginaries and constructions; KAVOORI & CHADHA (2006) study advertising in Delhi to document the mobile phone as a cultural technology that is appropriated and internalized within the context of the respective culture and society; KATZ and SUGIYAMA (2005) emphasise the expressive and symbolic aspects of technology by looking at the creation of the mobile phone as a fashion statement and a status symbol.

The fifth type of studies (on *impacts, social change and development*) examines the effects of mediatization on a large range of issues; while many of these studies acknowledge the complex interplay between technology and society, the focus is on the relations between technology and mobile communication as causes of social, cultural, political or economic change or development. The many subtopics include, among others, the transformation of social networks and relations; changes in space, place and place-making; youth culture; politics and governance; and economy

and economic development.

The *transformation of social networks* and relations through the mobile phone include studies like THOMPSON (2009) who links qualitative changes of labour migrants' social networks in Singapore with mobile phone usage; RETTIE (2008) shows how mobile phones contributed to the extension of support networks of people in the UK; PALACKAL et al. (2011) demonstrate the strengthening of core (kinship, neighbourhood) networks in India through mobile communication in a quantitative analysis. Another subtopic that is obviously relevant for Geography are *changes in space, place and place-making*: CRANG et al. (2007) for example analyse the changes in the spatio-temporality of shopping and its effects on local neighbourhoods in Newcastle upon Tyne in the UK; GORDON & DE SOUZA E SILVA (2013) look at the transformation of the experience of places and spaces through mobile media use, and how this creates the conditions for the emergence of a 'networked locality' and of new spaces. An important topic here is 'hyper-coordination', a motif that LING & YTTRI (2002) coined for the flexible and real-time making and unmaking of meeting arrangements through the mobile phone. The 'doubling of place' was originally used by SCANNELL (1996) to address the overlapping of physical presence and mediated co-presence in radio- or TV-transmitted events, and then transferred to the sphere of interpersonal communication by MOORES (2012, 2004: 22) to denote the "simultaneity, liveness and 'immediacy' in ... trans-localized ... spaces and encounters" that are facilitated by the telephone.

As young people are often early adopters of new technologies, the impacts of mobile phones and ICT on *youth culture* is a popular topic, see for example KASESNIEMI & RAUTIAINEN (2002) on the changing "Mobile culture of children and teenagers in Finland" (title of their book chapter); ITO (2005) on the replacement of face-to-face interactions by mobile conversations of Japanese youths; MESCH & TALMUD (2008) on the cultural differences of mobile phone use between Jewish and Arabic adolescents in Israel; or LESITAOKANA (2017) on the use of mobile phones in romantic relations in Botswana. The impacts of the mobile phone on the functioning of *politics and governance* is researched from different perspectives: RHEINGOLD (2002), in his seminal book "Smart Mobs", highlights the potential of mobile phones for social activism and protest; RAFAEL (2003) gives a detailed account on how text messaging enabled the organisation of protests and finally the overthrow of President Estrada in the Philippines in 2001, and IBAHRINE (2008) and KHONDKER (2011) analyse and discuss the role of mobile media in the citizens' movements of the Arab Spring. The mobile phone does not only serve citizen activism, but also find its workings in the mechanics of governance: in the field of ICT4D research, the potential and actual role of digital and mobile media for improving governance are an important topic, see for example HEEKS (2018) who finds generally positive effects of ICT on governance quality, but sees also considerable challenges. ASONGU et al. (2019) analyse the relation between mobile phone usage and governance quality in a cross-country comparison on a macro scale.

The mobile phone and ICT play also a role in the *integration* and acculturation of *migrants* and *refugees* at places of destination: COLES-KEMP et al. (2018) highlight the role of mobile phones for social integration of recent immigrants in Sweden, GORDANO PEILE & ROS HÍJAR (2016) for Spanish-speaking migrants in London; or JOHNSON (2013) for migrants from Guinea-Bissau in Lisbon. WALKER et al. (2015) demonstrate that the mobile phone positively effects social cohesion of refugees in Australia, as well as their connectedness with their host communities. HARNEY (2013) shows how asylum-seekers and illegal migrants use mobile phones for organising

their daily lives in Naples in Italy, and KAUFMANN (2018) discusses this for asylum seekers in Vienna. Migrants also use mobile phones for diaspora organisation, as LOPEZ (2017) shows in a study on cultural exchange, public discourse and collective meaning making of Hmong women in the United States, or BARBER (2008) with a study on the mediated discourses of Philippina diaspora workers on issues of exclusion and power in Canada.

The mobile phone has also impacts on everyday *mobility*, in addition to the aforementioned changes in place-making and perception: PORTER (2015) finds in a large study in 24 African cities that mobile communication tends to be associated with reduced urban mobility, as phone use substitutes travel so some extent. WILLIAMS et al. (2015) show how mobile phone data are used to improve informal public transport in Nairobi, and PORTER & TURNER (2019) point to the importance of mobile phones, and, more recently, also internet devices, for urban transportation businesses, from bicycle rickshaws to Uber drivers.

The last subfield I would like to include here is the impact of mobile communication on *economy and economic development*, which is also extensively covered; very roughly they can be divided into private household, business and various economic sectors, each on different scales (macro, meso, micro). Economic and poverty effects of mobile communication on household level form an important part of studies: BEUERMANN et al. (2012) show, for example, in a panel study that the introduction of the mobile phone significantly reduced poverty levels of households and correlates with increased consumption levels; BAIRD & HARTTER's (2017) study of Maasai herders in Northern Tanzania suggests that mobile phones play an important role for improving livelihoods through increased access to information, but that their impact on livelihood diversification can be limited; ANADOZIE et al. (2019) find, in a combined livelihood and systems analysis, that improved access to information and communication through mobile phones reduced the vulnerability of smallholder farmers in Northeast Nigeria.

In addition to smallholder (farming) households, the effects of mobile phones and ICT on businesses, value chains and market are studied for a while: In his seminal paper on Kerala fishermen, JENSEN (2007) showed that the adoption of mobile phones improved the fishermen's access to price information and bargaining power, and thus enhanced their welfare; while CHOWDHURY (2006) showed through survey analysis that market participation of rural farming households in Bangladesh was significantly increased through mobile communication. KRONE & DANNENBERG (2018) use a value chain and innovation approach and find that small scale farmers in Kenya benefit even from simple mobile phones for their integration in value chains. On a global scale, THOMPSON et al. (2007) compare the effects of mobile phones and internet access on business productivity and find that they are beneficial for business and government relations on a whole, but especially so for the poorest countries. Although there are many positive examples for the transformative potential of mobile phone for livelihoods and development, other authors such as CARMODY (2012: 1) cautions against overly optimistic expectations, arguing that although "socially articulating", technology often recreates "economic disarticulation" by reinforcing existing inequalities.

2.3 Migrants, translocality, and the mediatization of communication

Although not considerably large, there is a growing literature body specifically addressing the nexus of translocal and transnational connectivity with mediatization. The next paragraphs draw mostly on the literature review I have done for STERLY & SAKDAPOLRAK (2021).

A particular field or work here addresses the importance of ICT and mobile communication for *migration decision making*, and for organising migration routes: KIRWIN & ANDERSON (2018) show how West African migrants employ ICT to contact their social networks abroad and carefully plan their migration routes. FROUWS & BRENNER (2019) analyse a large scale survey of the Mixed Migration Initiative (MMI) and find that the combination of social media and transnational networks is the most important information source for migration routes from Africa to Europe, but less influential for migration decision making. According to BOAS (2020), rural dwellers of coastal Bangladesh strategically use mobile communication to stabilize their translocal networks, in order to facilitate domestic mobility in case of climate disasters.

A specific subtype of this research focuses on the use of mobile communication by refugees: SCHAUB (2011) for example explores the phone use of Sub-Saharan African migrants and refugees during their crossing of the Sahara Desert; in a similar vein, ZIJLSTRA & VAN LIEMPT (2017) study how irregular migrants employ mobile communication for destination and route decision making and for organising the necessary resources for their journey; DEKKER et al. (2018) discuss the role of social media for destination decision making by Syrian asylum seekers.

The influence of mobile communication on *remittances*, as a particular relevant aspect of translocality, have received considerable attention: The role of mobile banking for livelihoods is addressed for example by KIKULWE et al. (2014) in Kenya, and by SEKABIRA & QUAIM (2017) in Uganda; OJONG (2016) and KUSIMBA et al. (2016) discuss how mobile transfers and social networks are related in Cameroon and Kenya, respectively. TAZANU (2015) shows how mobile communication increased the expectations and pressure on Cameroonian migrants in Germany to remit money, and ALAMPAY et al. (2018) produced an extensive review on the effects of mobile phones on changing volumes, frequencies and diversities of remittance flows.

The *management of social relations* and family affairs through mobile communication form another important subtopic: CUBAN (2014) for example shows how mobile phones are used for distant learning in transnational families; PORTER et al. (2018) illustrate the ways how migrants and their families in Africa manage relational and emotional proximity; AHLIN (2020) outlines how calling frequency represents imaginaries of good care within transnational Indian families; MADIANOU (2016) describes how the pervasive and constant digital connectedness of transnational UK-Filipino families translates in to a form of “ambient co-presence”. Remote caring for children, or “mobile parenting” (MADIANOU & MILLER 2011) is a special sub-theme here, with notable literature clusters on transnational Filipino (e.g. CABANES et al. 2012, MADIANOU 2012, CHIB et al. 2014) and domestic Chinese migrants (e.g. LIU & LEUNG 2017, TO 2018).

To conclude here, mediatization, and mobile communication in particular, have been and are widely studied, and this research covers a broad range of themes and geographical backgrounds. However, the nexus of mediatization and migration, and in particular of mediatization and translocality receives much less attention in research and literature.

3 Theoretical approach and conceptual framework

Following the goal of the study, the theoretical framework is designed to conceptualise and empirically study two major thematic fields and their relations: translocal social constellations (including both structural and practice/agential aspects) and their changes, as well as the mediatization of (translocal) practices. I have drawn on the theoretical and conceptual fields of translocality research (e.g. BRICKELL & DATTA 2011, GREINER & SAKDAPOLRAK 2013a), on conceptualisations of place (e.g. AGNEW 1987, MASSEY 1991, CRESWELL 2004), and on communication and mediatization studies (e.g. GOFFMAN 1959, SCHROCK 2015). These theoretical strands are embedded in a framework of structuration and practice theory (e.g. GIDDENS 1984, ARCHER 1995, BOURDIEU 1980, STONES 2005, 2012).

Before I go into more detail about the ‘logical mechanics’ of the study, i.e. the concepts and theoretical approaches and their connections, I will briefly lay out my basic metatheoretical and ontological positions.

3.1 Theoretical and ontological scope

The theoretical framework laid out in this chapter is aimed at being a guideline for empirical work and the analysis of the gathered data, rather than giving an “ontological theory of the ultimate constituents of the social” (Lizardo 2010: 666) or, in this particular case, the translocal. Or, to be more exact, the theoretical and conceptual framework is part of the epistemology of my study, however it refers to and represents the ontology, that is, how I conceive the (real and outside) world to be.

Thus the conceptualisations of translocality and technological change are foremost understood as providing the ontological basis (e.g. what is translocality, or what are translocal social constellations, in my understanding) for leading towards an epistemic and analytical framework (e.g. what concepts do I need to formulate relevant questions and to express relevant relations, and how can I gather and process the appropriate information for that) used by the researcher in order to grasp the life reality of social agents. I consider the translocal conditions of people’s (and especially migrants’) livelihoods and lives as real and having causal powers expressed for example in certain advantages or disadvantages in people’s lives. However, I put the emphasis of my conceptualisation of translocality on an analytical level—which means that I do not intend to fully and exhaustively describe the (ontological) reality of mediatizing translocal lives, but I rather conceptualise certain aspects of the latter that I deem important for empirically capturing and analytically explaining translocality and changes therein.

Some basic tenets: *dodging determinisms*

It seems necessary to point to five basic tenets that I see as important, regarding the key concepts for this study, namely the relations of structure–agency and technology–society, and translocal–local (or also space–place): First, I consider all of these three as *dialectic, interrelated and mutually constitutive*, thus I assume that there is no structure without agency and vice versa, no society without technology and vice versa and there is no translocal without the local and vice versa. Second, I reject the notion of a *universal primacy* of any one of these over the respective other in these three dialectical relations. Even if there are cases or situations where for example structure overwhelmingly conditions agency, where technology strongly determines social development, or where there seems to be no reference of a given place to any other place whatsoever, I argue that there will be sufficient examples where it will be even the other way round, thus making determinisms (of what ever direction) not entirely impossible, but, depending on context and situation, rather something exceptional, than universal (see also table 3.1).

Third, regardless how the *ontological status* of the wholes and their constitutive parts (structure–agency, technology–society, local–translocal) might be finally conceived (as largely independent; as being parts on their own, but mutually co-constituting in a dualism; as inseparable in a duality, as Giddens for example sees structure and agency; or as the ends of a continuum, as for example Mouzelis conceives practice–agency¹): for the sake of the *analysis* of their relations, an *analytical separation* is at least very helpful, if not necessary, to grasp, understand and explain the mechanisms of these relations. Fourth, *spatial and temporal scale* matters here: regarding for example the relations of structure and agency, questions of micro versus macro actors and structures (in terms of causative power) become relevant, as well as the question on what “level” of scale (spatial, temporal, social) any analysis is conducted. Regarding the relations of translocal and local, the spatial scale is constitutive for a meaningful delineation of any given place as well as of the places that are translocally related to the place(s) in focus. And fifth, the three fields of analysis are *interrelated*: structure and agency unfold and literally *take place* in places and space; translocality and technology are both understood in this context as constituted through their material and immaterial structural parts, as well as agential properties and human agency. Or, to put it differently, as structure agency theory forms the theoretical basis, places, translocality, society and technology are understood as constituted by the interrelations of material and immaterial structural features with agency that unfold in time and space (it could also be said that the conceptual separation of the three is rather part of an analytical strategy,

¹It should be noted that Giddens’ conception of duality can be understood in two (related) ways: on one hand „structure is both medium and outcome of the reproduction of practices“ (GIDDENS 1979: 5), thus the dual character of structure lies in its constituting and necessary role for any agency (= as medium) and as being reproduced or transformed through agency (= as outcome); in this sense the term “duality of structure” makes sense also for more conventional notions of structure. On the other hand Giddens sees structure and agency as ontologically deeply intertwined, with “structural properties of social systems ... not exist[ing] outside of action” (GIDDENS 1984: 374), meaning “that structure exists, as time-space presence, only in its instantiations in such practices and as memory traces” (GIDDENS 1984: 17); in this sense, the type of structure Giddens refers to excludes certain aspects of structure. Further, as McLennan notes, “the term duality of structure is itself slightly misleading, since Giddens is actually insisting on the duality of structure-and-agency” (MCLENNAN 1984: 126, cited in STONES 2005: 16).

3.2 Differentiating levels of abstraction: ontology-in-situ and ontology-in-general

Objectivism	Structuration / social realism	Subjectivism
objects reduce subjects: no independent agency	objects and subjects are products of each other (social realism: and distinct from each other)	subjects reduce objects: no independent structure
technology causes social change	technology is part of and influence social structures, but is also actively interpreted and (re-)shaped	technology is socially constructed

Table 3.1: Basic approaches to structure and agency, and technology and society (Source: PARKER 2000, modified)

as they form all part of one social reality).

This said, it needs to be added that I conceive my *overall ontological stance* as a critical realist one, implying that I support the idea of an intransitive, external world existing independently of human consciousness and scientific practice, but that our knowledge about this world, lay or scientific, is relative, transitive and constructed through our (scientific) practices and discourses (Archer et al. 1995).

3.2 Differentiating levels of abstraction: *ontology-in-situ* and *ontology-in-general*

For several reasons, I deem the notion of several levels of abstraction, or of ontology, as helpful for formulating the theoretical framework of my study: first, it helps to systematize the concepts and ‘building blocks’ of the different social theories that I apply and to identify meaningful relations between them. Second, it facilitated the iterative elaboration of the theoretical framework, which involved deductive and inductive phases: I aimed at limiting the imposition of a ‘western’ and ready-built theory on the lifeworld of people in Bangladesh, thus the theory-building needed to involve the recognition of the empirical reality. At the same time, I deemed it important to have a certain theoretical guidance for elaborating the framework. This concerns especially the widening of scope for the research focus, from translocal households or livelihoods to the translocal *social constellations* (see chapter 3.3.1), and the formulation of types of mediatized translocal social practices (see chapter 3.3.6, and STERLY & SAKDAPOLRAK 2020, chapter 6.4).

STONES (2005) points to the ‘levels’ of abstraction that an ontology of the social can comprise of, and differentiates between “‘ontology-in-general’ but also ‘ontology-in-situ’” (STONES 2005: 8). Ontology-in-general refers to the abstract theoretical level, on which for example Giddens—purposefully—remains with his formulation of structuration theory, as he “concentrates on the creation of concepts about entities that exist in the social world, *that apply at all times and in all places*. These concepts are systematic in the sense that they are logically consistent

3 Theoretical approach and conceptual framework

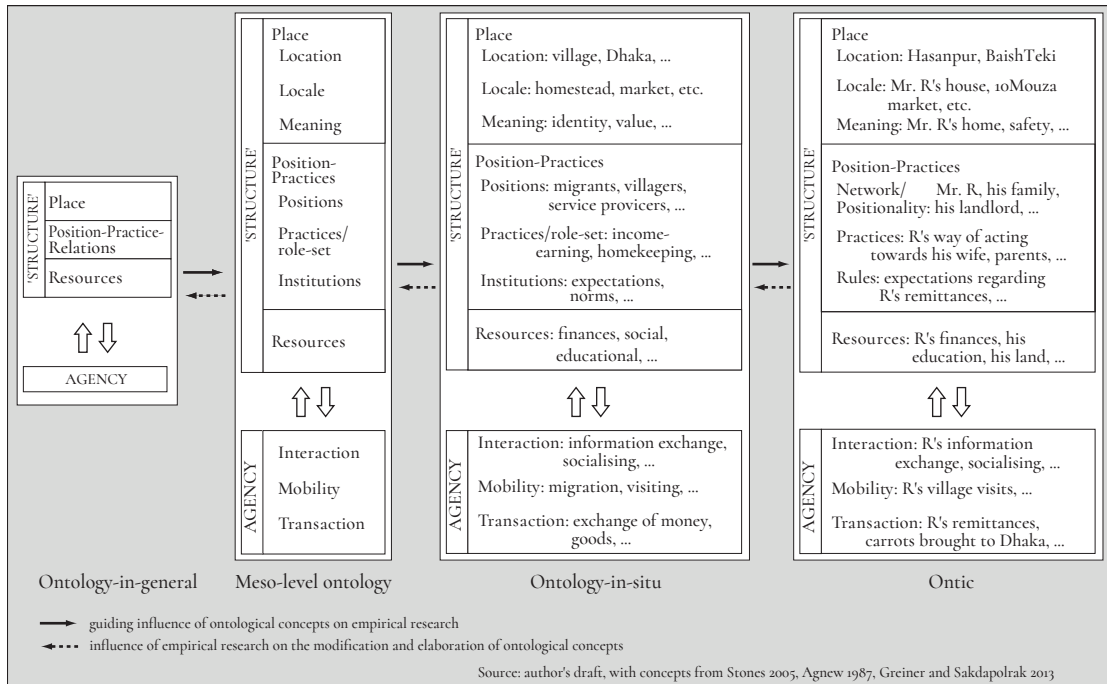


Figure 3.1: Key concepts of this study on several ontological levels (Source: author's draft, with concepts from STONES 2005, AGNEW 1987, GREINER & SAKDAPOLRAK 2013a)

with each other" (STONES 2005: 76, emphasis added). In contrast with the ontology-in-general, the ontology-in-situ is pointed "towards the ontic... , towards the realm of particular qualities, relations, shapes, tone, texture, colour and so on... at which empirical evidence can be sought" (STONES 2005: 76). For example, *the networks between villagers in the rural North and their rural-to-urban migrant relatives in Bangladesh* (or 'newly refurbished Wilhelminian style houses in neighbourhood X') would belong to a level of the ontology-in-situ, whereas the categories *position-practice-systems between rural and urban dwellers* (or: "heritage buildings") would belong to a more abstract meso-level ontology (see also figure 3.1). The statement *the networks between Mr. R. in Hasanpur village and his migrant daughters in Dhaka* on the other hand would refer to the instantiation of these categories on the ontic level of the 'real world'.

To make sense in the context of a study, the concepts of the ontology-in-situ must be logically coherent and informed by the corresponding system of concepts on an ontology-in-general. An intermediate conceptual level supports the concretization of concepts and allows for the incorporation of variations, difference, intensity, durability, etc. on the ontological level. Stones notes that by making explicit the meso-levels of ontology and logically linking them with each other (as well as with the concepts of the ontology-in-general), the content of and relations between concepts at an in-situ-level are more likely to remain coherent. The conceptual framework on such meso-level(s), as well as on the in-situ-level has to be elaborated for a given research subject and context (e.g. the study of education systems, society and technology studies, or translocal social constellations, etc.). Empirical research and the analysis of data is

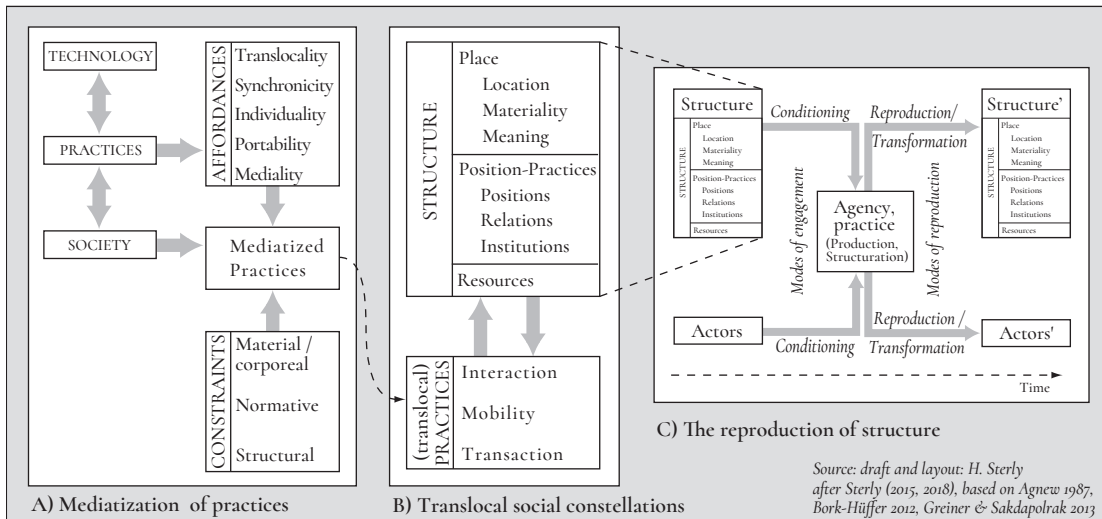


Figure 3.2: Overview of the theoretical framework: Mediatization of practices (A), translocal social constellations (B), the (re-)production of structure (C) (Source: author's draft, after STERLY 2015, 2018; based on AGNEW 1987, BORK-HÜFFER 2012, GREINER & SAKDAPOLRAK 2013a)

thus informed by these nested theoretical levels, and in turn again also informs the elaboration of the different levels of theory (see also figure 3.1, horizontal arrows).

3.3 Conceptual framework

The following subchapters give a more detailed account on the key theoretical concepts that I employ in the study; it starts with an overview of how the different concepts relate to each other (below), then gives a brief description of the concept of translocal social constellations (ch. 3.3.1) and of translocality and a relational concept of place (ch. 3.3.2). It then describes the approach to relational and network structure (ch. 3.3.3), briefly sketches the aspects of resources (ch. 3.3.4) and of actor and agency, (ch. 3.3.5) and gives an account on how mediatization is conceptualized (ch. 3.3.6). It concludes with presenting the concept how agency and practices invoke changes in social structure and place (ch. 3.3.7).

Overview

Figure 3.2 illustrates the main concepts and their interrelations: through interaction between technology and users, and in the context of specific constraints, particular affordances are produced and sustained. 'Calling' is thus not 'just calling': instead, people draw upon these affordances to overcome these constraints (see ch. 3.3.6) and to achieve anticipated outcomes. Mediatization then is conceived as the embedding of media, here the mobile phone, in everyday practices, but also in acts of strategic agency, thus leading to changes in practices and agency, for example in modes of information sharing or socialising, or to the emergence of new practices, for

3 Theoretical approach and conceptual framework

example the initiation of romantic relationship through mobile phone calls (Figure 3.2-A). This is especially relevant in the context of translocal social constellations (see ch. 3.3.1), where actors belong to a social units that are spatially dispersed through migration and where the everyday living and livelihoods have become translocal (see ch. 3.3.2, figure 3.2-B). As structure is being reproduced through agency and practices (see ch. 3.3.5), these changed practices lead to a modified reproduction of structure—of positionalities, relations, institutions (the structural part of position-practice-relations, see ch. 3.3.3)—and of the positioning, materiality and meaning of places (see ch. 3.3.2, figure 3.2-C). Different modes of interactions between actors and structural constraints pertain to different outcomes in the reproduction of social structure and place (see ch. 3.3.7).

3.3.1 Translocal Social Constellations

I refer to the subject of the study as *translocal social constellations*, because neither of the notions of translocal *households*, translocal *livelihoods* or translocal *kinship relations* does fully include all relevant aspects. Apart from general limitations that the concept of the *household* entails (for example the difficulty of universal definitions, see SANJEK 2010; the essentialism inherent even in many critical household approaches, CARR 2005; the gender and power differentials often missed in household approaches, HART 1995), it became also clear during my first explorative field visit in 2011 that households as units of social organization between the individual and larger scale units are one the one hand very differently shaped, and also undergoing processes of change on the other hand. Socio-economic transformations such as education- and income related migration and mobility, or shifts in gender and intergenerational relations contribute to lifestyle changes that considerably challenge the concept of the household as the most meaningful unit of analysis: In some cases what would be supposed to be one rural household was considered by the inhabitants as distinct households, due to separate income and production modes; in some cases it would be appropriate to speak of separate urban and rural households of one family, in other cases urban and (even several) rural households would function as a single economic and social unit, following joint decision making and operational logics.

For similar reasons, GREINER (2012) argues for the concept of translocal *livelihoods* instead of translocal *households*. However, the notion of translocal livelihoods is limited as well, as it implies a functional—and, to some degree, also functioning—economic unit, some sort of actual, more or less regularized, reciprocal or unilateral exchange of goods, finances or services, and a certain coherence of organising logic per livelihood unit. This tends to miss out more dormant or latent (economic and other) relations and flows that might not contribute to the livelihoods on a regular or continuous basis, but may nevertheless be important in times of need or emergency, or for socio-cultural reasons. Further, and more important for my study, the socio-psychological aspects of wellbeing, mutual support and meaningful relations are only to a limited extent covered by the concept of livelihoods—relations that were nonetheless considered as highly important by many interview partners. The concept of *kinship* or *family* on the other hand has a focus on the socio-cultural construction of genealogic relations, and misses out many of the aspects of households or livelihoods.

Thus, to broaden the focus, and to include these aspects—the meaningful, economic and often also morphological unit of the household, the socio-economic and functional notion of

		Local properties	Relational / translocal properties
Structural Properties	Location	Geographic location: 'here', coordinates	Relational reference: near, far, adjacent, contained in, etc.
	Materiality	Material site for corporeal presence and co-presence (e.g. house, common meeting point, public place); material features and resources (local infrastructure, soil, etc.)	Material sites of flows (roads, paths, bridges, etc.); material sites as nodes and hubs for flows (e.g. bus terminal, banking agent, cellular base station, etc.)
	Meaning	Specific individual relevance (home, own land), specific social relevance (territoriality), symbolic importance (birthplace of VIP, etc.); rules, norms bound to specific places	Rules and expectations shaping exchange and transaction (frequency and amount of remittances, communication, etc.); meanings attributed to translocal constellations, referencing to other places, etc.
Agency / Practice		Actions with local reference, or drawing on local structures, or with the outcomes of transformation of local structures	Actions with translocal reference, or drawing on translocal structures, or with the outcomes of transformation of translocal structures
		Locale	Translocale

Table 3.2: A multidimensional, relational and dynamic concept of space (Source: STERLY 2015, modified, based on AGNEW 1987, CRESWELL 2004, GREINER & SAKDAPOLRAK 2013b).

livelihoods, and the socio-cultural idea of family and kinship relations—I refer to the social and economic wholes that I found 'on the ground' and that shall be included in the study, as *translocal social constellations*.

3.3.2 Translocality: place, relations, resources

To conceptualise and operationalise translocality, I build upon GREINER & SAKDAPOLRAK (2013b), who highlight the three dimensions of place, network and locale. In modification to that, I use a combination of *place*, *position-practice-relations* and *resources* to capture translocal structures, practices and dynamics (see also STERLY 2015, ch. 3.6 and STERLY 2018, ch. 6.6).

Place is, as Greiner and Sakdapolrak note, the key for understanding translocality. The concept of place applied here is a multidimensional, relational and dynamic one (cf. GREINER & SAKDAPOLRAK 2013b, STERLY 2015). Based on AGNEW's (1987) three elements of location, locale and sense of place, I take three major aspects into account when analysing place: its *location*, its *materiality*, and its *meaning* (see also table 3.2).

Location is "the geographical area encompassing the settings for social interaction" (AGNEW 1987: 28). Places do have an absolute and relative topological location, but are also embedded in "social and economic processes operating at a wider scale" (AGNEW 1987: 28): they are constituted not only by their mere location (e.g. certain geographical coordinates), but also in relation to (e.g. 'the village north of our village', 'the village close to the city'), or bordering

3 Theoretical approach and conceptual framework

or being part of other places. Thus, scale also is important for understanding place, and itself needs to be conceived relationally (cf PORST & SAKDAPOLRAK 2017), as places do not have a fixed size or scale, and places can be nested in or part of other places. Spatial distance is also relevant, especially in terms of the related costs for mobility and travel. With *materiality*, I refer to the material sites in which corporeal actors are present and co-present, do interact and perform transactions, and where material (natural and artificial) resources and infrastructures are located. Resources are often place-bound, and transportation might be profitable or involve costs. And with *meaning* I denote the non-material structural features of a place: the way that actors make sense of a place, the meanings and associations, feelings of belonging and identity, but also the rules, norms and values that are specific for a place. Meaning here also includes the discourses and the struggles for semantic hegemony over a place.

The local and translocal structural properties of location, materiality and meaning are the frames for human *agency and practices*, both local (with a reference to a particular place, drawing on local resources, for example farm work, childcare, household chores), and translocal (with reference to other places, drawing upon translocal resources, for example sending or receiving remittances, communicating with someone in another place, travel and migration). Translocal social practices—transcending or spanning multiple places—are always anchored in local structures, ‘taking place’ locally but with reference or direction to other places, or simultaneously at several places.

A *locale*—as the arena in which everyday life and practices are situated—in this sense comprises of the structural properties in the dimensions of locality, materiality and meaning, as well as agency and practices; when relating to other places (or referring to translocal or relational structures), I would speak of a *translocale*. In this sense, my understanding of a locale is different from Agnew’s one, as I include also the location and the sense of places in constituting the locale.

This notion of place is *relational*: places, in each of these dimensions, are constituted through both internal arrangements and characteristics (e.g. through resources, architectural features, norms and meanings specific to a given place) as well as through relations to other places (e.g. through transportation infrastructure, migrant networks or expectations towards frequency of remittances) and structures. Thus places in most, if not all, cases represent local and relational arrangements at the same time, and so it will not be possible to understand a specific place by only taking either its internal or its relational, external structures and practices into account (MASSEY 2005, CRESWELL 2004).

And places are *dynamic* and undergoing constant change: These local and translocal aspects of places are structural features that enable and constrain human agency at any given moment in time, but are themselves the results of past agency and subject to reproduction or change, brought about by present and future agency. Thus places, their material and immaterial features, their meanings and signification, both local and relational, are not static but dynamic, they undergo constant redefinition, contestation and rearrangement. Important processes of change are regionalisations (GIDDENS 1984, WERLEN 2009) as the (habitual) constitution or (active, strategic) definition of places and spaces through spatially bounded practices (homes, public places, sports facilities, etc.), and time-space-distantiation (GIDDENS 1984), the spatial extension or ‘stretching’ of social structure and systems over space, and their extension in time, the latter resulting in their temporal consolidation.

Place has thus to be understood from a perspective of a two-fold dialectics: constituted through the spatial dialectics of local and relational aspects, and through the social dialectics of both structures as well as agency and practices. The concept of place is densely intertwined with that of scale in several ways: Places can stretch over different spatial extents (house, square, village, city, district, etc.); the local material and immaterial structures constituting a place do not necessarily share the same spatial structure or extent, and a given place can relationally be constituted through connections to places or entities on several scales.

3.3.3 Relational structure: position-practice relations, networks, networks of relevant relationships

“An individual carries his social position around in his head, so to speak, and puts it into action when the appropriate occasion arises. Not only does he carry it in his head but others also carry it in theirs, because social positions are matters of reciprocal expectations and must be publicly and commonly perceived by everyone in the group” (DAVIS 1948: 87, cited in SCOTT & LOPEZ 2000: 29).

I take up the concept of position-practice relations, but further elaborate on the different ontological levels implied, differentiating four concepts of relational structures: (a) position-practice relations, referring to (impersonal) positional categories, (b) social networks, referring to relations between actual individuals, (c) networks of relevant relationships, putting events or persons in institutional and systemic contexts and (d) the relative positioning of individuals and social categories in abstract spaces of power and status. Figure 3.3 illustrates the differences of the concepts (a), (b) and (c) according to the ontological status of their content.

Position-practice relations

STONES (2005) takes up the concept of position-practice relations, introduced by BHASKAR (1979: 51), briefly mentioned by GIDDENS (1984) and further elaborated by COHEN (1989: 2010-2012). It refers to *categories* for persons (positions), the relations between them and the related roles and practices. The concept of position-practice relations serves two mediating purposes: first it provides an important “‘point of contact’ between human agency and structure” (BHASKAR 1979: 51) and thus helps to ‘densify’ the ontological ‘landscape’ of structuration theory, and second it serves to systematically establish linkages between the ‘micro-’ and ‘macro’ levels. BHASKAR defines a position-practice system as a “mediating system . . . of the positions (places, functions, rules, tasks, duties, rights, etc.) occupied (filled, assumed, enacted, etc.) by individuals, and of the practices (activities, etc.) in which, in virtue of their occupancy of these positions (and vice-versa), they engage. . . Now such positions and practices, if they are to be individuated at all, can only be done so relationally” (BHASKAR 1979: 51).

COHEN (1989) further elaborates the concept of position-practice-relations, listing four defining criteria: (1) positional identities, associated with sets of prerogatives and obligations, and characterised by identifying criteria which also regulate access to these positions, such as qualifications, attributes, age or kinship; (2) sets of practices associated with the position; (3) other position-practices and their relations to a given position-practice; and (4) institutionalised reciprocities through which position-practice relations are structured (normative, interpretative

3 Theoretical approach and conceptual framework

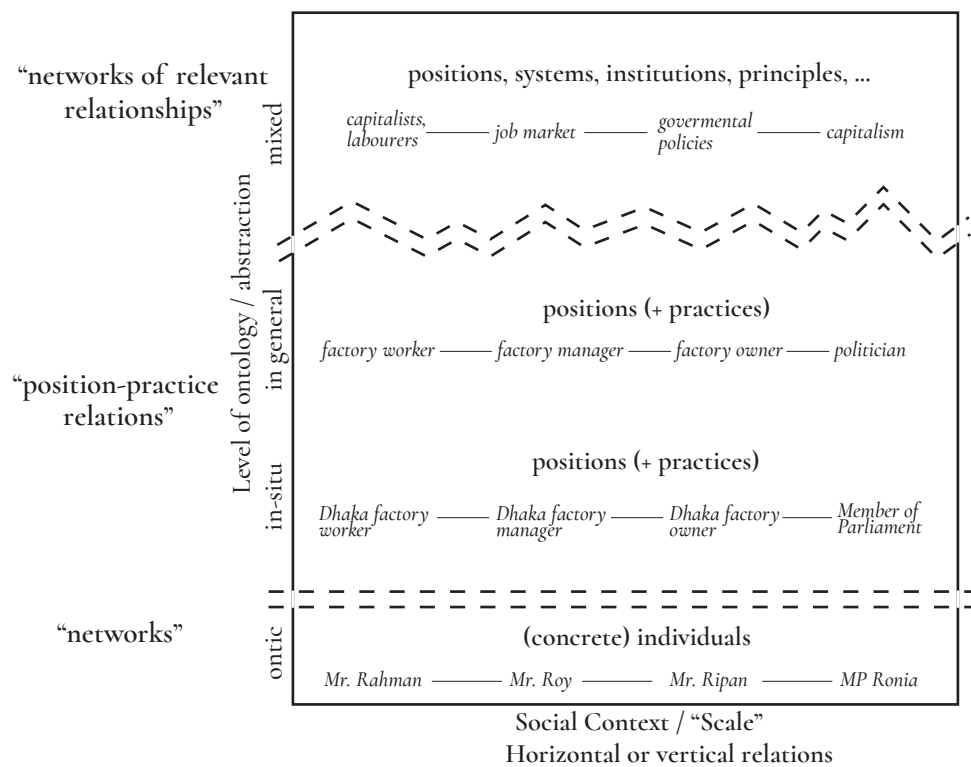


Figure 3.3: An ontology of relational structures (source: author’s draft, based on STONES 2005)

and power-related) (COHEN 1989: 210).

Positions are here understood as *categorical* social identities, specified within a network of social relations, having bundles of practices ascribed to them. This comes thus close to MERTON’S (1968) notion of status-sets, with role-sets attributed to them. Some aspects should be noted here: first, these positional ‘slots’ and the respective defining criteria exist—and can be identified—independently from and often pre- and postdate the individuals that fill them; however, these slots are not irresistible to change: their reproduction is contingent on actual practices, especially on the activities of role-taking and role-making (COHEN 1989: 209). For example, the position of a professor of Social Geography requires formal qualifications and comprises defined roles and institutionalised practices that are independent from the actual incumbent. But the positional identity, the attributed roles and practices and the relations to other positions in university (such as students, assistants) are also depending on an individual professor’s individual definition of her identity as a professor, her communication practices or the enforcement of hierarchies. Second, an individual normally occupies multiple positions, and these positions remain occupied and real even when they are not being enacted at a given time: a professor remains a professor even when he or she is a customer in the supermarket. COULTER (2001: 45) thus concludes that a position “is a matter of being able legitimately and relevantly to claim such a status, as well as ... to invoke it in ascriptive practices.”

Practices, in the sense of position-practice relations, refer to socially structured and routinized ways of doing things—of thinking and understanding, communicating, using the body, but also of handling objects (cf. RECKWITZ 2002). Thus practices are forms of habitualised, recurrent actions, but differ from personal habits in being a social phenomenon (BURNS & SCAPENS 2000). Practices are produced through invoking social structures (or sometimes caused or even enforced by social structures), but are also reproducing these structures: “social practices, biting into space and time, are considered to be at the root of the constitution of both subject and social object” (GIDDENS 1984: xxii). As practice “appears at different locales and at different points of time and is carried out by different body/minds”, practices are not only observable (compared to e.g. knowledge, interpretative schemes, power relations etc.) but to some extent also understandable or at least interpretable to potential observers (RECKWITZ 2002: 250).

To speak in terms of practice theory, it is not so much the positional identity that ‘allows’ an incumbent to enact certain rights and obligations, but it is rather a set of structured and socially acknowledged routines and practices that define the respective position (COAD & GLYPTIS 2014). These sets of practices associated with a position correspond to some extent to MERTON’S (1968) role-sets tied to a given position, in so far as they also underlie context-dependent constraints and limitations: it is only appropriate to enact certain practices (and thus ‘invoke’ the position) when being in the respective places, at the respective times or in the presence of (or in mediated communicative situations with) the respective others. Mediated communication and especially mobile communication can afford to extend the communicative range and to enact more than one position in a given space-time context, resulting in a potential for pluralisation of communicative or positional contexts (an example for the *doubling of place*, cf SCANNELL 1996 and MOORES 2004 and 2012).

The *relations* between these positions are constitutive elements of the positions: social positions or positional identities are to a large extent defined in relations to other positions in the context of the larger scale social phenomena (communities, systems, fields) that these position-practice relations form. The position of a professor for example is constituted through the relations with other positions (students, lecturers, other faculty members, dean, president, etc.) within the science and educational systems. COHEN notes that position-practice-relations can be ‘horizontal’ or ‘vertical’, referring to the differentials of power involved in the relations: the workers in a factory, the workers producing the raw materials and the customers of the final products for example are linked horizontally, whereas the workers in the assembly line, the factory administration and the factory management would be linked vertically (COHEN 1989: 212).

Discerning relevant horizontal and especially vertical position-practice relations into which an agent in focus is embedded can help to identify the “manifestations of [these] wider forces within the practical action horizon of particular agents” (STONES 2005: 83). For example, both ontologically and epistemologically it is difficult to directly link the livelihood situation and scope for agency of a farmer in a Bangladeshi village to such abstract (but nonetheless causally effective) institutionalised principles such as ‘capitalism’ or ‘feudalism’. These concepts become much more tangible (and relevant for empirical research) if they are reformulated in terms of position-practice relations, linking for example a village farmer to the mill owner buying the harvest, who is in turn linked to the landlord who owns most of the land in the village as well as the local truck company.

3 Theoretical approach and conceptual framework

Many types of position-practice relations (for example in kinship, education, labour systems) are stable over time and spread in space (for example in cultural, administrative, economic regions), thus they are what Giddens calls distanced in time-space (GIDDENS 1984). They are enacted through structures that have become institutionalised and thus stable over time and distances. (Institutionalised) structures can be, following Giddens, analytically separated in the three aspects of signification, domination and legitimation: communication is done in specific codes, power is exercised between positions in hierarchical relations and with different resource endowments, and normative expectations regarding the relations or positions lead to legitimation or sanctioning. Such institutionalised structures condition (both enable and constrain) any position's incumbent's actions—they are the medium of agency. At the same time they are outcomes of the very acts that they condition, and thus “they are subject to reflexive monitoring and potential variation in praxis over time” (COAD & GLYPTIS 2014: 146).

Networks

At the level of the 'real world'—the ontic—the social network between individuals (encompassing their power relations, different resource endowment and normative expectations) is an important analytical concept. A network is basically defined as a number of nodes linked by vertices (cf. NEWMAN 2010: 1). When focussing not on the relations between positions as *categories* for individuals (for example 'factory worker' or 'owner'), but on the relations between the *actual individuals* who occupy these positions (for example 'factory worker Mr. Rahman' or 'factory owner Mr. Ripan'), the individuals and their relations can be conceived as the nodes and vertices of a (social) network, with a distinct network topology. Similar to position-practice relations, networks are not 'flat' and void of hierarchies, but are structured by the relative positioning of individuals, the associated reciprocal practices, as well as the structural properties (rules, norms, expectations, power relations) that pertain to these positions and relations (STONES 2005, GREENHALGH & STONES 2010). These relations (understood as the topological structure of the network) can also have structuring effects on their own: for example when it is the personal network that gives a specific migrant better access to housing or jobs in Dhaka than other migrants.

Networks are idiosyncratic and bound to the individuals that form the networks (BOMMES & TACKE 2007), they have to be constantly re-enacted and reproduced in order to continue to exist: every contact and interaction reinforces, alters or extends an individual's networks. If individuals cease to engage in the reciprocal activities (exchanging information, tokens, gifts, etc.), they can also 'fall' out of the network in the course of time. It is within such personalised networks—within “certain specifiable connections between the individual agent and the social contexts through which that agent moves in the course of day-to-day life” (GIDDENS 1984: 60)—where interpersonal trust is generated and sustained through routinized interactions and the resulting perception of compliance with expectations (GARFINKEL 1963).

Social networks, being situated in time-space and bound to actual individuals, will extend over distances when the respective individuals are located in distant places. Thus it is the social networks that form the interpersonal structures spanning the social space between (and also within) places: “[t]ranslocal social space can be regarded as multi-local inter-personal links representing a relatively stable condensed configuration of daily life practices” (STEINBRINK

2009: 222).

Networks of relevant relationships

Networks of relevant relationships is a concept that STONES (2005) borrows from BOURDIEU's example of the analysis of the television system, where BOURDIEU criticises journalists to

“[...] show us the world only as a series of unrelated flash photos. [...] they cannot do what would be necessary to make events (say, an outbreak of violence in a high school) really understandable, that is, they cannot reinsert them in a network of relevant relationships (such as the family structure, which is tied to the job market, itself tied to governmental hiring policies, and so on)” (BOURDIEU 1998: 6-7).

The concept can be employed to establish causal relations between elements of different ontological status: events, persons, institutions, positionalities, systems etc. Although the network of relevant relationships suffers from conceptual fuzziness and especially from the mentioned ontological arbitrariness, it can still be helpful for situating the empirically relevant 'action horizon' of given individuals in institutional and other more generalised contexts (for example establishing relations to institutions such as the job market, governmental policies or capitalism, see also the top line of figure 3.3).

Social positioning

With social positioning I refer to a generalized relative positioning of individuals within larger social contexts, to a large extent defining the individuals' social status. This relative positioning is based on *generalised* position-practice relations, thus it goes beyond the context of specific position-practice relations. University professors and rickshaw pullers in general, but also a *specific* rickshaw puller and a *specific* university professor do have a positionality towards each other, even if they are not related through a common system of position-practice relations or a their personal network. To refer to BOURDIEU, this is because all social actors—and thus *all* rickshaw pullers and *all* university professors—are positioned in a generalized social space, according to their positions and endowment with different forms of capitals (BOURDIEU 1992). The power relations between actors in a given social subset (a field, in BOURDIEU's terms) are “institutionalized in durable social statuses that are socially recognized or legally guaranteed, between agents objectively defined by their position within these relations” (BOURDIEU 1992: 231). This corresponds also to what GIDDENS calls “[s]ocial relations [that] concern the ‘positioning’ of individuals within a ‘social space’ of symbolic categories and ties” (GIDDENS 1984: 89).

Relational structure = position-practice relations + positioning + networks

To be able to empirically comprehend the dynamics as well as the causal effects within social systems, it is necessary to analytically distinguish the relational concepts of social networks, position-practice relations, and social positioning. This makes it possible to comprehend the interrelations and interdependencies between these, and to better understand the scope for agency of the differently positioned individuals.

3 Theoretical approach and conceptual framework

Figure 3.4 schematically illustrates these interrelations with the example of the relations in a (fictive) company—think of a ready made garment (RMG) factory in Dhaka: (a) shows the *formally defined* (for example in internal rules of procedure) system of relations between different positions in the company. The size of the circles symbolises the formally defined power, the width of the connecting lines the intensity of interaction. (b) shows the *informal* position-practice relations, that is the positional identities, relations and practices how they are routinely interpreted and enacted ('the way things are usually done here'). Often, the position of the secretary is more important and stronger linked than formally designated, as much information passes this position. And frequently the workers are establishing social bonds, although this might not be officially foreseen.

(C) shows the *networks* between the actual incumbents of the positions; the size of the circles symbolises the positioning of the concrete individuals in the wider social context. The social position of Mr. Alam the foreman is notably higher than his position within the company would suggest, as we let him be a member of the ruling party and thus having some political influence; he has conflicting relations with the worker Mr. Rahman, who, however, has some links to the factory owner as their fathers are friends in their rural home. Mr. Alam and the secretary Mr. Assaduzzaman are cousins, so their relation is very strong. (d) shows the overlay of the three 'layers' of relations.

The example shows why it makes sense to differentiate these layers of relational structures: to understand the operational logic of actors within the social space of this fictive company (or, to stay in the more mundane example: if we ourselves would want to successfully navigate and maneuver within this company), we would obviously need a sufficient degree of knowledge of all of the three.

Position-practice relations and the networks of actual individuals filling the positions are related and influence each other: the structural properties of position-practice relations (positionality, practices, institutionalised structures) have structuring effects on the networks of the individuals, and the latter in turn also have influences on the (especially informal) structures of position-practice relations. General social positioning largely influences who will be legitimate to occupy certain positions, as well as the access to personal networks. As ARCHER (1995) puts it, the position of agents, "due to parentage and social context, profoundly influences what type of Actor they can choose to become" (ibid.: 277). However, access to the 'right' individuals through personal networks can also raise the opportunities to get into positions that a given agent might not be able to occupy without having these networks, based on her positioning and individual characteristics alone. And finally the positions within position-practice relations (e.g. being a professor and a mother and a charity chairperson, etc.) as well as the membership of social networks (e.g. being a close friend of powerful individuals) determine also to some degree the social positioning, status and recognition of an individual.

3.3.4 Resources

Resources, in the sense of material and immaterial goods that actors have command over, form an important part of the theoretical thinking of structuration theory. Access to resources is a crucial basis for agency and practice, but the aspired increase or conversion of resources are also strong motives for acting. Migration decision making is in many cases linked to aspirations of

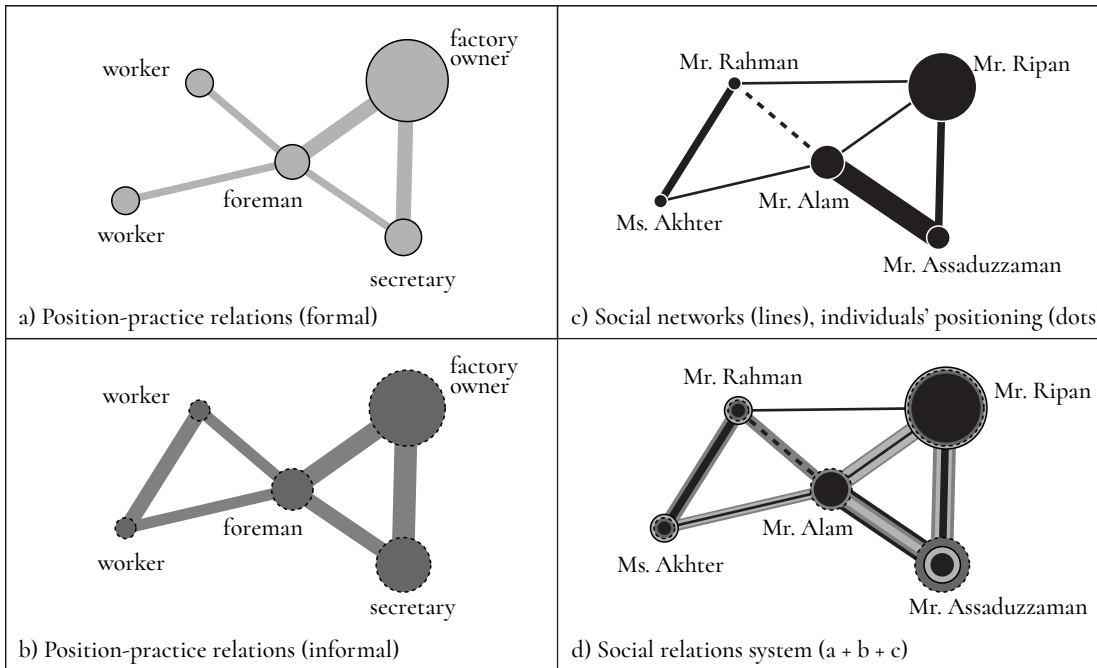


Figure 3.4: Relational components of social systems (Source: author's own draft)

improving the resource basis; and translocal livelihoods, based on remittances of finances, goods and knowledge and the reciprocal care for rural assets, are often a vital part of the translocal social constellations in the study. In order to further operationalise the (fairly abstract) resource concept of e.g. GIDDENS or the capitals of BOURDIEU, the substantially extended definition in KLEINE's Choice Framework (KLEINE 2010, 2011) is adopted, including ten resource dimensions.

KLEINE adopts the sustainable livelihood approach with its 'classic five' resources of human, natural, financial, physical and social, but subdivides the human capital into educational and health, and adds the cultural, informational, geographical and psychological as relevant dimensions. I further add the dimension of time, as this was a frequently occurring motif in my fieldwork. This leads then to the following resource dimensions:

- 1) material resources include all material objects owned, including tools and equipment for production;
- 2) natural resources such as land and the geo-ecological condition as well as the access to water;
- 3) geographical resources which include the location (relative to markets for example) and nonmaterial qualities of the place;
- 4) health as a prerequisite to lead a meaningful life;
- 5) education as the skills from formal and informal trainings;
- 6) psychological resources comprise of "self-confidence, tenacity, optimism, creativity and [psychological] resilience" (KLEINE 2011: 123);
- 7) information resources as the ability to access information (e.g. producer or input prices), but also the capacity to process the information into relevant knowledge (e.g. whether input producer prices are competitive);
- 8) cultural resources that I reduce here to the institutionalised state that, following BOURDIEU (1988), pertains to the prestige or status that a position of an actors has;
- 9) social resources (or social capital) emanates from the membership in social groups and networks, and can facilitate access to resources;
- 10) financial resources as

3 Theoretical approach and conceptual framework

the financial capital available to an actor; and 11) time resources which refers to the perception of time 'availability' and 'necessity' by actors, including the time necessary to achieve certain outcomes, and the idea of spare time.

3.3.5 The actor, agency and practice

In this study, I regard as an agent or actor, any individual, (unorganized) collectivity, or organized group (or organization) who engages in action, regardless of whether this action actually results in any structural changes or not (cf STERLY 2015, and chapter 6.3). I do not further delineate between actor and agent (as for example BORK-HÜFFER 2012 does), as for the scope of the study this was not deemed necessary.

As *actions* I conceive all forms of human action, stretching on a continuum between critically distant and reflected agency on the one side and habitual, routine practice on the other side (MOUZELIS 1991). While *agency* in this sense then denotes more conscious, sometimes even strategic action, *social practices* refer to the socially structured, routinised actions, including thinking and understanding, communicating, moving, using the body, objects and technology (cf RECKWITZ 2002). In the course of action, agency and practice often co-occur and might be difficult to discern; while a certain action can be carried out reflectively and strategically, and in this sense would be regarded as agency, within the course of action, actors often are bound by the "urgency of practice", immersed in the flow of action and constantly "anticipating the anticipation of the others" (BOURDIEU 1980: 137), thus needing to *re-act* immediately and then mostly recurring to embodied and habitualised practices during the flow of action.

With regard to the topic of translocality and mobile communication, three types of actions seem to be especially relevant: *Interaction*, i.e. the communicative and interpersonal engagement of agents, which also encompasses non-verbal and non-directed communication, for example through dressing in a special way in public places. *Transaction* as the exchange of information, goods, services, finance, etc. between the actors within translocal as well as local contexts. *Mobility* as the long-term (migration) and the short-term movements of actors between places that spatially stretches social networks and adds translocal relations between places (see also STERLY 2015, chapter 6.3).

3.3.6 Mediatization, affordances and constraints

On an abstract ontological level, the concept of *mediatization* refers to the increasing relevance of technologically mediated communication and its intertwining with changes in the social construction of the world (LUNDBY 2014, see also 2.2). On a more concrete (meso-) level, and in the context of this study, with *mediatization of translocal practices*, I refer to the increasing spread and utilization of mobile communication for interpersonal communication, and the changes in translocal practices of (rural-to-urban) migrants. I largely set a focus on mobile voice communication and consciously exclude the wide field of data- and internet-based services such as social media, locative services etc., as, at the time of the field work and still today, in rural parts of Bangladesh and the informal settlements in Dhaka, the majority of people did and do not have access to smartphones and data-services.

Affordances

In order to take a middle ground between technological determinism and social constructivism (see also chapter 3.1), I employ the concept of *affordances*. The term has been coined by GIBSON (1979) for something that the environment, an object, or technology offers to humans or animals, or, as “something that refers to both the environment and the animal... [i]t implies the complementarity of the animal and the environment” (ibid. p. 127). The latter notion is key to the understanding of affordances as being neither an inherent characteristic of the object, nor solely a social construction of people: a table or a highboard for example afford the action to place something on it; for adults it might also afford the action to sit on it, whereas for smaller children, this would not be the case (although for them, it might as well afford the action of *climbing* onto it). Another example is the use of the backlit screen of a mobile phone as a (dim) source of light, which is not built-in or designed for that, but may emerge from the possibility and the need in places without electricity or with power-cuts.

Another prominent example for affordances are the (for example health-related) mobility information that mobile phone call metadata (Call Detail Records, CDR) can provide: initially, CDR were designed for billing purposes, and for that a CDR dataset is generated with each call or message. It typically contains information on the caller’s and callee’s ID, the location and network of caller and callee, and the duration. Thus, CDR contain information on the spatio-temporal trajectories of a large number of people—or at least of their mobile phones—in a fine to medium spatial and temporal granularity. Already in the past (e.g. during the Ebola outbreak, or for tracing influenza outbreaks, WESOŁOWSKI et al. 2016) but especially in the recent COVID-19 pandemic, data researchers, epidemiologists and governments were using CDR to derive a range of metrics for monitoring the mobility of populations, refine epidemiological models, or plan emergency measures (for a description of the potentials for the use of mobile phone data for fighting the COVID-19 outbreak see for example OLIVER et al. 2020).

Affordances can be seen as a relational concept, or as the emergent properties of the relationships between humans and objects that result from the interaction of the technical and material characteristics of objects or technology with the subjective perceptions, practices and experiences regarding their usage and utility (HUTCHBY 2001, FARAJ & AZAD 2012, LEONARDI 2012). The concept draws attention to three aspects of processes and outcomes of mediatization: the specific characteristics of a given technology, the social practices of the actors concerned, as well as the social and cultural context in which these two are positioned.

There is also a dialectical relationship involved: affordances are on the one hand *emerging from the interaction* of users with a given technology and from its application and usage, and on the other hand affordances *condition the usage practices* of technology by users (without determining them), through framing the perceptions of utility, accepted ways of usage, and observable usage practices, among others.

In the context of this study, I draw upon SCHROCK’S (2015) typology of communicative affordances of mobile media, combine this with WELLMAN’S (2001) differentiation of communicative situations (*door-to-door, place-to-place, person-to-person*), and include first explorative field insights on what types of constraints the mobile phone usage helps to overcome. Based on this, I distinguish five basic affordances of mobile phones that are relevant in the context of the mediatization of translocal practices:

3 Theoretical approach and conceptual framework

Technology- focus (affordances based on SCHROCK 2015, constraints)	intermediate / “affordances-in-practice” (COSTA 2018)	Practice focus (phone use practices)
---	---	--

Figure 3.5: ‘Basic’ and ‘intermediate’ affordances and practices (author’s draft, based on SCHROCK 2015, COSTA 2018)

1. *translocality*, the ability to communicate over distances and through material barriers;
2. *synchronicity*, the ability to communicate without temporal delay and in real-time;
3. *individuality*, the ability to communicate from person-to-person and with the possibility to identify the calling and the called person individually;
4. *portability*, the ability to communicate from any given place, and, linked through space-time-trajectories, also at any given time, and also while being mobile and moving; and
5. *mediality*, the ability to record, store, exchange and display audio-visual media.

Constraints

A strong motive for humans to utilize technology or media is that it enables them to do things that they could not do without, or can do easier with it. To consider this, I employ the concept of *constraints*—limitations and barriers for actions that actors are facing when they engage in practices or agency. GIDDENS (1984) differentiates three types of constraints: i) *material / corporeal constraints*, pertaining to the materiality and corporeal nature of the human body and its boundaries for acting and communicating over distance, through solid walls and to our boundedness to certain time-space trajectories—we cannot be in two places at the same time, and our speed of mobility is limited; ii) *normative constraints*, as social norms, rules and expectations regulating actions in everyday life, for example the way how romantic feelings and relationships are expressed and performed; iii) *structural constraints*, as the inequalities in resource endowment and allocation, unequal distribution of power, and larger scale socio-economic patterns such as rural poverty and industrial labour availability in urban centres (which form for example one of the underlying structural reasons for labour migration). The affordances of mobile communication can enable actors to overcome some of these constraints.

By combining the aforementioned five ‘primary’ types of affordances—which are rather close to a more technology-centric perspective—with a phenomenological perspective on mobile phone usage practices and with a consideration of constraints, it is possible to operationalize what COSTA (2018) frames as “affordances-in-practice”: actors with their positionalities as farmers, parents or secret lovers aim to achieve certain outcomes with their agency and practices (Figure 3.5, right side). However, they face specific constraints (material/corporeal, normative, structural) to do so—the distance, moral expectations of non-engagement with members of the other gender, socio-economic and power disparities. By interacting with the technology and resorting to its primary affordances (translocality, synchronicity, individuality, portability,

and mediality, Figure 3.5, left side), actors are able to overcome the constraints, and out of these interactions, a range of ‘intermediate’ affordances result, emerging properties that are meaningful and relevant in the intersection of the primary affordances and the practices or actions pursued by the actors (Figure 3.5, middle).

3.3.7 The reproduction of social structure and space

As I have laid out, I understand action and structure as dialectically intertwined—action is conditioned by structure, and structure is (re-)produced by action (GIDDENS 1984, ARCHER 1995). Change in one of the two—structure or actions—or in the way the reproduction of structure works, therefore also should cause or at least trigger changes in the other. To further conceptualize the relationships between action and structure, and how change affects the scope of agency for the actors involved, I differentiate between modes of interaction that characterize i) the relations of agents and (constraining) social structure, and ii) the outcomes of agency on the reproduction of social positions, relations and institutions, and space. The examples given all pertain to the Bangladeshi context of mostly rural-to-urban migrants.

Actors’ engagement with structure

The engagement of actors with structure and the reproduction of structure and space follows different modes. BORK-HÜFFER et al. (2016), see also chapter 6.1, differentiate four modes of the engagement of actors with power inequalities (*Resilience, Reworking, Resistance, and Revolutionary acts*), based on KATZ’ 2004 typology of American youth contestation of space. I disentangle these modes by the different modes of engagement of actors with structure (keep, circumvent, change) and by the type of agency (strategical vs habitual, cf. MOUZELIS 1991), and then add three more categories (see figure 3.6-A): if actors act routinely and through this keep the structure, they *reproduce* structure; for example when women engage in remote parenting and through this reinforce their position-practice of caring mother. When actors strategically sustain structure against contestation or processes of change, they *defend* it, as elderly women in the rural areas of Bangladesh for example did when resisting against the mobile phone use of young and adolescent women to prevent them from engaging in pre-marital relations. When actors engage in routine practices that deviate from established ways of doing things, they can *rework* (BORK-HÜFFER et al. 2016) structure, for example when migrants routinely employ phones for remitting money and thereby contribute to the reshaping of the remittance sending system.

Circumvention of structure forms somehow a ‘middle ground’ between its change and keeping: when actors routinely do this and follow established ways of avoiding constraints, it can be framed as acts of *resilience* (BORK-HÜFFER et al. 2016), for example when rickshaw pullers call remote family members in times of distress to get emotional support, or migrants use the mobile phone to remotely manage their rural farm. When actors strategically circumvent structure, I denote this as *subversion*, for example when they deliberately call random numbers to secretly start an illicit romantic relationship.

3 Theoretical approach and conceptual framework

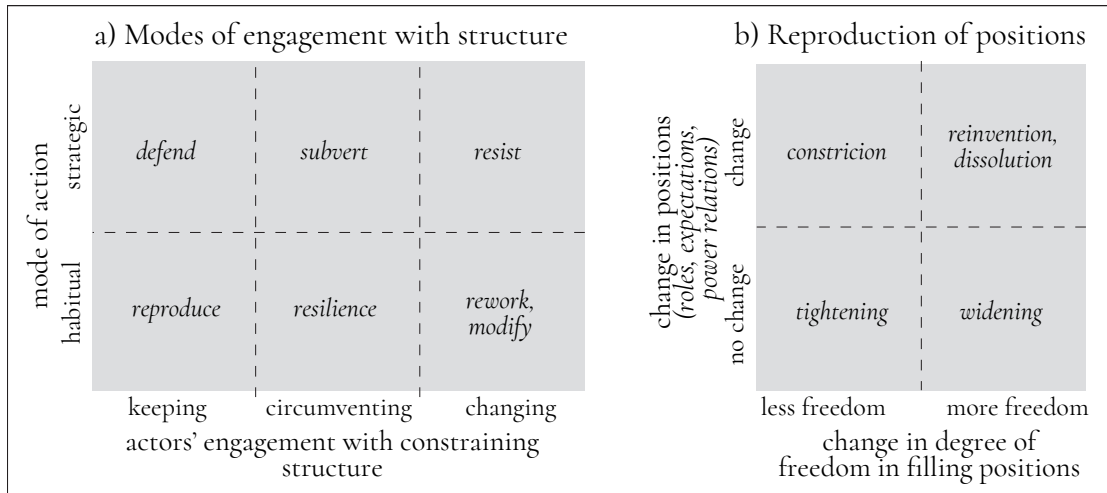


Figure 3.6: Modes of engagement with structure (a), and outcomes of the reproduction of positions (b) (Source: author's draft, based BORK-HÜFFER et al. 2016)

The reproduction of positions

For the outcomes of the reproduction of position, I differentiate between two dimensions: first, the change of freedom in 'filling', enacting, performing the respective position (between less freedom and more freedom), which is relevant for actors' *scope of agency*, and second, the change in the position with regard to its structural surrounding, the roles, expectations and embedding in power hierarchies (between no change and change, see figure 3.6-B). When the position itself does not change, but its incumbents have less freedom to deviate from the norms coming with the position, I call this *tightening* of the position. This would for example apply for women or mothers when increased social control decreases their freedom in negotiating the filling of the position. If the position itself remains, but there is more freedom in filling it, this would be a *widening*, for example if working women can negotiate more flexibility in caring work and are still accepted in their social position. When on the one hand the positions change, and on the other there is less freedom to enact the position, positions get *constricted*, which for example is the case when street food vendors (as a structural group) are pushed to a lower positionality in the social field and get increasingly discriminated legally and socially, and at the same time they have less scope for acting different as street food vendors (it has to be said that this outcome did not appear in my study). Finally, when on the one hand positions change, and on the other the freedom for enactment increases, it makes leeway for a *reinvention* or maybe even a *dissolution* of the position, as is for example the case when through the mediatization of remittance sending the positions of the sender and receiver change, and their freedom to remit in several ways increases.

The reproduction of relations and institutions

The reproduction of relations and institutions is broken down along two axes: first, the degree of structural change (between persistence and change), and second the mode of interaction

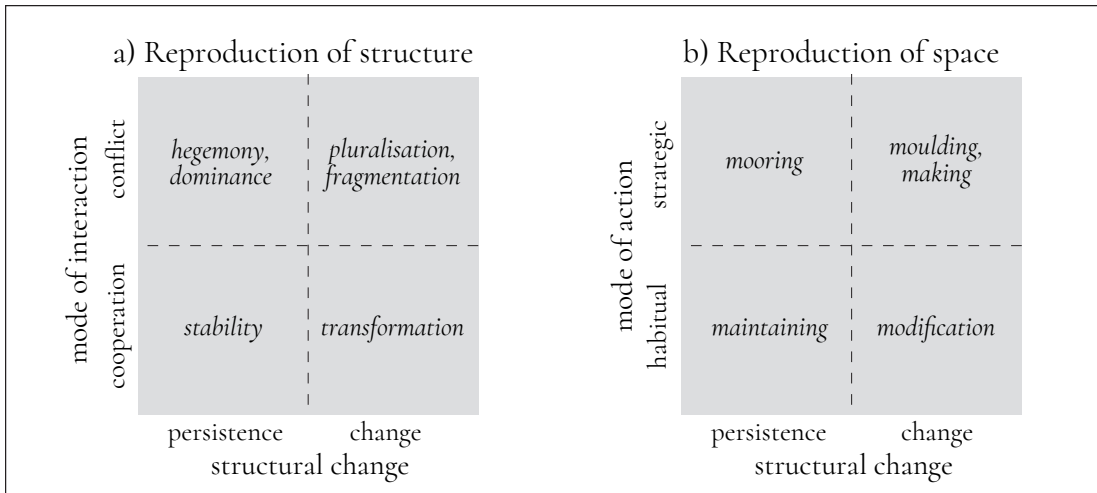


Figure 3.7: Outcomes of the reproduction of social structure (a), and outcomes of the reproduction of space (b) (Source: author's draft, based BORK-HÜFFER et al. 2016)

that led to these outcomes (cooperative or conflictive, see also Figure 3.7-A). When there is no contestation among actors on structural conditions and they reproduce them, this cooperative interaction results in the persistence or *stability* of structure. This happens when for example migrant women's relations and the institutionalised practices as a caring mothers (with all the role expectations) are stabilised through practices of remote parenting. *Transformation* takes place as a result of cooperative interaction that leads to structural change; an example would be the change in the new relations and institutionalised norms of a rural grocery shop turned mobile banking agent.

When conflictive interactions with regard to structure lead to structural persistence, the outcome could be characterised as *hegemony* or *dominance*, where one or certain groups prevent change and impose structures on others. An example is the adolescents' aspiration (and hidden practicing) for pre-marital romantic relations and the denial of the powerful (elders, local and higher level elites, religious authorities) to accept changes in social norms. When conflictive interactions lead to structural change, it is possible that this change is encompassing all members of a society, which would be a hegemonic form of change, but it is also possible that parallel social structures evolve that are shared by distinct groups or position practice relations. This can be labelled *pluralisation* or *fragmentation*, depending on the degree of separation and conflictive interaction. An example would be the emerging dating culture of students in Dhaka that is paralleling the dominant structural concept of what a legitimate relationship would be constituted, and that is pertaining to the position practice relations of students especially of the large public universities.

The reproduction of space and place

There are two levels on which I address the reproduction of space and place: first, the inter-linkages between positions, practices and places, in the sense of *who normally does what* and

3 Theoretical approach and conceptual framework

where, and second, the reproduction of (material and immaterial aspects of) places and space itself. For the first, I employ the concept of everyday regionalisation, as described by GIDDENS (1984) and WERLEN (2009). For the second, I refer to the modes of space production proposed by BORK-HÜFFER et al. (2016).

I understand regionalization as the spatial *and* temporal ordering of everyday life through (routinised) practices. GIDDENS (1984) emphasises the strong links between practice and place: “‘Regionalization’ should be understood not merely as localization in space but as referring to the *zoning of time-space* in relation to *routinized social practices*” (ibid.: 119, emphasis added). Also WERLEN (2009) argues for a focus on “everyday regionalisations” as the structuring of place through everyday practices of subjects (ibid.: 8). But it is not the everyday practices of an unspecified entirety of actors, who are doing something at some places that is of interest here, but rather specific actors who are regularly at specific places, and do specific things at these places. This is where position-practice relations come in:

Position-practice relations do almost always exist *regionalised* or even *placed*: a position has certain practices and institutions attached to it at specific places, times and social contexts: between a professor and her student for example, the interactional practices are structured not only in general, but also pertaining to spatial and social settings: during an exam, interactional procedures are highly structured, with little freedom for deviation; during an ‘ordinary’ consulting hour, conversations normally also follow specific procedures, but these are less strict than in the exam setting; in a departmental soccer match, totally different interactional practices would apply, probably allowing or even requiring (harsh) bodily interactions. Thus, the differences in power and hierarchy, the repertoires of and scopes for agency, as well as the formal and informal aspects of positional relations between actors depend not only on their positionality towards each other, but also on the spatio-temporal setting and the situational context. This regionalisation and spatialisation of position-practice relations also implies that the latter can only be understood to a limited extent, when spatial aspects are not being taken into account.

For the reproduction of space and place, BORK-HÜFFER et al. (2016) differentiate four central modes: *maintenance*, *modification*, *moulding*, and *making*. I have combined moulding and making, as in my study no real making of new types of spaces occurred, except the setup of infrastructures for mobile banking. I have rearranged these modes along two dimensions, first the degree of structural change (between persistence and change), and second the mode of action (between habitual and strategic, see Figure 3.7 Fig 3.7-B). When actors’ habitual acting and everyday practices lead to persistence, this would be *maintaining*; migrants who call their village relatives in times of psychological distress for example do not invoke changes in place through this. When habitual acting leads to change in place, this would be *modification*, for example when the waiting areas of rickshaw pullers at street intersections become habitual sites of joint listening to music. Strategic agency that leads to the persistence of places is referred to as *mooring*, for example when a neighbourhood group successful campaign to keep a local park open for using after hours, to hold their nightly dance performances (in my sample, there was actually no example for this). When strategic agency leads to changes in place, I call this *moulding* or *making*, following BORK-HÜFFER et al. (2016); an example is the spatial rearrangement of remittance sending structures through mediatisation, and the subsequent changes of former tea stalls or grocery stalls to financial agents.

4 Methodology, research design and applied methods

In the following, I will explain my basic epistemological positions, what this means for the methodological approach of the study, and I will reflect on my own positioning as a researcher and address some limitations of the methodology. After that I will explain the specific methods used for data collection and analysis.

4.1 Epistemology and methodology: between naïve empiricism and radical constructivism

As laid out in chapter 3.1, my *ontological perspective* corresponds to critical realism, implying that “there are real objects that exist independently of our knowledge of their existence” (SCHWANDT 2007: 256). Also corresponding with critical realism, my *epistemological approach* is leaning towards a constructivist paradigm, so I presume that our knowledge about, and the possibilities of comprehending and understanding external realities, are mediated through culturally produced and historically contingent concepts (DANERMARK et al. 2002). This is different from a “naïve realism” that postulates that knowledge about the world can be directly and immediately apprehended (TEDDLIE & TASHAKKORI 2010). However, I also do not fully subscribe to an epistemological pragmatism and an “anything goes” approach, implying the arbitrariness of any given epistemology, and that knowledge only depends on paradigmatic socialization of researchers or fulfils certain social functions: “‘Anything goes’, as PAUL FEYERABEND (1993) expresses it, ... ‘but all methods are not equally suitable’” (DANERMARK et al. 2002: 152). Thus, we can discern which methods lead to ‘better’ knowledge of the world (in the sense of higher explanatory value) than others—this is what BHASKAR (1998: xi, emphasis in original) describes as “*judgemental rationality*”.

Epistemology, then, cannot be *completely* dependent on cultural (theoretical, conceptual, ideological) constructs, but we access the world through a combination of constructed concepts on the one hand and (sense-based) observations on the other. With this, I see myself epistemologically between an absolute (or naïve) empiricism and radical constructivism.

From this, and from the points made in chapter 3.1, a number of methodological and methodical¹ conclusions can be drawn: *First*, the elaboration of the theoretical framework, or of an ontology of the research subject, is of key importance to guide the research process, and this ontology needs to be iteratively elaborated to match the empirical reality; *second*, a mixed methods research approach is advisable here, as it allows to complement different perspectives;

¹I consider *methods* as the tools or instruments for data collection and/or analysis, and *methodology* as the process of research, in the sense of procedures and methods (CRESWELL & CRESWELL 2018).

third, a multi-sited approach is necessary to gain a sufficient understanding of the translocal entities in focus; and *fourth*, as a constructivist epistemology depends also on the individual researcher, it requires reflection on the positionality of the researcher.

4.1.1 Iterative theorizing: from the general to the locally approximated

As mentioned above, the epistemological ‘program’ of critical realism (“*ontological realism, epistemological constructivism and judgemental rationality*”, BHASKAR 1998: xi, emphasis in the original) requires a coherent and theory-led formulation and elaboration of concepts, in order to generate meaningful knowledge about the world. However, I also see the necessity to remain open and to measure and adapt theory and ontologies to the reality within the research process, especially in a context where there is not much previous literature and theoretical knowledge available so far (see chapter 2.3chapter 2.3; see also BORK-HÜFFER 2012: 100-102 on the thin prior knowledge base on migrants’ health seeking behaviour in PR China). Therefore I decided to work with a combination of deductive (theory-based) and inductive² (empirically-based) approaches in order to elaborate the theoretical-conceptual framework in an iterative procedure. The formulation of the meso-level ontology is thereby informed by the abstract / general level ontology as well as by the ontic level, i.e. the empirical information in and from the field.

Thus, my empirical fieldwork was guided by theory, but I tried to be open and refine my concepts iteratively to such an extent that they make most sense in the given context. This has resulted in two important refinements of the conceptual and theoretical approach: first, it helped me to widen the scope and sharpen the concepts for the research subject, namely from those of *translocal households* or *translocal livelihoods*, which I did not find fitting well to the empirical reality, towards *translocal social constellations* (see also chapter 3.3.1), and, entailed by this, also to the inclusion of the concept of *Position-Practice-Relations* (see chapter 3.3.3). Secondly, this iterative procedure was key to formulate the empirically grounded types of mediatized translocal practices that form an important part of the analysis (see chapter 4.6 data analysis, and chapter 6.3).

4.1.2 Mixed methods research: combining the qualitative and the quantitative

While in the 20th century a growing gap between representatives of quantitative and qualitative approaches and methods has grown (LINCOLN et al. 2018), the recent decades have seen a cautious reconciliation of quantitative and qualitative methods (DANERMARK et al. 2002). SCHWANDT (2000: 210) has even pointed out that “it is highly questionable whether such a distinction [between qualitative and quantitative methods] is any longer meaningful for helping us understand the purpose and means of human inquiry”.

In order to investigate the interdependencies between a) technology usage and changing social practices, including preferences and expectations, and b) changing social practices and

²I do not use inductive and deductive here in the strict sense of logical reasoning, i.e. that deductive conclusions are necessarily true and inductive conclusions are probably true (cf. HURLEY & WATSON 2018), but in the sense of working out the concepts ‘from above’ (i.e. from a more abstract ontological level) downwards, or vice versa, ‘from below’ (from the ontic level upwards).

4.1 Epistemology and methodology: between naïve empiricism and radical constructivism

changing social structures, including positionalities, places and space, I consider a combination of structuralist and phenomenologist perspectives as important (see also GIDDENS 1984, STONES 2005). To support this heuristic aim on the method level, I employ a ‘Mixed Methods Research’ approach and combine qualitative and quantitative methods of inquiry. According to JOHNSON et al. (2007: 123), “[m]ixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration.”

Out of the different rationales for mixed methods research that GREENE et al. (1998) discuss, the following two are most relevant for my study: (*method*) *development*, in the sense that it “seeks to use the results from one method to help develop or inform the other method” (p. 259, emphasis added), and *complementarity*, using the results from one method to inform (further elaborate, enhance, illustrate or clarify) the results of the other method. Regarding method development, I have utilised the results of qualitative inquiry to develop the quantitative methods and the sampling, and I have utilized the results of the quantitative survey to access further partners for qualitative interviews. The complementarity of knowledge provided by qualitative and quantitative methods is on the one hand helpful to abstract from the particular, idiosyncratic interview cases and to allow a certain judgement in how far it is possible to generalise (at least on a local level), and on the other hand the quantitative survey has provided valuable background information on the socio-economic structure, the livelihood bases, the translocal social constellations, etc. on a village level.

Regarding the ideal types of research paradigms that JOHNSON et al. (2007: 124) identify, ranging from a) pure qualitative, b) qualitative mixed, c) pure mixed, d) quantitative mixed to e) pure quantitative, my approach would fall under b) qualitative mixed, as I take a largely constructivist epistemological perspective while acknowledging that quantitative data and approaches do likely benefit my research.

4.1.3 Multi-sited approach: from the bounded to the connected

Capturing the translocal life realities calls for an empirical approach that acknowledges the multidimensional connectedness of and the flows and exchange between people and places, and the multiple spatial embeddings of both migrants and non-migrants (MARCUS 1995, FALZON 2009). Thus, although I would not claim to have worked ethnographically in the sense of thoroughly achieving GEERTZ’s (1973) “thick descriptions”, my conceptual and methodological approach was inspired by *multi-sited ethnography*, which shifts the focus from bounded localities as the arenas of thinking and empirical research towards the social practices that are produced both within and between distant places (MARCUS 1995).

Multi-sited ethnography has emerged as a way to overcome the epistemological and methodological limitations of ethnography as largely focussing on concepts of communities and groups as socially and spatially bounded entities and research objects (FALZON 2009). As an intellectual program, it highlights the “logic of associations or connections among sites that in fact defines the argument of the ethnography” (MARCUS 1995: 105). Marcus links this methodological design with concrete methodical hints for “tracing” people, things, metaphors, stories, biographies or conflicts (MARCUS 1995).

There are several ways how I have benefitted from ideas of multi-sited ethnography for my study: *first*, multi-sited ethnography also calls for an empirical focus on everyday practices of actors as observable expressions of the stratified organisation of human life. Both local and translocal social structures (e.g. systems, positionalities, institutions) can rarely be directly observed, but their expressions can be assessed through observation of everyday practices and activities of specific actors and in specific places (NADAI & MAEDER 2009) and through the interpretation of meanings and expectations of interviewees. As GIDDENS puts it: “All social systems, no matter how grand or far-flung, both express and are expressed in the routines of daily social life” (GIDDENS 1984: 36). *Second*, as multi-sited approaches also mean additional effort (to visit other places and identify relevant objects for observation and interview partners), it is necessary to keep the research sufficiently focussed (HORST 2009) and to have a clear theoretical orientation (FITZGERALD 2006). I tried to accommodate this with the specific focus on the mediatization of translocal social constellations, and the respective theoretical framework. *Third*, it has confirmed my position to focus on the translocal connections between individuals and the translocal aspects of families, households, networks, places, and how they shape practices, structures, ideas and identities (GALLO 2009).

4.1.4 Reflections on the positionality and its implications

I deem a brief reflection of my own positionality as a researcher as important and necessary in order to enable readers to understand why I chose the research topics, epistemologies and methods I did, and not others.

Epistemological and methodological implications of my positionality

My positioning as a scientist matters here because of my basic epistemological perspective: I believe in an intransitive world, but at the same time I believe in a transitive epistemology and knowledgeability of the world (BHASKAR 1998). This implies that an epistemology can ultimately not be neutral, but always needs to depend on the positionality and individual background of the researcher (ROSE 1997). This is, in my regard, what is missing in (biographically neutral) explanation about epistemologies: the reason why a researcher has a certain access to the world and to the knowledge about it is rarely based solely on sufficient knowledge of all possible perspectives. Scholars are always predisposed, through their pre-academic and academic socialisation, through their disciplinary embedding, but also through specific ‘schools of thought’ in national and university contexts (BOURDIEU 1988). This means, consequently, that I need to reflect, elaborate and explicate my epistemological and methodological framework.

Through my own studies of philosophy and linguistics I have been strongly influenced by a phenomenological and constructivist perspective, on the other hand, through the strong empirical orientation of Geography I am also attached to an ontological realism. Both perspectives have certainly been fostered by my exposure to different cultural contexts, which on the one hand made the differentiation and stratification of the (intransitive, real) world very directly and often sensually perceptible. Through experiencing of the differences in interpretative schemata and patterns of interpretation (as becomes very obvious in situations of a ‘cultural shock’, for example) on the other hand, I internalised that there is not just an empirical reality that can be

grasped simply by the senses, but also an immaterial (malleable yet causally powerful) structural level of reality that exists outside our heads and that cannot be so easily observed and measured.

Position as a German researcher in Bangladesh

As a German researcher in Bangladesh, I had a twofold privileged position: on the one hand as a visitor from Germany, on the other hand as a member of a large international research programme. This was expressed in everyday life in Bangladesh by the fact that I had relatively easy access to higher social strata, for example through being introduced by university colleagues to former ministers and other influential personalities—things that would rarely happen to a junior researcher (PhD student of geography) from within Bangladesh. This position gave me privileged access to experts, as well as to translators, research assistants and transcribers from renowned universities (and thus with the appropriate methodical and language qualifications).

However, this position also implied a considerable difference in status between myself, my assistants and the people being researched. In order to deal with this actively, I discussed questions of social status frequently with my assistants. I introduced myself to the interviewees as a learner and as a PhD student. In order not to further widen this status gap, I refrained from wearing elaborate clothing and carrying expensive equipment (computer, camera) during fieldwork. I selected my research assistants also according to their biographical background: my three key translators/assistants came from rural-village backgrounds themselves and were thus able to comprehend the reality of people's lives, which proved to be very helpful in gaining access to the interviewees.

In order to reduce the distance to the researched and to facilitate my general understanding, I learned the national language; I was able to communicate to the extent that I could engage in simple everyday conversation, which often helped breaking the ice in interview situations. During the main phase of qualitative research in autumn 2011, my family (partner and 4 months old child) accompanied me to the rural research site, which made access to the field even easier—I was not perceived only as a researcher, but also as a family father, a social position that interviewees could easily relate to.

Practical issues and constraints: time and language

Through my employment at the University of Cologne and the post as a coordinator of a larger international research program (SPP 1233 Megacities-Megachallenge, www.megacities-megachallenge.org) at the time of the field work, I had the opportunity to travel to Bangladesh almost annually between 2007 and 2013, six times in total, and four times between 2011 and 2013, during the time of the research. At the same time, my involvement in the coordination of the research programme limited the time that I was able to do research, so that I could only spend between one and six weeks in the field at a time.

I countered this time limitation by planning my empirical research phases in a targeted manner; and by organising the research sequentially and iteratively, with methodological-conceptual and empirical phases building upon each other; and by hiring an assistant (Master's student) from Germany in the labour-intensive quantitative survey phase in spring 2013. He assisted me to coordinate the research team in the rural and urban survey locations also after

I had to travel back to Germany. During the quantitative survey, I also hired a team of six surveyors to facilitate the data collection within a reasonable time.

However, the limited field time also limited the choice of research methods, excluding some more time-intensive empirical methods, e.g. network analysis, or diary methods on phone use (BOLGER et al. 2003), and, as another consequence of limited field-time, my empirical material is not as 'thick' (GEERTZ 1973) as would be desirable from an ethnographical perspective. I have gathered contextual information through discussions with different types of actors (e.g. formal interviews with experts, but also repeated informal discussions with NGO employees and researchers from Bangladesh).

Another limiting factor was my limited knowledge of Bangla, despite an intensive language course and daily practice; this meant that I always had to work with translators and transcribers, which caused semantic inaccuracies as well as longer durations of the interview situations. To counter these, I had all the guidelines for qualitative interviews and focus group discussions as well as the questionnaire for the quantitative survey translated in Bangla in advance, and then evaluated and discussed them with the field assistants.

4.2 Research ethics

As I conducted research in a development context, the power differentials between researcher and researched was especially pronounced (see also 4.1.4 on positionality). I therefore took special precaution to safeguard the wellbeing of my research partners (including research assistants, experts, urban and rural interview partners and participants in the survey). HAMMERSLEY & ATKINSON (2007) formulate five key ethical principles that should guide (ethnographic) research: 1. Informed consent, 2. Privacy, 3. Harm, 4. Exploitation, 5. Consequences for future research, and CLOKE et al. (2004) add 6. Sensitivity to cultural difference and gender. From my research experience, I would also add 7. Safety and security of the researchers.

Regarding (1) *informed consent*, HAMMERSLEY & ATKINSON (2007: 210) note that people should consent to being researched "in an unconstrained way, making their decision on the basis of comprehensive and accurate information about it; and that they should be free to withdraw at any time." As a general rule, my research assistants and I openly presented ourselves and explained our positions, aims and activities during all field work encounters, except for distant observations of actors in public spaces, for example of the mobile phone usage by rickshaw pullers in Dhaka's traffic or in larger gatherings in public spaces. This included introducing ourselves to key persons in a given location, for example the owner of a rickshaw garage in Dhaka, the village elders in the rural places, or other locally important persons, before starting field activities. Before conducting an interview, all members of the research team (in interviews and focus group discussions myself and one or two translators or assistants, in the survey the enumerators) would disclose their names and institutional affiliations and explain the general research purpose. After that, participants were asked for their consent to be interviewed, and, if they agreed, they were asked whether it was acceptable for the interview to be recorded. They were told that they could always signal that they would like to end the interview at any time, or also continue without recording. I specifically instructed my translators and assistants to be sensitive for indirect hints or body language that could indicate an interviewee's uneasiness. In

most cases, participants agreed to be interviewed, and only in a few cases they declined to be recorded or asked to switch off the recorder during the interview.

Privacy (2) refers to the need to restrict the access to confidential or private information. Although privacy can be a complex issue (for example regarding the distinction of groups from whom certain types of information should be kept), and the topic of my research was in large parts not considered sensitive in general terms (except the topic of mobile romancing), all names of interviewees were pseudonymised, and the exact locations of places (the names of the villages in the North of Bangladesh, and of the informal settlements in Dhaka) that could lead to the identification of individuals were kept confidential.

Harm (3) “may arise as a result of the actual process of doing the research and/or through publication of the findings” (HAMMERSLEY & ATKINSON 2007: 213), including the intimidation of research participants through intrusive research practices. To avoid the latter, the qualitative interview was always preceded by a judgement of the context (housing, appearance, other persons present) and after a short phase of informal talk, which allowed to assess whether the person in question would be suitable and ‘fit’ for the interview. Some delicate interview passages that could produce negative effects, even when interviewees were pseudonymised, were not included in the analysis of the interviews.

Exploitation (4) refers to a “research bargain that advantages them [the researchers] and disadvantages those they study” (HAMMERSLEY & ATKINSON 2007: 217). Even when the disadvantage faced by those researched might not be large and consist mainly of the time ‘given’, there is a clear imbalance of the (career) benefit for the researcher, and often nothing in return for the researched. I was very open and direct about this, and clearly disclosed my position (as a researcher who could most likely not give anything in exchange for the information I got), in order to enable people to take an informed decision. Especially in the informal areas of Dhaka, I was frequently mistaken as a representative of an NGO or an international organisation, and it was necessary to clarify that. I also advised my translators and research assistants to be sensitive towards time constraints of those researched, and that, due to the power imbalances in the research constellations, the latter might be hesitant to express their constraints or unwillingness. A small number of interviews were cut short because of time constraints.

Consequences for future research (5) might arise if those researched or gatekeepers or other stakeholders find the research process so objectionable or undesirable that they refuse future researchers access to relevant settings. To avoid this, together with the translators I attached great importance to the feelings and sensitivities of our interviewees, and we always introduced ourselves to the local leaders of informal settlements or villages. In order not to raise future expectations for remuneration, I did not pay any allowances or compensation to those researched.

Sensitivity to cultural difference and gender (6) concerns the respect for the “rights, beliefs and cultural context of the researched, as well as to their position within patriarchal or colonial power relations” (CLOKE et al. 2004: 165). As I had experience in and done trainings on interculturality before, I had a certain awareness of cultural differences and the inherent power differentials involved in the research. To further sensitise myself and my research team, power relations, gender and research ethics were parts of the training of the translators and assistants. I also had periodical conversations on these topics and my own position with colleagues and human rights workers in Bangladesh.

The *safety and security of the researchers* (including assistants) (7) was generally not problematic, neither in the informal settlements of Dhaka nor in the rural villages. In the 2013 spring field phase however, pre-election political violence reached a level that necessitated a change in field work plans and an extended stay in the village, as the overland journey back to Dhaka was considered too dangerous. The subsequent follow-up interviews with rural-to-urban migrants from the rural site who stayed in and around Dhaka (see Figure 4.4) were largely done remotely by phone, in order to minimise risks for the enumerators.

4.3 Research design and procedure

As outlined in chapters 4.1.1, 4.1.2 and 4.1.3, my methodology combines three approaches: first, an iterative and inductive-deductive pathway to theory development; second, a mixed methods approach that aims at a sequential development of methods and a complementary use of the results; and third, a multi-sited ethnographic approach that is geared at capturing the translocal aspects of my research subject. To succeed with this, I employed a multi-phased research design, consisting of seven major phases (see figure 4.1). These phases were temporally aligned with major activities of the research program Megacities-Megachallenge that I coordinated at that time and for which I traveled to Bangladesh (and China) regularly.

After conceiving of the idea for the research topic in general in Spring 2010, I first undertook a preparatory *phase (1)* (numbers refer to figure 4.1) in Summer and Autumn 2010. This was done through literature research on the topic of mobile communication and social change, as well as on potentially relevant social theories and methodologies (including actor network theory, social network analysis, etc.), and through reviewing statistical data on the topic. This served the purpose to narrow down the topic and to 'locate' it in the development context of Bangladesh, as well as to develop a first theoretical framework and a methodology for data collection of the next phase: *Phase 2* was an exploratory phase in Spring 2011 (20.-30.03.2011) that comprised of informal talks (and one formal) interviews with experts from NGOs and two universities for critically reviewing my topic and approach, and for selecting first research sites in the informal settlements in Dhaka. Together with an assistant translator, a Master student of Urban Planning from the Bangladesh University of Engineering and Technology (BUET), I conducted informal talks (non-recorded but documented in field notes), field observations, one Focus Group Discussion and eight semi-structured interviews with rural-to-urban migrants in two informal settlements in the Southwest of Dhaka (see also table 4.1). The objective was to get an overview of the livelihoods situation of the migrants, and how they use mobile phones in their daily lives. During phase 2, also the feasibility of the planned multi-local study was ascertained, and the location of the rural site in was decided upon.

Phase 3, in Summer 2011, was the first main phase of theory and method development, based on literature research and on the interpretation of the empirical data gathered in phase 2. The theoretical framework was elaborated to a large extent, and the qualitative data collection instruments for the next field phase were designed, incorporating the insights gained in phase 2. The upcoming interview phase was organized and planned, and possible translators were contacted. *Phase 4*, in Winter 2011 (30.10.-14.12.2011) was the main qualitative data collection phase; after recruiting the translators, the first round of expert interviews (4), interviews with

4.3 Research design and procedure

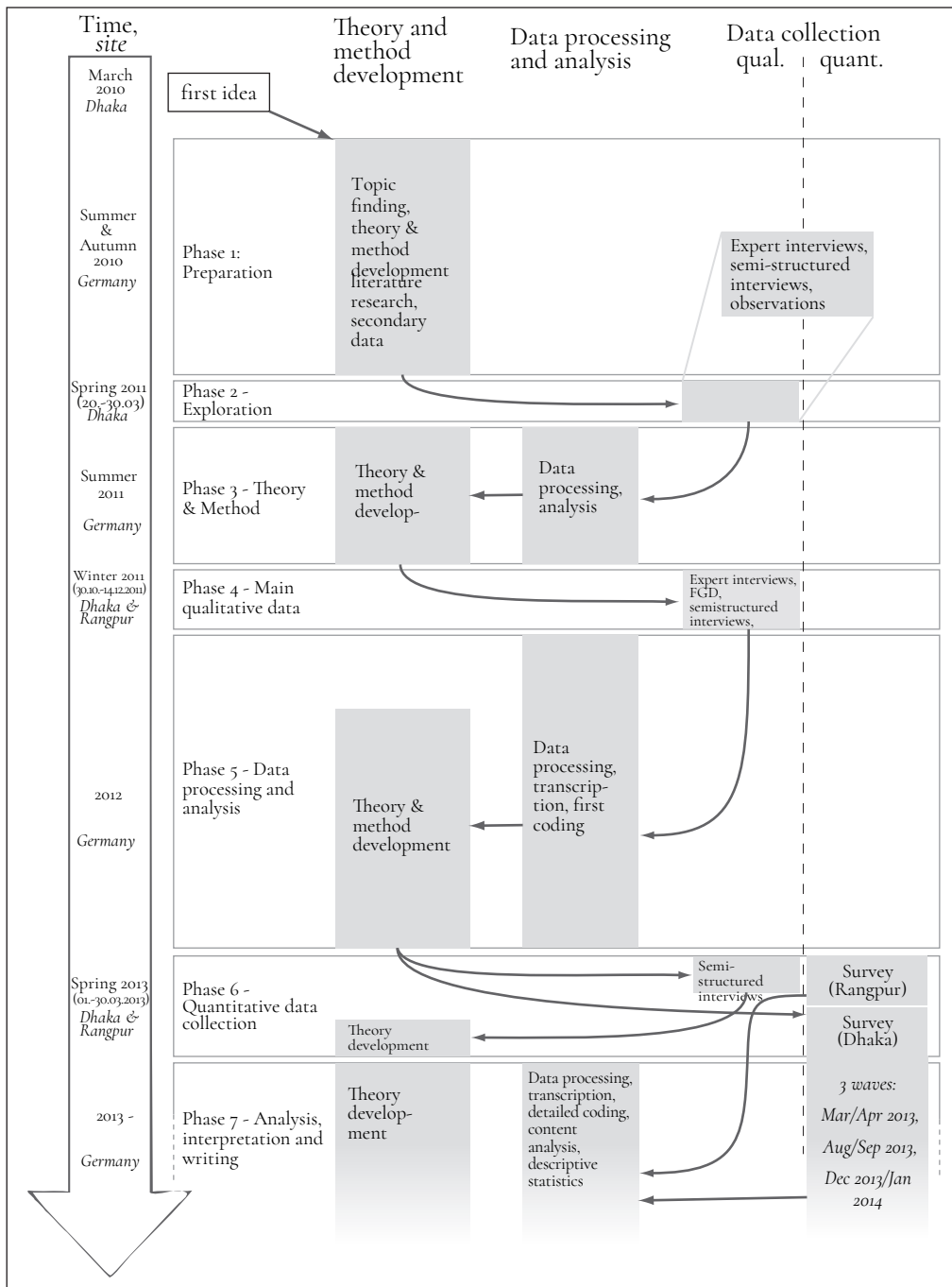


Figure 4.1: Phases of the dissertation research (source: author's draft)

	Dhaka	Savar	Rangpur			Total
			village 1	village 2	town	
Expert Interviews	5 (Ph 2: 1, Ph 4: 4)		1 (Ph 4)	1 (Ph 6)	1 (Ph 6)	8
Semi-structured interviews	27 (Ph 2: 8; Ph 4: 19)	4 (Ph 4)	19 (Ph 4: 9; Ph 6: 10)	7 (Ph 4: 5; Ph 6: 2)	4 (Ph 4)	61
Focus-Group Discussions	2 (Ph 2: 1; Ph 4: 1)		1 (Ph 4: 1)	1 (Ph 4: 1)		4
Informal talks		<i>not counted (field notes)</i>				
Quantitative survey	17	25	117	39		198

Table 4.1: Overview over empirical data, by type and site (interviews and survey; Source: author's own draft; Ph = Phase)

migrants (23) and one FGD were conducted in Dhaka. In the villages in the rural North, one expert interview, 18 interviews with migrants households and two FGD were conducted. In December 2011 I hired and trained six students of the English department of Dhaka University for the transcription and translation of the interviews.

In *Phase 5*, the qualitative data from the interviews was processed and coded with first order categories. This was a lengthy process, because the team of transcribers in Dhaka could produce the transcripts only one by one over the years 2012-2014. The coding and interpretation informed the further development of the theory, as well as the design of the questionnaire for the quantitative survey; during phase 5, I also prepared and planned the next field phase. For *phase 6*, the quantitative data collection, I hired a group of six students of BUET and the University of Dhaka as enumerators in order to carry out the quantitative household survey; additionally, a Master student from Germany was accompanying me and the enumerators to the villages, and continued the supervision of the team after I had to leave back to Germany. Due to incidences of political violence, the survey of the migrants in and around Dhaka could not be conducted face-to-face, as travelling was considered a risk in the whole of 2013; thus, the students did most of the survey on the phone.

Phase 7 (from 2013 onwards) consisted of the data processing, especially the continued transcription of interviews, the digitalisation of the 198 (paper based) questionnaires, as well of the further elaboration of the coding system, and the content analysis, interpretation of data and writing of articles for the study.

4.4 Site selection

The reasons for site selection were partly of practical nature, as I did have limited time and resources. After opting for a multisited approach, it was clear that, for practical reasons, I would choose a rural research location first and then the corresponding migration destinations in

Indicator	Unit	Bangladesh, natl. average	Rangpur District	Dhaka District
Population figure	persons	144'043'697	2'881'086	12'043'977
Population density	persons / km ²	976	1'216	8'232
5-years migration ratio 2005-2010	Percent	-0.92%	-4.7%	+12.6%
Poverty headcount (upper poverty line)	Percent	31.50%	46.2%	15.7%
Poverty headcount (lower poverty line)	Percent	17.60%	30.1%	4.9%

Table 4.2: Overview of population and poverty statistics for 2010 in Bangladesh, Dhaka and Rangpur Districts; 5-years migration ratio was calculated as 5-year in-migration (2005-2010) minus 5-year out-migration (2005-2010) divided by the population 2011, in percent (Sources: own compilation from BBS 2015, BBS 2016, AHMED 2013)

Greater Dhaka. This is because it is much easier to follow a set of migration and translocal linkages *from* a village origin *to* a megacity than vice versa, as the number and especially the spatial dispersion of migration destinations from a given village to Dhaka and its periurban areas (as large as they might already be—see also figure 4.4) is likely to be much smaller than the number and spatial dispersion of origins for a given (megaurban) destination.

An easy access to the field was found through a Bangladeshi friend who is a labour migrant worker and garment worker herself, and who was a domestic worker of the project flat of the research program SPP 1233 in Dhaka. She comes from the North of the country, from Rangpur district. I had visited her village before (in spring 2010) and had thus already gained some insight into the general characteristics and location of the village. Checking some basic data (cf. table 4.2) reveals that the district is poorer than the average and has a high outmigration rate, both of which make it suitable for the research. The road distance from Rangpur to Dhaka is about 270 km, which is roughly equivalent to almost a day of bus travel, so it is clearly too far away from Dhaka for (daily) commuting. The village is located about 8 km East from the Dhaka-Rangpur highway, so it is on the one hand accessible, on the other hand not located directly near the connecting road (see also figure 4.2).

Within Rangpur, I chose to work in the home village of the friend, as it was possible to stay at her place for shorter or longer periods, and also to accommodate a smaller number of fieldwork assistants or enumerators. As the village is electrified, and, compared to the local standards, generally well-off, I decided to include a second village further North, which was less affluent, and also without access to electricity at time of fieldwork. In Dhaka, I conducted interviews at sites in seven different informal settlements where migrants from the two villages were staying; they were chosen according to the number of migrants from the two villages who were staying there (see also figure 4.4).

4.5 Research methods employed

The key research methods that I used for primary data collection were observations and informal talks that were documented in field notes, interviews with experts and with ‘participants’ (migrants and their households in the rural origin), and Focus Group Discussions (FGD). ‘Formal’ interview refers to the use of a guideline for structuring the conversation, whereas informal talks were less steered, and they happened not in an interview setting. In the following I explicate the development procedure, the structure and the data processing and analysis of a) formal interviews, b) Focus Group Discussions, and c) the quantitative survey. I have kept the methods relatively simple, on the one hand because of time constraints (both for developing and implementing more advanced methods), on the other hand I expected the language barriers to result in a certain inaccuracy in data interpretation that would make some more advanced methods inapt (cf. also HACKENBROCH 2013).

4.5.1 Qualitative interviews

For the qualitative interviews with experts and with migrants and their household members, the following design, sampling and analysis procedure was followed:

Design of the instrument: interview guidelines

The design of the interview guideline for phase (2) was quite basic, it covered the experience of migration and translocal living, the mobile phone usage, and the advantages and disadvantages that people perceived in using mobile phones. The interview guidelines for phases (4) and (6) were more elaborate and longer. They were based on the refined research questions and the first theoretical and methodical framework, and consisted of sections on household and family relations; migration and resources; social aspects such as networks, support systems and trust; and on place, identity and cultural change. The guidelines were discussed in advance with PhD colleagues and my supervisor at the Institute for Geography at the University of Cologne as well as with experts and assistants in Bangladesh. The expert interviews in the two villages covered topics of development processes, social change, socio-economic inequalities, and the role of mobile phones.

Selection of interview partners

In the explorative phase (2) I selected my interview partners through a focus group discussion, informal interviews, as well as by interviewing key stakeholders (local influential people, shop owners, etc.); I searched for interview partners who were migrants and had family members in the village on the one hand, and used mobile phones on the other. In the main phase of the qualitative fieldwork (4) I could draw on contacts from phase (2), and through these I could contact further interview partners, both in Dhaka and in Rangpur. Also in phase (4) I did not look for specific types of cases (e.g. specific actors, practices, narratives, etc.), but continued to generally look for migrants who were connected to their households in the village *and* used mobile phones.

Experts were selected on the basis of their thematic expertise in the fields of digitisation, ICT4D, migration and social change. Among them were three experts from the University of Dhaka, three staff members of NGOs active in poverty reduction and urban development / digitisation, and two local experts in the village context. In addition to the transcribed interviews, I conducted also a number of unrecorded, informal conversations with researchers from several research institutions and NGO representatives. Experts were identified through searching the webpages of the large universities, as well as from research and policy literature.

In phase (4) in the village, the selection of the interview partners was a little different: first I talked to the village heads and the elders and gained insights into the basic demographic, socio-economic, migration and infrastructural patterns of the village. Then I searched for families or households who had migrants in Dhaka and who were connected to them via mobile phones. Through short conversations with potential interview partners they were screened for their suitability. This was documented on a contact sheet (one A4 page), so that a growing data base for interviews was created.

In phase (6), I conducted qualitative interviews in addition to the quantitative survey with rather specific interview partners, e.g. a trader who ran a translocal business through his mobile phone, or regarding gender issues or intrahousehold power dynamics.

Procedure

The interviews were conducted with translators with whom I already had prepared (translated and discussed) the interview guidelines. Before the start of an interview, we clarified our positions and roles as researchers, as well as the purpose of the interview, and the further use and pseudonymisation of the data. The explicit (oral) consent of the interviewees was asked for participating in the interview, and for recording the interview. The interviews were recorded with a digital recording device (Olympus LS-P1). Interviewees were informed that they could stop the interview at any time and/or demand that the recording be stopped. The interviews were kept as short as possible in order to interfere as little as possible with the everyday life of the interviewees. Parallel to the recording of the interview, I took notes of the contents as well as of observations in my field diaries. In addition, after each interview a protocol sheet was filled out about the progress and the estimated quality of the content (see annex 3).

Data processing

Recorded interview files were securely stored and coherently named (date, type of recording, place, interviewee name, e.g. 2011 [11] 05_01_Interview_Savar_Afrin.WMA). After the filing, each of the interviews was assigned to one of the transcribers for translation and transcription. The transcription of the interviews was done in waves between May 2011 to August 2015: the interviews from phase (2) in May to July 2011, the interviews from phase (4) between December 2011 and Summer 2014, and the interviews from phase (6) between Summer 2013 and August 2015. The transcribers, Master students of the English Language Department from the University of Dhaka, were recruited and trained in Autumn 2011. Interviews were then sent to Bangladesh through file sharing, and payment was made by international money transfer. The transcription was done based on the adapted “simple transcription system” developed by

DRESING et al. (2012). To ensure the quality of the transcripts, the transcribers received a written guide in which the most important rules were summarised and explained with examples (see annex 4).

Analysis

The analysis was conducted in several steps; the field notes and exploratory interviews from phase (2) were not coded during phase (3), but simply interpreted to contribute to the theory and method development. In phase (5) and (7), all interviews were then coded in the software MaxQDA. I proceeded in subsequent steps (see also MAYRING 2015: 85-87): the first step consisted of a deductive development of categories based on the theoretical considerations of phase (3), especially the concepts of place, types and intensity of phone use, and basic practice types (cf. chapter 3.3). In phase (6) and (7), a second set of codes was built inductively, based on parts of the interview and empirical material of phases (4) and (6). For this purpose, I continued to build a typology of communicative-situational contexts (cf. GOFFMAN 1986) and communicative practices I found in the interviews, until no further categories emerged. I discussed and adapted these categories with inputs from my field assistants during field phase (6).

In phase (7), in addition to this inductively generated typology, I extended and adapted the previous deductive code set, e.g. by the conceptual aspects of position-practice relations, affordances and constraints, and types of structural change. Subsequently I coded all interviews with this combined inductive-deductive category system, and interpreted the constellations of mediated translocal practices and changes in translocal social constellations against the theoretical framework.

4.5.2 Focus Group Discussions

Focus Group Discussions (FGD) are a form of moderated or structured group discussion that allows to assess the diversity of perspectives, identify socially shared narratives, conflict lines and discourses on a given topic (FLICK 2010, PUCHTA & POTTER 2004). I employed FGDs additionally to get access to the field and to stakeholders, and to select suitable interview partners.

Design and procedure of the instrument—between FGD and PRA

Three out of four FGDs—one in Dhaka, two in the villages—were structured discussions that were visualised during the process. I borrowed some of the facilitation and visualisation techniques from Participatory Rural Appraisal (PRA) approaches (NARAYANASAMY 2009). The FGDs in Dhaka were mainly aimed at getting an overview over peoples' diversity of mobile phone usages and their perspectives regarding the effects on their daily lives, as well as to get access to the field. To include also illiterate participants, the discussion was visualised through prepared cards and with symbols that were drawn during the discussion. The basic steps were: 1) introduction of the research team, the objectives and the method; 2) a question and discussion round on how people use their mobile phones; 3) a round on how these usages affect their daily lives in their different roles and positions; 4) a general discussion on the advantages and disadvantages of mobile phones. FGDs in Dhaka were facilitated and visualised by one assistant.

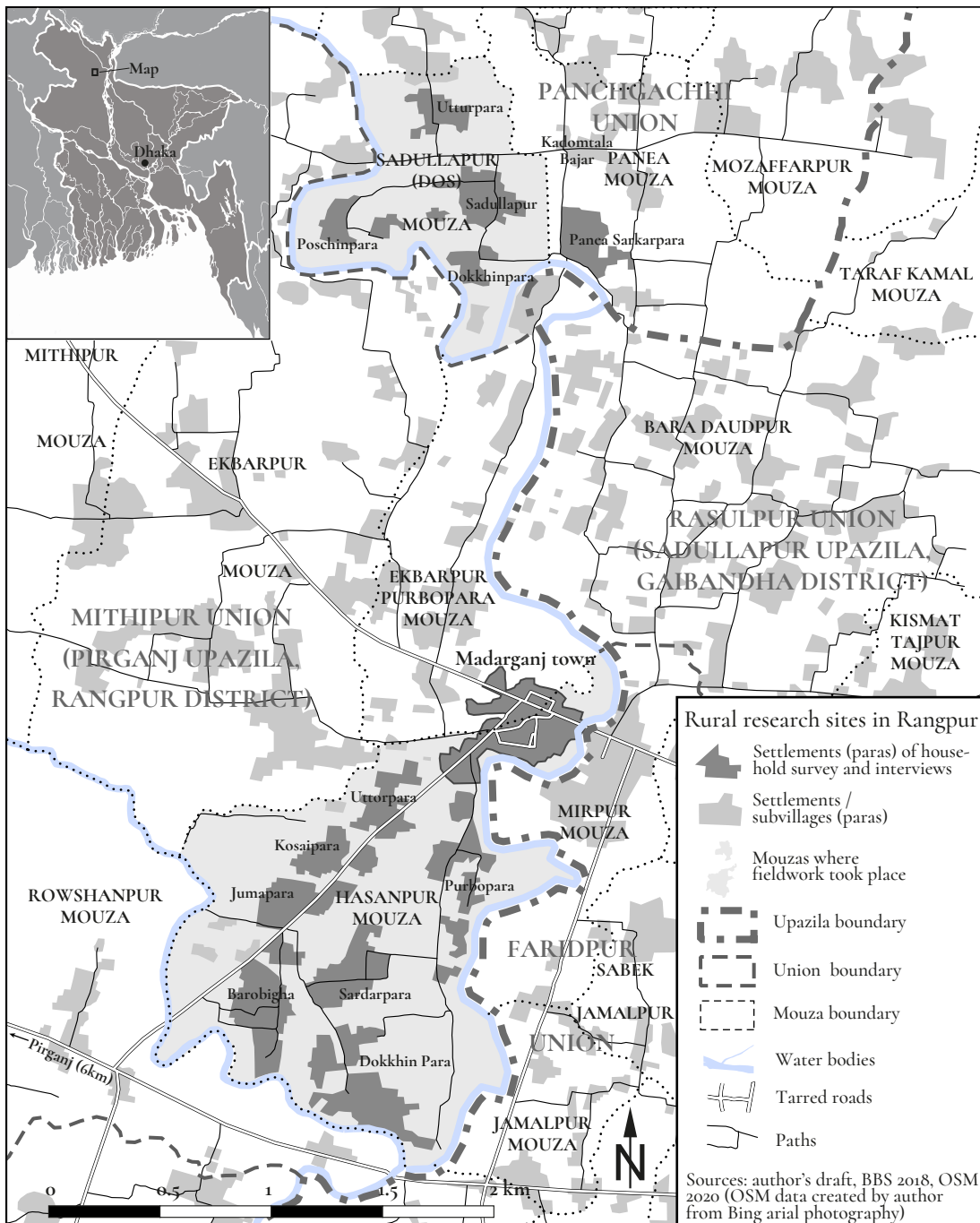


Figure 4.2: Rural research sites in Rangpur (own draft, sources: BBS 2018, OSM 2020 (OSM data created by author from Bing arial photography))



Figure 4.3: Focus Group Discussion in village 1

In the rural sites, I had already more knowledge on the topic, and the thematic focus of the FGDs was more on community processes (e.g. access to NGOs, political representation, self-organisation, etc.) and how they were affected by mobile phone use. The process was structured as follows: 1) an introduction of the research team, the objectives and the method; 2) a discussion on important development processes in the village; 3) the question how mobile phones influenced these processes; 4) a general discussion on advantages and disadvantages of mobile phones for the community. Both FGDs were facilitated by two assistants and visualised with moderation cards.

Selection of FGD participants

In Dhaka, participants of one FGD were the rickshaw pullers from one rickshaw garage who had free time during their afternoon break; the garage was located in the Southwest of Dhaka in Hazaribagh and was identified through informal talks as a place where many migrants were working. The second FGD in Dhaka was conducted in an open area with inhabitants of an informal settlement in Rayer Bazar, also in the Southwest of Dhaka; the FGD had similar topics as the other one but was not visualised due to rainy weather. In Rangpur, one FGD was conducted in each research village, and participants were invited as knowledgeable individuals through the village leaders.

Data processing and analysis

All FGDs were recorded and transcribed, in addition to the visual material that was produced during the FGDs. The transcripts, visualisations and field notes of the first Dhaka FGD were

used in the analyses and theory and method building of phase (3), those of the second Dhaka FGD and the village FGDs were included in the coding and analysis process of phases (5) and (7).

4.5.3 Quantitative Survey

The quantitative survey of the study mainly served to gain background and contextual knowledge to classify the qualitative results, so that I could better assess to what extent the results of the qualitative analysis were generalizable at least at the village level.

Design of the instrument: household questionnaire

The questionnaire was designed on the basis of the research questions and the theoretical-methodological considerations in phase (3). The key survey unit was the household, because of practicability, even though it was already clear when the questionnaire was developed in phase (5) that neither the unit 'household' nor the concept of 'livelihoods' fully corresponded with the real and lived translocal constellations. The questionnaire covered topics such as types and intensity of mobile phone use and calling costs; effects on social networks, on belonging, on household economics; translocal connections and exchanges; household composition and migration history. The design of the survey was inspired by other studies (e.g. SAKDAPOLRAK 2010, KABIR et al. 2008, LirneAsia 2009), but at the time of the survey there were no established quantitative instruments on mobile phone use and/or translocal living conditions, as is the case for example in health research (cf BORK-HÜFFER 2012). Thus I designed the questionnaire myself (after NEUMANN 2003, TAYLOR-POWELL 1998, BABBIE 2009, who provide information on general design as well as the concrete formulation of questions), and in discussion with colleagues at the Institute of Geography at the University of Cologne and the BUET in Dhaka (see also annex 5 for the questionnaire).

Sampling strategy and procedure

The sampling strategy for the survey corresponds to a *proportionally stratified random sampling* (CHAO 2010, TEDDLIE & TASHAKKORI 2010). In the rural sites, information on social stratification in the two villages was collected in expert interviews: For each subvillage (para) the number of households in three wealth categories ('rich', 'medium' and 'poor') was collected following local criteria, including ownership of land, livestock and housing conditions. For each of these categories, also the number of households with migrants in Dhaka was enquired (see table 4.3). A random sample of about 10% was then drawn from the different wealth groups in the sub-villages. The survey was conducted dynamically: The six enumerators walked through each sub-village on one or two days, contacted every tenth household and did a quick screening whether the household met the wealth criteria. When no one was met, the next household in the walking direction was interviewed. After each interview, enumerators called me with their mobile phones or sent me a text message and reported which wealth stratum the surveyed household belonged to. I checked this against the list and gave instructions to interview other households of the same stratum or to switch to another stratum, accordingly. Households that did not match the wealth criteria were then skipped, and the next household was contacted.

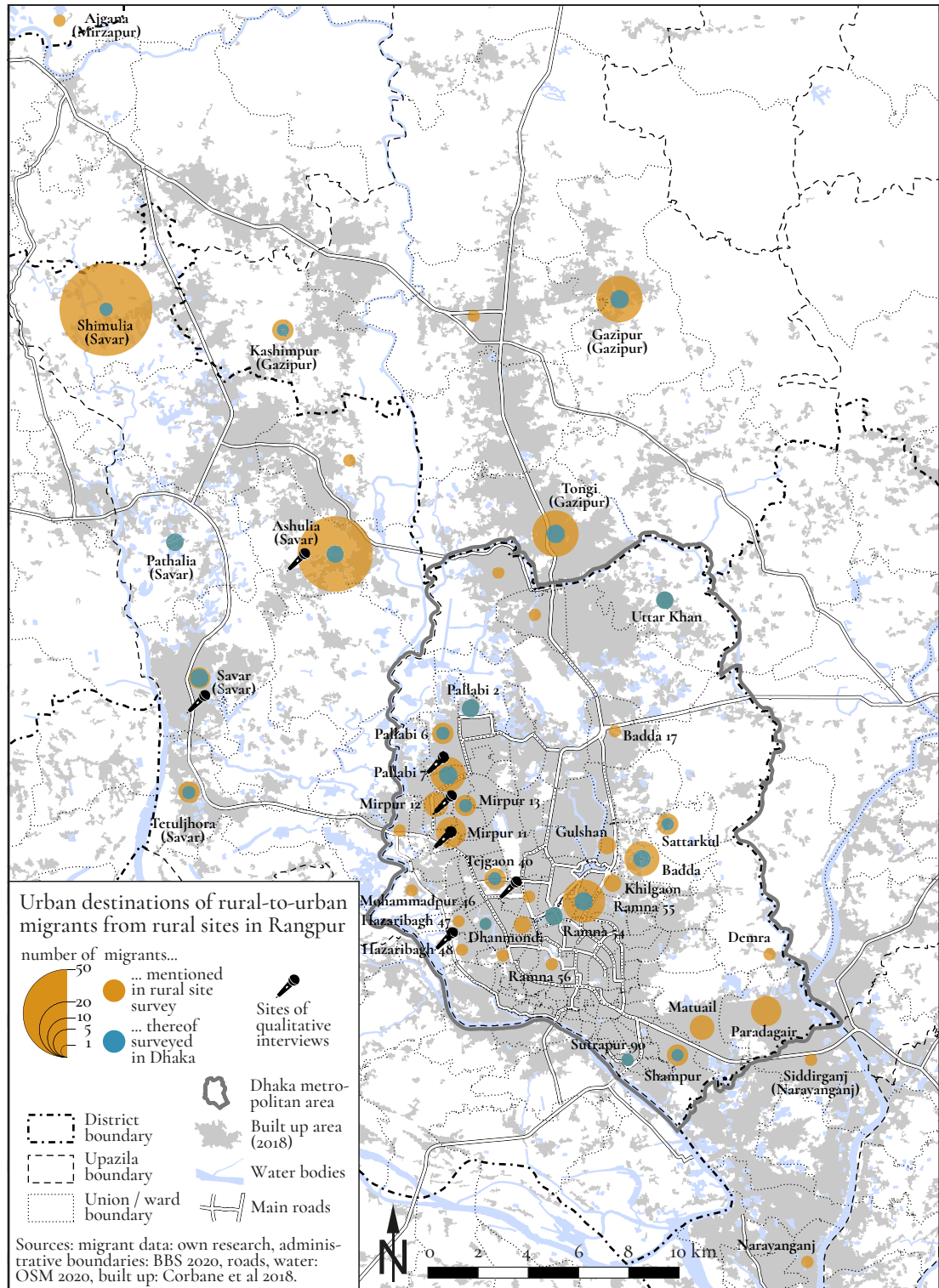


Figure 4.4: Urban destinations of rural-to-urban migrants from the research sites in Rangpur, as per quantitative survey (own draft, sources: BBS 2020, OSM 2020, CORBANE et al. 2018)

Village 1 <i>paras</i>	HH	Rich Middle Poor	HH with migrants in Dhaka	Village 2 <i>paras</i>	HH	Rich Middle Poor	HH with migrants in Dhaka
Para 1	80	R: 15 M: 20-30 P: 35-45	R: 7 M: 15 P: 25-30	Para 1	30-35	R: 5 M: 15 P: 15	R: 2-3 M: 7-8 P: 7-8
Para 2	400	R: 50 M: 150 P: 200	R: 25-30 M: 80-90 P: 130	Para 2	15	R: 5 M: 5 P: 5	R: 3 M: 2-3 P: 2-3
Para 3	400	R: 50 M: 100 P: 250	R: 16 M: 40-50 P: 110-120	Para 3	100	R: 10 M: 0 P: 90	R: 2-3 M: 0 P: 25-25 (poorest)
Para 4	400	R: 30 M: 10 P: 360	R: 8 M: 8 P: 100	Para 4	70-80	R: 30 M: 25 P: 25	R: 15 M: 25 P: 20
Para 5	400	R: 100 M: 250 P: 250	R: 30 M: 80-90 P: 100	Para 5	15-20	R: 0 M: 2-3 P: 13-17	R: 0 M: 2-3 P: 5-6
Para 6	100	R: 15 M: 25 P: 60	R: 6-8 M: 10-12 P: 25				

Table 4.3: Wealth strata and migration in villages 1 and 2, HH=Household, R=rich, M=middle, P=poor (own draft, source: interviews EX-07 and EX-08)

For the survey in destinations in and around Dhaka, a list was compiled of migrants from those households already surveyed in the rural sites, and they were then contacted. For an overview of sites of quantitative (and qualitative) interviews in Dhaka, see figure 4.4. The original plan was to conduct the interviews face to face; however due to ongoing political violence in the run-up to the 2013 elections, this was only possible to a limited extent. The majority of the interviews were then conducted by telephone. Due to the tense situation, the interviews were conducted in three waves after the situation had calmed down (Spring 2013, Summer 2013, Winter 2013/14).

Data processing and analysis

The questionnaires were sent to Germany after completion of the survey and entered by a student assistant (financed by the DFG) in summer 2014. Since representativeness at the sub-village and village level cannot not be achieved with the small sample size (KISH 1995; I would have had to conduct about 1,000 interviews here due to the stratification, in order to achieve representativity), I have refrained from using advanced or inferential statistics and applied descriptive methods only. I consider the survey sufficient for obtaining background information and approximate ideas about distributions. The data analysis was done in MS Excel and R.

5 Regional research context: Domestic migration and mobile communication in Bangladesh

In the following, I will give an overview over the migration systems and dynamics in Bangladesh (chapter 5.1) and the development of the telecommunications system in the country (chapter 5.2).

5.1 Domestic migration in Bangladesh

This subchapter consists of an abridged translation of STERLY et al. 2019 (chapter 6.1).

Bangladesh is reknown for its international labour migrants who are employed, for example in the Gulf States or in Southeast Asia in construction, production and as domestic servants, thus keeping globalisation running (AFSAR 2009). However, in addition to international migration, internal migration plays also an important role in Bangladesh (MARSHALL & RAHMAN 2013).

Migration within Bangladesh was and is closely linked to historical and economic developments: After the end of the British colonial rule, the partition from India in 1947 triggered the migration and displacement of hundreds of thousands of Hindus and Muslims—the former mainly moved to India, the latter from India to East Pakistan, the later Bangladesh (VAN SCHENDEL 2009). After independence in 1971, migration to the cities increased sharply: on the one hand, the famine of 1974 and recurring phases of food shortages, combined with state food aid in the large cities, led to rural-urban migration (AFSAR 2000). On the other hand, the expansion of infrastructure, industrialisation and above all the emergence of the garment industry since the 1980s have contributed considerably to migration to the cities (MALLICK & ETZOLD 2015).

Domestic migrants in Bangladesh are in theory listed in a household registration system, however this is not fully operational and covers only a fraction of movements (AFSAR 2000). National census data provide better information, as they include information on the place of birth and on internal and cross-district mobility over the past five years. At the time of the last census (2010), 13.5 million people in Bangladesh were living as internal migrants outside their district of birth, which corresponds to approximately 9.4% of the population. An large proportion migrated over shorter distances: between 2005 and 2010 alone, almost 9 million Bangladeshis moved within their home district—more than twice as many as the 4 million who moved between districts in the same period (see also figure 5.1, BBS 2015). The number of internal migrants thus exceeds by far that of international migrants from Bangladesh (for 2010 the UN indicates a total of around 6.5 million, UNDESA 2012).

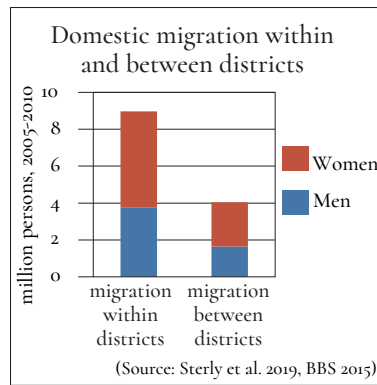


Figure 5.1: Domestic migration with and between districts in Bangladesh, by gender (Source: STERLY et al. 2019, translated and modified, BBS 2015)

‘Topographies’ of domestic migration

Figure 5.2 provides an overview over net migration flows (outmigration minus immigration) between 2005 and 2010 at district level. Most districts are characterised by outmigration and only a few districts—above all Dhaka and the surrounding industrial centres of Gazipur and Narayanganj, but also Chattogram (formerly Chittagong) and Sylhet—are important destinations of domestic migration. This becomes even clearer when net migration between the next higher-level administrative units, the divisions, is considered (transparent grey arrows on the map). However, this clear picture is the result of different overlapping processes and dynamics: High immigration figures are often contrasted by large outmigration as well—although for Dhaka, for example, immigration clearly outweighs outmigration with a net balance of 1.37 million, more than 400,000 people left the district between 2005 and 2010 (bar charts in figure 5.2).

Changing migration motives and migration systems

Reasons for migration are diverse, and so are the corresponding migration systems, the constellations of actors involved, decision-making processes, geographical destinations and timeframes. Also, migration decisions are complex and can rarely be reduced to a single factor—motives such as education or employment may well overlap, or migration destinations may be stages in more far-reaching mobility trajectories (MARSHALL & RAHMAN 2013).

Looking at figure 5.1, it might come as a surprise that women make up for the majority of domestic migrants; however, the female ‘surplus’ can be explained with the reasons for migration: While for men the most important motive for migration is job search (men: approx. 50% of internal migrants, women: approx. 12-25%), for women it is, in the largely patrilocal culture of Bangladesh, marriage (men: approx. 5-10%, women: 35-50%, BBS 2015).

In general, there seems to be no larger trend of feminisation of domestic migration in Bangladesh—the proportion of women among internal migrants (between districts) has been around 50-60% since the 1960s. However, the motives are changing: education and above all, employment, are becoming increasingly important and are gradually replacing marriage as the most important motive for women to migrate. This has been particularly pronounced since the

5.1 Domestic migration in Bangladesh

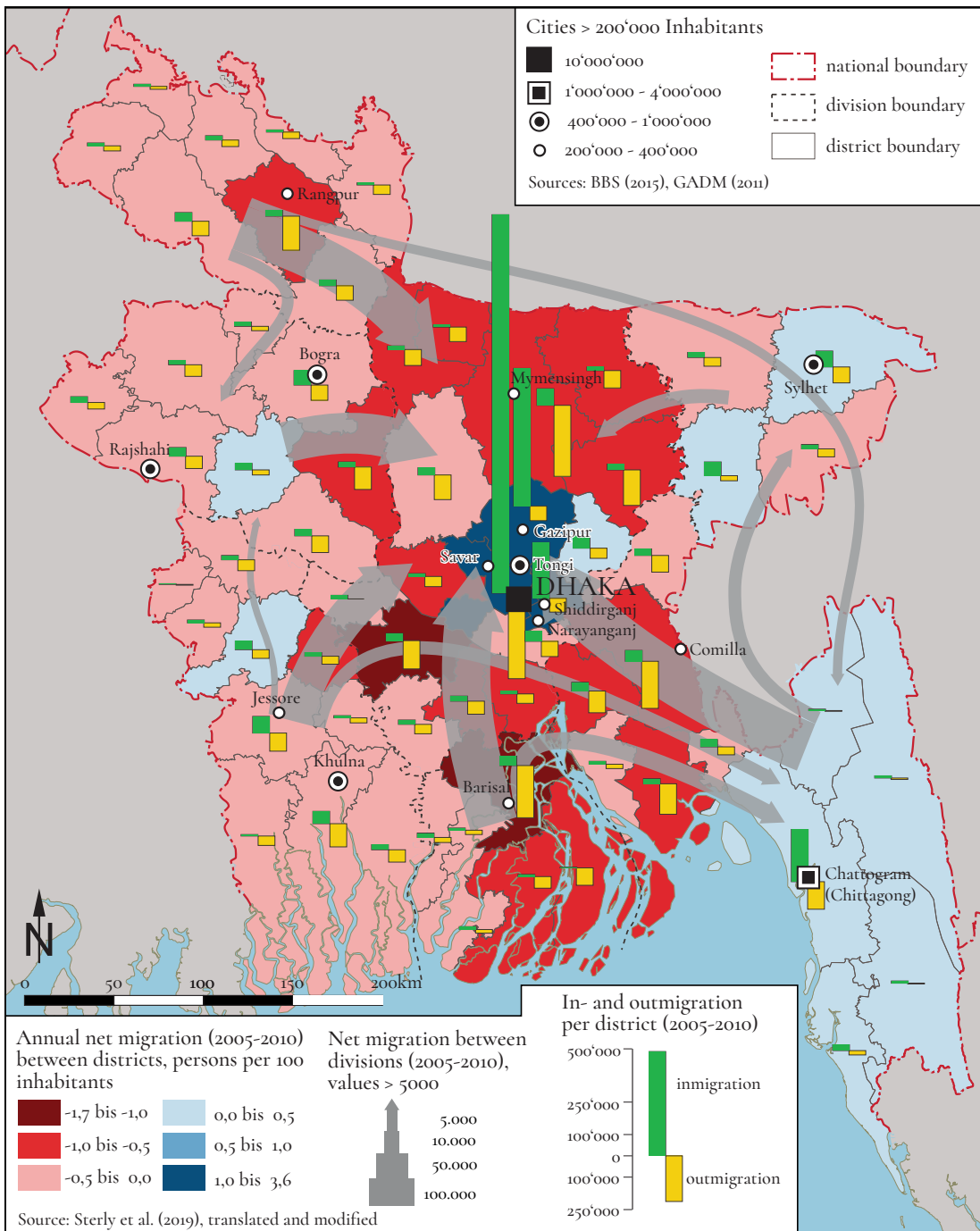


Figure 5.2: Net migration in Bangladesh 2005-2010, by districts and divisions (Source: STERLY et al. 2019, BBS 2015, GADM 2011)

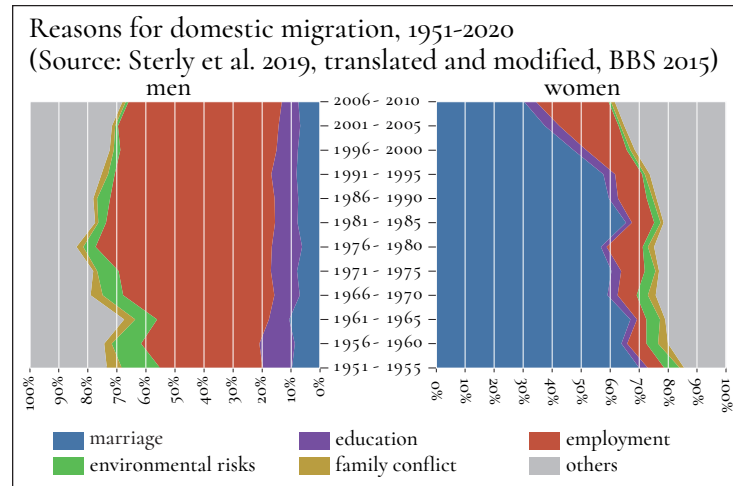


Figure 5.3: Reasons for domestic migration, 1951-2010, by gender (Source: STERLY et al. 2019, translated and modified, BBS 2015)

1990s, when the garment industry took off in the capital city of Dhaka—in 2014 the industry employed about 4 million workers, about 80% of them women (BGMEA 2020). Figure 5.3 shows these changes (the category "others" largely contains the migration of already married partners to the place of residence of their partner).

Apart from the geographically small-scale, but permanent marriage migration, which is the most important type of migration for women, employment is the most important motivation for mobility in Bangladesh. Migration motives depend, among others, on the economic opportunities in possible destinations. Figure 5.4 shows the main motives for migration to five selected districts: for Dhaka as an economic, cultural and political centre, labour migration is dominant; the diverse landscape of educational institutions also attracts a considerable number of educational migrants. For Gazipur, located in the northern fringe zone of Dhaka and characterised by the rapid expansion of the garment industry, labour migration is even more dominant. In both districts, marriage migration is of secondary importance, as is migration due to natural risks and family problems. Sylhet, which is located in the Northeast, has recently experienced a significant economic boom due to remittances from international migrants, and the growing the petroleum and agricultural industries, but also tourism—this is reflected in the growing importance of employment migration. Rajshahi as a regional administrative centre in the Northwest, with some limited agro-industry but some important educational institutions, is less important as a destination for labour migrants, but there is a strong increase in educational migration. Riverbank erosion along the Ganges in neighbouring districts is reflected in the comparatively high importance of natural risks as a motive for migration. Netrakona as a peripheral rural district is primarily the destination of marriage migrants from neighbouring districts.

The intensive migration dynamics in Bangladesh lead to the formation of translocal social constellations through the multiple connections of people and places at places of origin and destination.

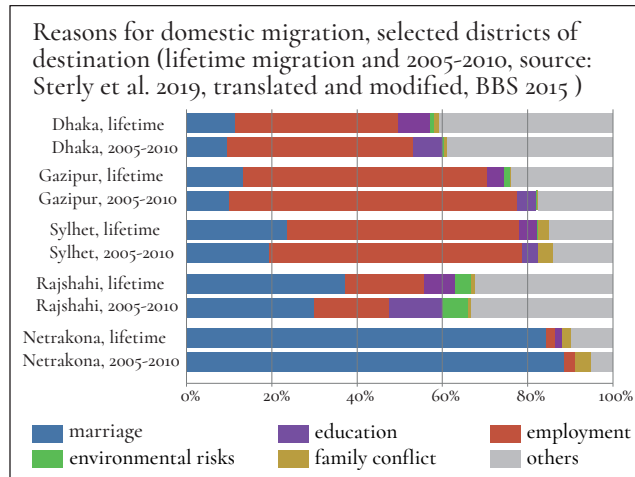


Figure 5.4: Reasons for domestic migration to selected districts of destination (Source: STERLY et al. 2019, translated and modified, BBS 2015)

5.2 Mobile communication in Bangladesh

The rapid spread of mobile communication (and associated change at the local level) in Bangladesh has to be seen in a wider context in the key dimensions of global change (environmental, economic, social, cultural, political, cf. JOHNSTON et al. 1995) and on several scales. On a global and international level, economic and political dimensions are of special relevance: Technological development, mass production and thus price reduction of both infrastructure and mobile phone handsets have largely contributed to the affordability for low-income groups in developing countries. KALBA (2008) identifies the introduction of pre-paid billing schemes (and the necessary technology) as a key driver of mobile phone adoption in developing countries. International labour migrants and their communication needs have been another driver for the growth of telecom markets (PERKINS & NEUMEYER 2013).

Global policy advocacy for 'universal access' and pressure for market deregulation as well as a strong domestic national policy of 'Digital Bangladesh' have led to an opening of the domestic market for international investors, which in turn has increased competition and contributed to reductions in calling prices (BHUYIAN 2004, WARF 2013): As a result, between 2005 and 2010, calling prices in Bangladesh dropped by almost 50%, while at the same time especially the flourishing garment export sector contributed to increasing real wages in both urban and rural areas (MUZZINI & APARICIO 2013). Industrialisation and the creation of employment opportunities are also key drivers of rural-to-urban migration and urbanisation and the corresponding demand in translocal connectivity. Responding to the emergence of high growth markets in developing countries, from the early 2000s onwards, companies such as Nokia specifically targeted low-income groups and issued simple and robust devices such as the Nokia 1100 (dubbed as the "AK-47 of communication", LEDGARD 2011), the best selling mobile phone device up to now (NOKIA 2011).

6 Articles and chapters

This chapter contains references and short explanations of the articles and book chapters that form the basis of this cumulative dissertation thesis. The articles and book chapters themselves are available on the websites of the respective publishers.

Three articles provide accompanying material for the dissertation:

1. STERLY et al. (2019, chapter 6.1) gives an introduction into the domestic migration systems and dynamics in Bangladesh;
2. BORK-HÜFFER et al. (2016, chapter 6.2) provides a theoretical framework for the relationships between agency and social structures and space;
3. STERLY (2015, chapter 6.3) gives an overview over the conceptual approach and key empirical results.

Three articles form the main corpus of the cumulative dissertation:

1. STERLY & SAKDAPOLRAK (2020, chapter 6.4) traces the mediatization of translocal practices and presents the eleven types of practices that form the basis for further analyses.
2. STERLY & GERADS (2017, chapter 6.5) gives an in-depth account on the role of the mobile phone for practicing intimate relationships over distance and its implications for social structure;
3. STERLY (2018, chapter 6.6) examines the spatial changes caused by mediated practices in more detail.

6.1 “Bangladesch - Beweggründe für Binnenmigration und translokale Lebensrealitäten”

The article was written in autumn 2018 and published in March 2019 in the German Geography journal “Geographische Rundschau”. The Geographische Rundschau is a peer-reviewed journal listed in Scopus with a JIF of 0.1. It is also listed by the “Verband für Geographie an deutschsprachigen Hochschulen und Forschungseinrichtungen (VGDH)” (German association of researcher-Geographers) in their list of “Approved professional geographical journals”.

Article citation:

STERLY, H., ETZOLD, B., PETH, S. A., 2019. Bangladesch - Beweggründe für Binnenmigration und translokale Lebensrealitäten. Geographische Rundschau (3), 18–23. Online: <https://www.westermann.de/anlage/Beweggruende-fuer-Binnenmigration-und-translokale-Lebensrealitaeten>

Embedding of the article in the overall study

The article provides an overview over the domestic migration system of Bangladesh. It presents the spatial patterns of migration origins and destinations and depicts motivations for different types of movements; besides the dominant motives, economic and marriage migration, it also discusses the role of environmental reasons for migration. It then concludes by describing the impacts of migration and the evolving translocal livelihood systems.

The article forms part of chapter 5 (Regional research context); the text in chapter 5.1 is a version translated from German to English and slightly shortened.

Own contribution

I jointly conceived the structure of the article together with the co-authors; I gathered the statistical data and did the statistical analyses; I interpreted the results jointly with the co-authors; I designed the figures and maps with inputs from the co-authors, and I wrote the majority of the manuscript, with substantial contributions from the co-authors.

6.2 “Agency and the Making of Transient Urban Spaces: Examples of Migrants in the City in the Pearl River Delta, China, and Dhaka, Bangladesh”

The article was conceptualised in 2012 and written between 2013 and 2014 within the framework and with members of the research program “Megacities-Megachallenge”. It has been published online in 2014 and in print in 2016 in the journal “Population, Space and Place” (PS&P), a peer-reviewed journal listed in all major international databases (SSCI, ISI Web of Science, Scopus, Google Scholar, EBSCO Search Elite and others) and has an impact factor (Clarivate) of 2.591 (2019) and a CiteScore index of 4.5 (2019).

Article citation:

BORK-HÜFFER, T., ETZOLD, B., GRANSOW, B., TOMBA, L., STERLY, H., SUDA, K., KRAAS, F., FLOCK, R., 2016. Agency and the Making of Transient Urban Spaces. Examples of Migrants in the City in the Pearl River Delta, China, and Dhaka, Bangladesh. *Popul. Space Place* 22 (2), p. 128–145. <https://doi.org/10.1002/psp.1890>

Embedding of the article in the overall study

The paper identifies migrants’ agency as a key driver of the production of urban space in Asia. It constates, in spite of a growing research body on the topic, a lack of conceptual clarity on the exact modes how various forms of agency interact with power geometries and with space. It elaborates thus a framework for the conceptualisation of these modes and interactions. Key elements are the modes of the (re)production of space through agency (Maintenance, Modification, Moulding and Making), the modes of (re)production of agency by space (Suppression, Structuring, Support, Stimulation) and the modes of the reproduction of power geometries through differentiated engagement of actors with the latter (Resilience, Reworking, Resistance, Revolutionary acts).

The article contributes to answering research question 1. These three modes of interaction form the basis of my conceptualisation of the interaction of social structure, agency and place (see chapter 3.3.7).

Own contribution

I contributed substantially to the framing of the theoretical ideas for the article, and I contributed the part on domestic migration in Bangladesh.

6.3 “Without Mobile Suppose I Had to Go There’ – Mobile Communication in Translocal Family Constellations in Bangladesh”

The article was written in Spring 2014 and published in Winter 2014/2015 in the journal “ASIEN – The German Journal on Contemporary Asia”. The journal is refereed (double blind peer review) and published by the “Deutsche Gesellschaft für Asienkunde DGA e.V.”

Article citation:

STERLY, H., 2015. “Without Mobile Suppose I Had to Go There” – Mobile Communication in Translocal Family Constellations in Bangladesh. In: ASIEN (134), 31–46. http://asien.asienforschung.de/wp-content/uploads/sites/6/2014/10/ASIEN_134_Sterly_Mobile_Communication.pdf

Embedding of the article in the overall study

The article gives a brief and comprehensive overview of the theoretical framework, excluding the position-practice-relations part and focussing on the relational approach to place and the framing of translocality (see also chapter 3.3.2). It discusses structural change linked to the mediatized practices and gives a brief outlook on the empirical results and the interpretation, using the examples of two of the eleven practice types (remittances and chatroom).

The article contributes to answering research question 1 and partly also 3.

Own contribution

I conceived the structure of the paper, collected, analysed and interpreted data, prepared the figures, and wrote the paper.

6.4 “Multiple dimensions of mediatised translocal social practices. A case study on domestic migrants in Bangladesh”

The article was written in Winter and Spring 2020; it has been published in the Journal “Mitteilungen der Österreichischen Geographischen Gesellschaft” (MÖGG), a peer-reviewed journal that is listed in major international databases (SSCI, ISI Web of Science, Scopus, Google Scholar, EBSCO Search Elite and others) and has an impact factor (Clarivate) of 0.194 (2019, 2018: 0.4), and a CiteScore index of 0.4 (2019).

Article citation:

STERLY, H., SAKDAPOLRAK, P., 2020, Multiple dimensions of mediatised translocal social practices. A case study on domestic migrants in Bangladesh. *Mitteilungen der Österreichischen Geographischen Gesellschaft* 162, 369-395. <https://doi.org/10.1553/moegg162s369>

Embedding of the article in the overall study

The article mainly addresses research question 2 and tracks the changes in translocal practices associated with mobile communication. In the article I present eleven types of mediatization of translocal practices that were derived inductively from the mentions of mobile phone usages in the interviews and obtained from observations. I then interpret and discuss the mediatization of communication practices, thus the shift from face-to-face communication to mobile phone mediated communication. I discuss these shifts from the perspectives of overcoming specific constraints and from the embedding of these practices within overall translocal forms of relationships and livelihoods. In the (‘bottom-up’, or inductive) elaboration of the eleven types of mediatised practices, the iterative approach to conceptualisation (see chapter 4.4.1) and the idea of several levels of ontology (see chapter 3.2) are applied; the types of practices are a direct result of the endeavour to establish a conceptual level between the “ontic”, the lived and instantiated realities on the ground, and the meso-level ontology of “translocal social practices”. The results of the analysis are contributing to the further analysis of the relations between changed practices and social and spatial structures (chapter 6.4 and chapter 6.5, research questions 3 and 4).

Own contribution

I conceived the structure of the article, with inputs from Patrick Sakdapolrak; I collected and analysed the data and interpreted the results; I prepared and designed the figures and table; I wrote the majority of the manuscript with inputs from Patrick Sakdapolrak.

6.5 “Call Me in the Dorm’ - Mobile Communication and the Shifting Topographies of Intimate Relationships in Bangladesh”

The article was written in Winter 2015/2016 and published in Autumn 2016 in the journal “Internationales Asienforum” (since 2017 “International Quarterly for Asian Studies IQAS”). The journal is peer reviewed and published by the Arnold Bergstrasser Institute for area and transregional studies.

Article citation:

STERLY, H., GERADS, D., 2016. “Call Me in the Dorm” - Mobile Communication and the Shifting Topographies of Intimate Relationships in Bangladesh. *Internationales Asienforum* 47 (3-4), 273–296. <https://crossasia-journals.ub.uni-heidelberg.de/index.php/iaf/article/view/3684>

Embedding of the article in the overall study

The article mainly addresses research question 3 and contributes to research question 1.

It focuses on specific mediated practices around intimate relationships and traces the effects of the changing practices on relational, normative and spatial structures. It employs a theoretical perspective that builds on affordances as emergent properties of human-technology interaction and the differentiation of material and normative constraints (chapter 3.3.6). It examines the shifting spatialities of performing intimacy that are associated with the mediatization of communication. These shifts are examined with three examples of intimate relationships: the long-distance relationships of rural-to-urban migrants (the chatroom practice); the establishing and sustaining of romantic relationships over the mobile phone (the dateline practice); and the circumvention of strict gender separation of student dorms through mobile communication (chatroom). The article discusses in detail the causal relationship between the mediatization of practices and structural change of position-practice-relations. The results of the analysis are contributing to answer research questions 3.

Own contribution

I drafted the structure of the paper; I collected the data on the first two examples, my co-author collected data on the third example (partly under my supervision), I analysed the data of the first two examples, my co-author analysed the data of the third example; I interpreted the results with respect to the theoretical framework; I wrote the majority of the manuscript, with inputs from my co-author.

6.6 “Regionalization revisited. Mediatization of translocal social practices and the spatial reconfiguration of life in rural-urban Bangladesh”

The book chapter was written in Winter 2016/2017 and published in 2018 in the book “Geographies of Digital Culture” (edited by Tilo Felgenhauer and Karsten Gäbler) by Routledge. The book appeared in the Routledge series “Research in Culture, Space and Identity”.

Citation:

STERLY, H., 2018. Regionalization revisited. Mediatization of translocal social practices and the spatial reconfiguration of life in rural-urban Bangladesh. In: Felgenhauer, T, Gäbler, K. (Eds.), Geographies of digital culture. Routledge, London, New York, 52–68.

Embedding of the article in the overall study

The chapter mainly addresses research question 4 and also 1.

The chapter employs a theoretical framework that is based on spatialising position-practice-relations (chapter 3.3.3), by linking it with the relational and dynamic approach to place (chapter 3.3.2). It then analyses the socio-spatial effects of three practice types (remittances, romancing / dateline, and chatroom) with this theoretical framework and identifies three important processes that are at work here: the translocalisation and quotidianisation of topographies of interaction, the re-regionalisation of everyday practices (chapter 3.3.7), and the gradual shifts in power relations and positionalities (chapter 3.3.3).

Own contribution

I did conceive the study, collected and analysed the data, interpreted the results and wrote the manuscript.

7 Synthesis and discussion

In the following I will revisit the research questions raised in chapter 1, synthesise the findings related to answering the questions, and discuss in how far they have been addressed. I will also briefly discuss the limitations of the concepts, empirics and analyses.

7.1 Conceptualising the mediatization of translocal social constellations and practices

The first research question addresses the conceptual domain: *“How can the translocal social constellations of rural-to-urban migrants and the relations of the former with the mediatization of practices be adequately conceptualized and operationalised?”*

In chapter 3, and in the articles in 6.2 and 6.3 I have elaborated on the conceptual framework for the study: translocal social constellations are conceptualised with position practice relations and a translocal concept of place; mediatization is conceptualised with affordances, constraints and practices; and change in social practices and space with different modes of interaction of actors and structures.

My initial focus was both conceptual and empirical—I have therefore developed concepts on an operationalizable meso-ontological level that enabled targeted data collection as well as analysis. This helped to grasp the changes in the conceived structures and plausibly relate them to the mediatized practices. The iterative procedure (see chapter 4.4.1) and the combination of the deductive perspective from the ontic, and the inductive perspective from the ontology-in-general, helped me to elaborate a framework on a meaningful ontological (meso-) level of abstraction that is both adapted to the local reality and at the same time coherent with the logic of the more abstract ontology-in-general (see also chapter 3.2).

7.2 The mediatization of translocal social practices: constraints, affordances and mobile phone usage

The second research question addresses the mediatization of translocal practices: *“How do actors in translocal social constellations utilise mobile phones, and how does this influence their translocal practices?”*

In my approach to answer this question, I aimed at going beyond a mere description of practices, and to include an analysis of the contexts and mechanisms that contribute to the emergence of these practices. Therefore, I have addressed mediatization with a conceptual approach that links technological affordances, social constraints and practices. In a first step, I gathered types of mobile phone use and created an inductive typology according to the situational contexts. I then analysed these types of mediatized translocal practices with regard

PRACTICES	AFFORDANCES			CONSTRAINTS		
	translocality & synchronicity	individuality	portability	material-corporeal	normative	structural
Dateline	++	++	++	++	++	(+)
Micro-Coordination	++	++	++	++		+
Helpline	++	++	++	++		(+)
Chatroom	++	++	++	++		
Business	++	+	+	++		+
Umbilical Cord	++	+		++	+	
Infoline	++	+		++		+
Hotline	+	+		++	+	+
Walkman	+	++	+	+	+	
Remittances	+	+		++		(+)
Remote Management	+	+		++		(+)

Table 7.1: Mapping mobile communication practices against affordances and constraints (sorted by number of affordances & constraints concerned, “++” = necessary, “+” = helpful, source: STERLY & SAKDAPOLRAK, forthcoming 2020)

to two areas: first with regard to the affordances that the actors draw upon to overcome constraints, and second with a focus on their embedding in the wider context of translocal livelihoods and practices (see STERLY & SAKDAPOLRAK 2020, chapter 6.4), in order to answer the second part of the research question. In the following I will summarise the findings regarding these two areas and then briefly reflect on the phenomenon of *quotidianisation*.

Constraints and affordances: “drivers” of mediatization

In the case of the social constellations of rural-to-urban migrants that I researched, material and spatial constraints (distance), normative constraints (rules and expectations, gender norms, etc.), and structural constraints (poverty, power relations) considerably regulate and limit local and especially translocal practices and agency. The physical distance for example is an obstacle for almost all translocal practices, norms for example constrain the way how intimacy is performed, and poverty and power imbalances for example restrict regular visits of migrants at their home. The way how actors use mobile phones is conditioned by the affordances that emerge out of their existing practices, their experience of constraints and their perception of the technology’s usability. Actors draw on these affordances—routinely or strategically—to overcome constraints that matter to them. Practices thus become enmeshed with the use of mobile phones, and mobile phones become an integral part of *mediatised practices*.

Table 7.1 gives an overview over the eleven types of practices and the importance of three basic affordances of the mobile phone (translocality and synchronicity combined, personalisation, portability) to overcome material, normative and structural constraints.

It is very obvious that the key (basic) affordances here are translocality and especially synchronicity (the ability to communicate without time delay), which are necessary for most of the practice types, and helpful for the rest; translocality and synchronicity however are not specific to an (individually owned) mobile phone, but to *any telephone* (e.g. landline, call shop, shared mobile phone). Only for four of the practice types, the mobile phone is indispensable (dateline,

micro-coordination, helpline and chatroom), since for these the affordances of individuality and/or portability are *necessary*. The other practice types could *theoretically* also be realised without mobile phones, information exchange (hotline, infoline), childcare from a distant or remote management of farms and households for example could also be done through call shops or letters, and remittances could also be transferred (and have been) without mobile phones.

I emphasise 'theoretically', because Bangladesh's landline phone infrastructure and the postal system were and are not really well accessible for most rural-to-urban migrants and their rural counterparts, so for most of them the mobile phone was the first possibility *at all* to engage in distant and synchronous communication. It is therefore not surprising that migrants in particular consider the mobile phone to be more important than many people in industrialized countries—at least I have gained the impression that in Bangladesh, despite possible disadvantages, the assessment of the mobile phone was predominantly positive, whereas in my context of origin I encounter critical attitudes much more often. In Bangladesh, many people had no access to landlines that would have enabled them to enact at least some of the translocal practices, while in industrialized countries, some of these practices have been widespread for decades.

Mediatized practices and “the translocal”

To put the eleven mediatized in the context of translocal living arrangements in general, the eleven mediatized practices can be systematized according to their importance within the overall translocal living and livelihoods context. If this is combined with a differentiated view of the importance of mobile communication for the 'functioning' of the practices, and four 'meta-types' of mediatization can be abstracted (STERLY & SAKDAPOLRAK forthcoming 2020):

I – the mobile phone can serve as “critical infrastructure”: here, practices are important for translocal living and livelihoods, and the mobile phone is important to implement these practices; micro-coordination, chatroom and helpline fall under this category.

IIa – the mobile phone is an “extension”, is rather 'nice to have': practices are important for translocal living and livelihoods, but the mobile phone is not that important for them; umbilical cord ('parenting' in STERLY & SAKDAPOLRAK 2020), infoline and remittances fall under this category.

IIb - the mobile phone is an “enabler”: the mobile phone plays an important role, but with regard to the translocal living and livelihoods, these practices are less important; this includes only dateline.

III – the mobile phone can be rather a “supplement”: it does not play such an important role for the practices, and these practices are less relevant within the overall translocal living and livelihood context; this includes hotline, remote management, business and hotline.

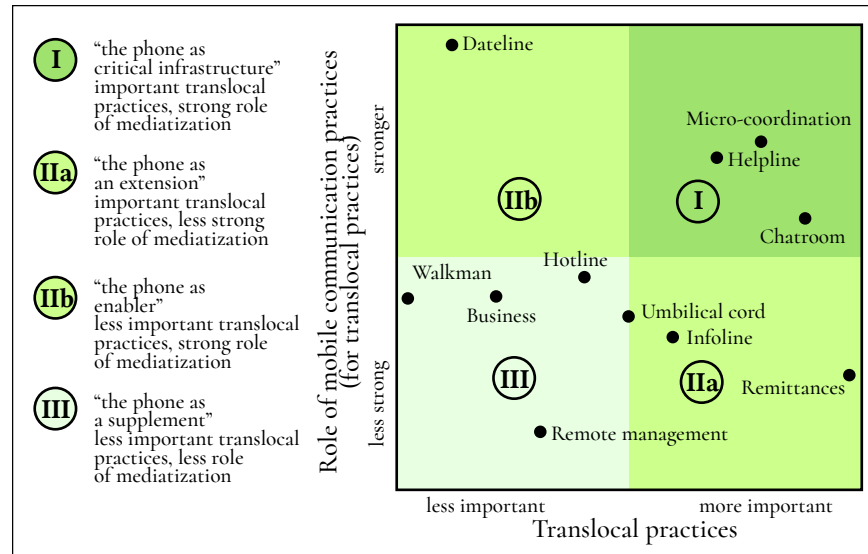


Figure 7.1: Fields of relevance of mediatized translocal practices. Values for the x-axis were obtained through ranking of practices according to their importance for overall translocal living context, values for y-axis were obtained through scoring the importance of mobile phone affordances, see also table 7.1 (Source: STERLY & SAKDAPOLRAK 2020, modified)

Towards emergent affordances-in-practice?

With the basic types of affordances employed here, I have stayed quite close to a somehow technology or platform centred perspective on affordances. Analytically combining the latter with a (phenomenological) perspective on practice types moves already in the direction of what COSTA (2018) conceptualizes as "affordances-in-practice" and, together with a constraints-perspective, yields relevant insights into potential causes and dynamics for mediatization. A more nuanced picture of affordances as emerging from the interaction (the perception, conception and usage) of humans and the material and technical properties of technology in the sense of FARAJ & AZAD (2012) and LEONARDI (2012) requires a closer look at these interactions. Figure 7.2 illustrates an attempt to sketch these interactions—on the left are the five technology-based affordances of translocality, synchronicity, individuality, portability, and mediality (the ability for audio-visual recording and playback), which is as closely (or even stronger) linked to the handheld devices as the other four.

On the right are the eleven mobile phone usage practices, and in the middle are two 'levels' of intermediaries or intermediate affordances: 'Bankability' (the option to do financial transactions directly with the phone) and 'affordability' (the financial affordability of the mobile phone usage / tariffs), as not being properties of the basic telephony or the handheld devices, but rather emerging from the combined banking, communication and billing system ('bankability'), and from the dynamic interactions of regulatory and universal access policies, markets and income of the users ('affordability'). Humans interact with the technology and its 'basic' affordances,

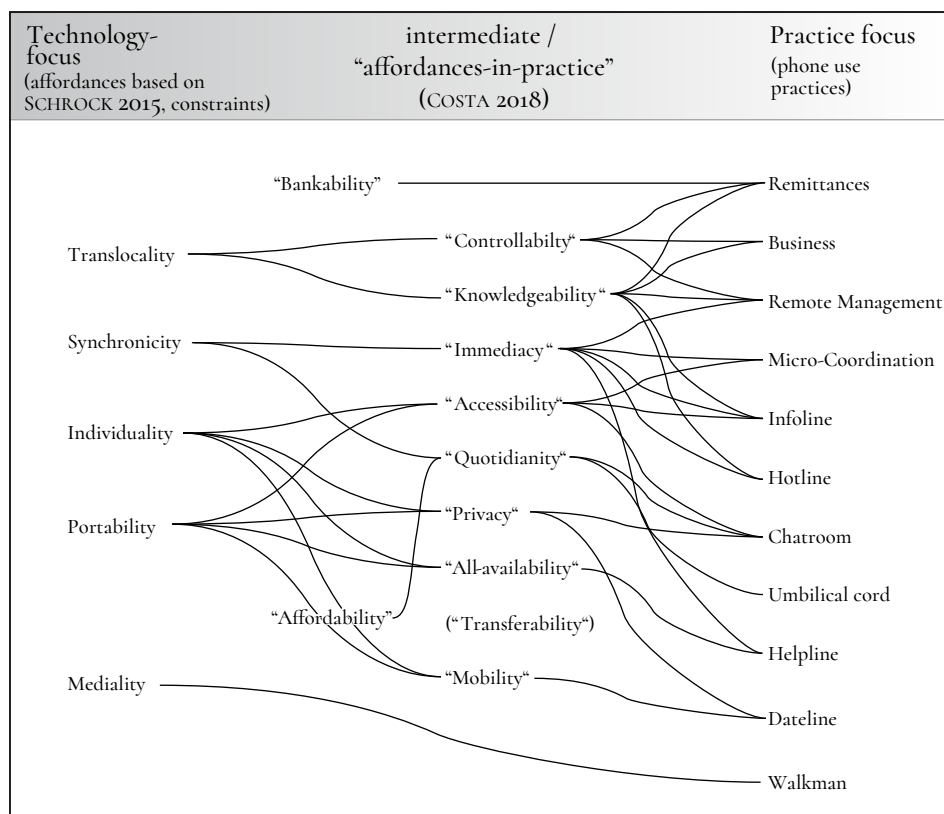


Figure 7.2: Emerging affordances-in-practice as intermediaries between technology and practices (source: authors' own draft, based on interview data)

Types	Intermediate Affordances
Signification	Knowledgeability Accessibility
Power	Controllability
Resources	Bankability Affordability Transferability
Legitimation	Privacy
Space	Mobility
Time	Immediacy Quotidianity All-Availability

Table 7.2: Intermediate affordances by dimensions of structure, space and time (Source: authors' own draft, based on interview data and GIDDENS 1984)

whereby specific forms of interactions take place in the forms of the usage practices. Out of these interactions, a range of intermediate affordances emerge (middle of figure 7.2): 'Controllability', allowing to command and exert power over people over distance; 'knowledgeability', the ability to access and share information; 'immediacy', the ability to contact others and share information in real time; 'accessibility', enabling communication also for illiterate persons; 'quotidianity', making any of the practices possible everyday (and not a rare, exceptional event, see also next subsection and STERLY 2018, chapter 6.6); 'privacy', enabling users to keep communication secret; 'all-availability', the possibility to call from any given place and at any given time; 'mobility', the option for calling and being called also 'en route', while being mobile; and finally 'transferability'—the possibility to sell a mobile phone device and thus transfer its value to cash (not linked to any particular translocal usage practice, but to the need arising possibly in situations of distress).

If grouped by the dimensions of signification, power/resources, legitimation (analogous to GIDDENS' (1984) types of structure), as well as space and time (see table 7.2), it seems that the dimensions of (material/financial) resources and time are more relevant than for example the spatial dimension. Although there is by no means an equal 'weight' in the affordances, and although there is also some degree of uncertainty or ambiguity in the attribution of affordances to these types, a closer look in the interviews and the situative contexts of the mobile phone usages shows that indeed temporal and financial aspects are among the most frequently mentioned 'advantages' of mobile phones.

Quotidianization¹ of translocality and translocal practices

One of the most striking features of the mediatization of translocal practices is certainly the *quotidianization*. For most of the interviewed migrants, practices such as supporting children in their school homework, chatting with spouses, other family members or neighbours, or discussing household or family business was something exceptional and episodic. Before they acquired mobile phones or had access to mobile call shops, it was mostly limited to the (rare) occasions when face-to-face situations and corporeal co-presence were established for example during visits. The mobile phone, and frequent calling (and the option to do so any time) turn the occasional and extraordinary into an everyday matter, a *quotidian* practice: “The experience of connectedness, the impression of copresence, and of the simultaneous ‘taking part’ in the daily life at the other place adds a fundamentally translocal dimension to social life of many rural-to-urban migrants” (STERLY 2018: 63).

This quotidianization ‘normalises’ the performance of distant relationships—especially intimate, family or kinship based, friendships, business relations or acquaintances. If understood from a structuration perspective, such relationships consist of a structural part (the positions, relations, networks, norms and expectations, etc.) and an agential part—the performative, active and experience-related side. Without having access to mediated communication, the structural aspect of relationships were existing and real, however due to the distance involved they were rather latent and only ‘lived’ or enacted occasionally. Through mediated communication with the mobile phone, actors have (re-) quotidianised the experience of proximity and performance of their relationships (STERLY & GERADS 2016). The financial costs for mobile communication that even poorer migrants are willing to bear for this indicates how much they value this quotidianization of proximity and social life.

The predominantly positive results that I present here should not hide the fact that the use of mobile phones does indeed entail risks and costs; for many women, for example, ‘dateline’ translates to unwanted calling and is a serious form of harassment; one of the interviewees reported that he himself had been the victim of a telephone scam; other interviewees mentioned the use of mobile phones in criminal activities; some parents were worried about their children’s excessive mobile phone usage and their declining performance in school; one woman told me the story of her (adolescent) daughter who ran away with her boyfriend (whom she had initially encountered face-to-face) after a period of secret romance through the mobile phone. However, as such examples were not particularly related to the translocal social constellations in focus, I did not include them in the analysis of translocal social practices.

7.3 The influences of changing communication practices on social structure

The third research question deals with the relations between practices and social change: “*In how far, and how does the mediatization of translocal practices contribute to changing social*

¹ *Quotidianization* refers to the change from the extraordinary and exceptional to the everyday quality of practices; it is a translation from MAX WEBER’S (1922) *Veralltäglichung* via the French *quotidiennisation* (BÉGOUT 2005; SCHOUTEN 2012).

structure?”

Partly, the research question has been answered in STERLY (2015) and STERLY & GERADS (2016), see also chapters 6.2 and 6.4. In order to answer the research question based on my conceptualisation of translocal social constellations, in the following I will discuss first the modes of actors’ engagement with social structure, second the outcomes on the (re-) production of social position, and third the outcomes on the (re-) production of relations and of the institutions linked to these positions.

As laid out in chapter 3.3.7, I understand agency and social practices as conditioned by and as producing social structure (position, relations, institutions, place, etc.); thus changing—in this case mediating—practices can be expected to have outcomes on the reproduction of social structure.

I employ the framework of modes of structure-agency-interaction elaborated in chapter 3.3.7, based on BORK-HÜFFER et al. (2016, see also chapter 6.2). With this, I differentiate broadly in the four themes of a) modes of engagement of actors with social structure, b) modes of the reproduction of position, c) modes of the reproduction of relations and social institutions, and d) modes of the reproduction of space. I will in the following use a), b) and c) to further systematise and abstract from the empirical findings (I will discuss d) in the subsequent subchapter 7.4).

In the following table I have compiled the eleven practice types, the structural constraints, the modes of engagement with structure and the changes in positions, relations and place. The table is a synopsis of the subsequent discussions of the typification of the practices. In order to determine which modes the practices correspond to, I have re-interpreted a selected number of the interviews for each practice type.

Modes of engagement with structures

Figure 7.3 shows approximate placements in the differentiated ‘space’ of actors’ engagement with constraining structure. In the operational logic of the modes of engagement with structure, most of the practices belong to the *resilience* mode. These are acted out habitualised or routinely, and less strategic in order to change or subvert structures. These practices include remote management (9), infoline (5), micro-coordination (3), helpline (6), walkman (8) and chatroom (7). The practice type hotline (11) is a bit on the borderline to *rework*, because it is also about shifting the possibilities to contact people across hierarchies, but on the other hand the changes in structures are not really pronounced. Umbilical cord (4) clearly falls into the mode of *reproduce*, because with this practice, parents—mothers in particular—are maintaining their position, roles and practices in childcare, even at a distance, and are thus fulfilling and sustaining the expectations placed on them as good mothers.

A change in structures is brought about by remittances (1); however, since those involved, at least the migrants and their families, do not act strategically to change these structures, but also do so in routine everyday activities, this is placed in the *rework, modify* mode. Business (10) is in the quadrant *resist*, because in this practice type, the strategic use of the mobile phone led to the establishment of a translocal business and the organization of street sales in Dhaka in a very competitive informal market. Dateline (2) is an interesting case, because on the one hand, normative structures are strategically subverted for the establishment and maintaining of (clandestine) relationships, which would merit a placement as *subvert*, but, on the other hand,

7.3 The influences of changing communication practices on social structure

Practices	Structural constraints on agency / practice	Modes of engagement w. constraints (see fig. 7.2)	(Re-) production of social structure		(Re-) production of space (see fig. 7.5)
			positions (see fig. 7.3)	relations, institutions (see fig 7.4)	
Dateline / romancing	material (distance), normative (gender, intimacy)	subvert / resist, (defend)	reinvention	pluralisation, (hegemony)	moulding
Micro-Co-ordination	material (distance), structural (e.g. price)	resilience	liberation (reinvention)	stability	modifying
Helpline	material (distance), (structural) (power relations)	resilience	liberation (widening)	transformation	maintaining
Chatroom	material (distance), structural (poverty)	resilience	liberation (widening)	transformation	modifying
Business	material (distance), structural (inequality)	resist	reinvention	transformation	modifying
Umbilical cord	material (distance), (normative)	reproduce	control (tightening)	stability	modifying
Infoline	material (distance), structural (knowledge)	resilience	reinvention	stability	maintaining
Hotline	material (distance), normative, structural (hierarchy)	resilience / rework	reinvention	transformation	maintaining
Walkman	material (distance), normative (reputation)	resilience	liberation (widening)	pluralisation	modifying
Re-mittances	material (distance), structural (inequality)	rework	reinvention	transformation	moulding, making
Remote management	material (distance), (structural)	resilience / reproduce	control (tightening)	stability	modifying

Table 7.3: Synoptical overview over the interactions of structure and agency (source: own draft, based on interviews)

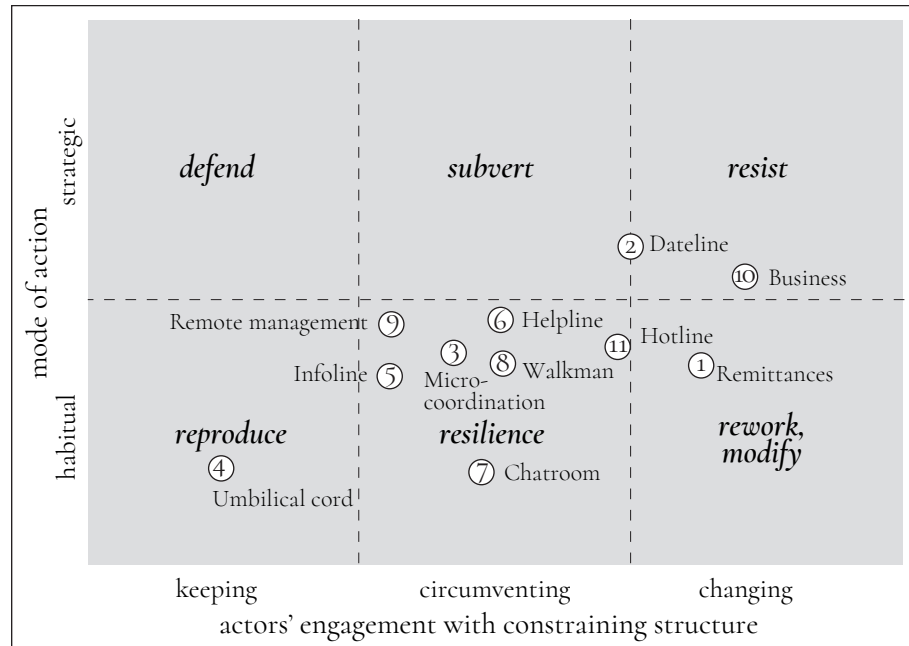


Figure 7.3: Modes of actors' engagement with social structure, practice types placed accordingly. Note: practices are placed through interpretative estimation, no quantification was used (Source: own draft, based on BORK-HÜFFER et al. 2016).

parallel structures are created, for example, when new acceptance for such relationships is established at least in subgroups (rickshaw pullers, students), thus justifying a placement in between *resist* and *subvert*.

The reproduction of positions

With regard to the dimensions of freedom to filling in the position (x -axis), and of change in the position itself (roles, expectations, power structures, y -axis), most types of action fall into the right two quadrants: Most of these mediatized practices lead to more freedom and scope of action to filling in the respective positions. At the same time, about half of the practices also lead to change in the positions themselves (see figure 7.4).

A number of practices fall into the category *widening*, which refers to an expansion of the scope of action within the roles, but few changes in the roles themselves. These include helpline (6), micro-coordination (3) chatroom (7) and walkman (8). Examples for helpline (6) are migrant workers in the city who contact their relatives in situations of distress, or women in the village whose husbands have migrated and who, as a result of patrilocal marriage regulations, often live at the house of their in-laws. Without their own family protection, they are sometimes exposed to violence or harassment and then can call their relatives or husband, for example. This is surely helpful, but it does not really change their position. The situation is similar with micro-coordination (3) and chatroom (7), where mobile phone usage affords more room for manoeuvre, but no significant changes in the positions themselves. I have grouped 6, 3 and

7.3 The influences of changing communication practices on social structure

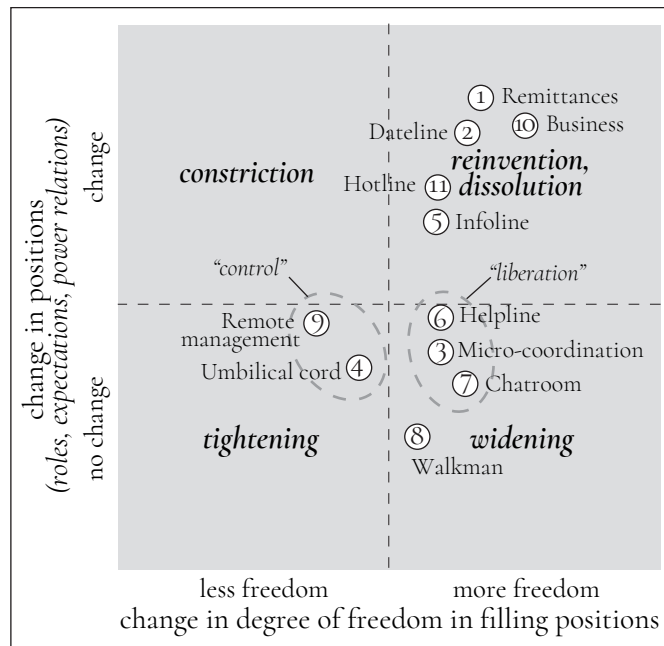


Figure 7.4: Modes of the reproduction of positions, practice types placed accordingly. Note: practices are placed through interpretative estimation, no quantification was used (Source: author’s draft, based on BORK-HÜFFER et al. 2016).

7 into a sub-category “liberation”. Media consumption within the practice type of walkman (8) also allows a slightly extended scope of action, for example, improving the otherwise very limited leisure activities for rickshaw drivers, but does not lead to changes in position.

Five types of practices fall into the mode of *reinvention/dissolution*: Infoline (5), for example, enables farmers to remotely enquire about prices, gain better market access and sometimes ‘eliminate’ middlemen. Hotline (11) enables contact with officials and members of higher social hierarchies and opens up the possibility of establishing closer networks. Business (19) can help to move to new positions, for example from rickshaw driver to businessman. Dateline (2) also enables partly a redefinition of the position as ‘lovers’, even if this might need to happen invisibly. Remittances (1) brings with it the most significant structural changes, as it led to a whole social, organisational and spatial restructuring of the remittances sector (see STERLY 2015, chapter 6.3, and STERLY 2018, chapter 6.6).

The mode *tightening* includes remote management (9) and umbilical cord (4). Without the mobile phone, the wives of migrant workers who stayed behind in the village, had to act as the de-facto heads of households, often making decisions on their own. Remote management (9), however, in many cases means that absent (migrant) men now have (regained) more and tighter control even over smaller everyday decisions in the household and on the farm. The closer connection to children and the expansion of care activities in space and time (over distance, and with the mobile phone virtually at any time, at least potentially) limits the room of mothers for manoeuvre, especially for working and leisure activities in the city. I have therefore grouped

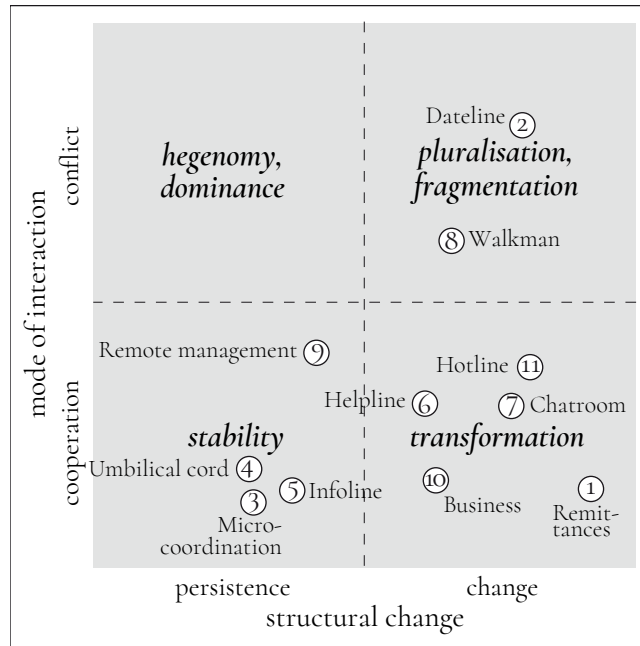


Figure 7.5: Modes of the reproduction of relations and structure, practice types placed accordingly. Note: practices are placed through interpretative estimation, no quantification was used (Source: author's draft, based on BORK-HÜFFER et al. 2016).

both (9) and (4) under 'control'.

The reproduction of relations and institutions

The next step aims at abstracting and classifying the effects of mediatization on change in relations and social institutions (see figure 7.5). Most interactions of mediatized translocal practices and institutions take place in a cooperative, non-conflictual mode. Five of the practices have *transformative* effects on institutions and relations: remittances (1), chatroom (7), hotline (11), business (10) and helpline (6). Remittances (1) has a transformative effect because it leads to new relations and formalised accountability between bank agents and remitters. Chatroom (7) leads to closer and more stable social ties between distant actors. Hotline (11) decreases the 'distance' to power actors, and, in some cases, leads to more intensive connections to them. Business (10) enables actors to establish partly new connections into new domains. Helpline (6) strengthens the relations and bonds between distant actors, similarly does chatroom (7).

Another group of practices also interacts with structure largely free of conflict, however it does not lead to changes, but rather to *stability* or even intensification of social structures: Remote management (9) leads to a more intensive participation of remote household members in the household and farm, but does not have too great an impact on relations and structures. Umbilical cord (4) leads to stronger expectations, especially for women, to again fulfil their role as 'good mothers', but also to closer ties to children. Micro-coordination (3) and infoline (5) do not lead to major changes in relations, micro-coordination perhaps a little more than infoline.

7.4 Changing spatial and temporal organisation of social life

Dateline (2) and walkman (8) lead to *pluralization* of relations and institutions: with dateline, new relations with new informal institutions attached to them emerge, but as they are in conflict with general social norms, they exist largely in clandestine and parallel ways. With walkman (8), new cultural influences are coming to the villages; it sometimes also leads to conflicts, especially when used by adolescents, but usually not to such an extent that there is a clandestine usage (except in some cases for adult content).

To summarize, the mediatization of translocal practices does have structural effects on positions, relations and institutions, notably the practice types of remittance, dateline, business and hotline. In case of the dateline practice and the pluralisation of structure that it brings about, it might be appropriate to talk about the *layeredness* of structure, with a second layer of 'informal' structure emerging here (see figure 3.4 in chapter 3.3.3): this becomes very clear if we take the example of the mobile phone use by students for performing their intimate relations on campus. They do not only individually evade structures of control, but they are also creating a new layer of practices with a socially shared meaning and corresponding places, for example by having night-time talks in their dorms, visible and audible to all their flatmates (see STERLY & GERADS 2016, chapter 6.5).

It is important to note that these structural changes pertain to the translocal social constellations of the researched rural-to-urban migrants and their rural counterparts, and not necessarily include more general structural change.

7.4 Changing spatial and temporal organisation of social life

The fourth research question tackles changes in the reproduction of space: *"In how far, and how does the mediatization of translocal practices translate into changes of the spatial and temporal organization of social life, and how space and place are made?"*

In STERLY (2018), see chapter 6.6, I have laid out how the mediatization of communication leads to a re-regionalisation and translocalisation of social practices and relations, using the example of the three practice types of remittances, dateline and chatroom, and in STERLY (2015) and STERLY & GERADS (2016), see chapter 6.3 and chapter 6.5, I have discussed changes in the dimensions of location, material and meaning of place. For a broader discussion of the changes in the spatial and temporal organisation of social life, including all the eleven practice types, I build on the elaborations in chapter 3.3.7 on the reproduction of place: first, I will discuss the changes in the relations of positions, practices and space with the concepts of translocalisation and regionalisation, and then I will employ BORK-HÜFFER et al.'s (2016) modes of the reproduction of space to gain an overview over the effects of mediatization on changes in place.

Translocalisation, re-regionalisation

As laid out in chapter 3.3.7, regionalization can be seen here from two perspectives: *first*, as an everyday "zoning of space" (GIDDENS 1984) by routinised and socially shared, spatio-temporal mobility and practice patterns (where do actors usually do what?), and *second*, as the 'placement' of position-practice relations, thus as the intertwinement of positions, practices and places (where are specific positions 'valid', where are they expected/allowed to be enacted?).

Everyday regionalization usually refers to 'local' practices, the zoning of (local) space that results from the spatio-temporal ordering of life within the reach of *everyday practices* (and *mobility*). The spatial extension of everyday mobility is obviously very different—some actors commute hundreds of kilometres every day, while most labour migrants in Dhaka have an everyday radius of gyration of just a few kilometres. Without the mobile phone (and, more generally, without communication media affording translocal communication), rural-urban migrants' everyday practices relating to distant others in the village would be largely confined to the *local*, for example the celebration of village events by a group of migrants from the same place while being in Dhaka, or the *occasional* trip to the bus stop in Dhaka to then travel to the village. It is the mediatization of communication, and, more precisely, the *quotidianization* of interaction that 'brings back' translocal practices into the realm of *everyday* life.

It makes sense to (separately) consider the *local* aspects also of everyday *translocal* activities, in order to understand their local grounding and the effects on the *zoning of space*, for example to better capture the meaning of certain places to actors and actor groups, or the material and immaterial characteristics of places that matter for these actors, like the privacy or anonymity, quietness or accessibility. The effects of mediatization on the intertwining of *position-practice relations* and space however can only be fully understood (at last for this study) if the *translocal* aspects in the everyday patterning are included: for a mother (and, partly, also for a father) childcaring from the distance, daily and at potentially any time, becomes a new normal, and with this also come changing expectations towards the position to fulfil the role of a 'good mother' (or, less often, of a 'good father') in everyday life, regardless of the distance involved.

If I consider these two perspectives—changes in the 'local' regionalisation (the zoning of space), and the translocalising of position-practice-relations—and re-interpret selected interviews against these, I can identify three groups of practices: in the *first*, some of them have pronounced effects on *both* the changes of 'local zoning' and the translocalising of the position-practice-relations; these are remittances, dateline, infoline and chatroom. The *second* group has strong effects on either one or the other; the practice of micro-coordination has important implications on the local zoning, as it allows for greater flexibility in everyday meeting arrangements, but does not have large effects on the spatial aspects of positions or relations. Other types of mediated practices have stronger effects on the translocalising of position-practice-relations, but less so on the local zoning: this includes umbilical cord, business, remote management. The mediatization of practices in the *third* group has rather limited effects on both, local zoning as well as translocalising of positions-practice-relations; walkman, helpline and hotline would fit here, walkman because it does neither strongly affect any of the two; helpline and hotline because they are invoked only on an occasional basis and therefore have limited effects on the spatial aspects of relations or practices.

Modes of the restructuring of place

For analysing the restructuring of place in its various dimension, I differentiate BORK-HÜFFER et al.'s (2016) (modified, see chapter 3.3.7) modes for the interaction of agency and place. I disentangle them by two perspectives: by the strength of structural change invoked (between persistence and change) on material and meaning-related aspects of place, and by the mode of action (between habitual and strategic). After re-interpreting a selected number of interviews, I

7.4 Changing spatial and temporal organisation of social life

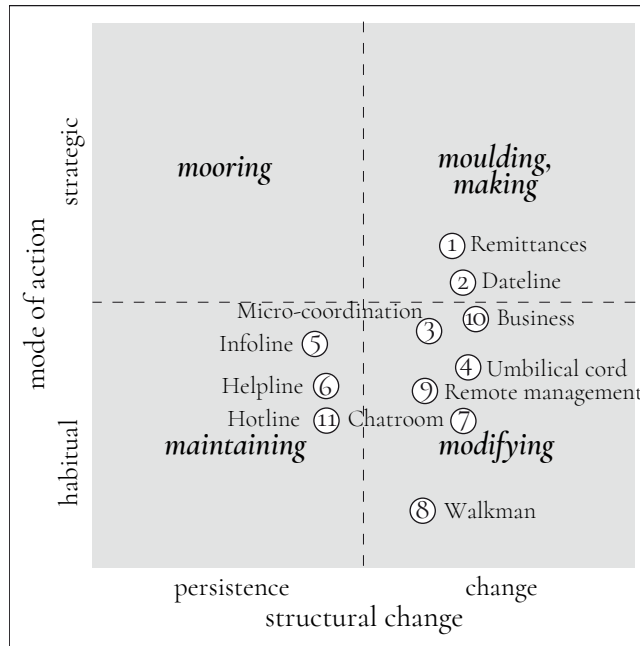


Figure 7.6: Modes of the reproduction of place, practice types placed accordingly. Note: practices are placed through interpretative estimation, no quantification was used (Source: author's draft, based on BORK-HÜFFER et al. 2016).

find that most of the practice types invoke some sort of change of the material, but mostly the immaterial characteristics of places (see figure 7.6).

Micro-coordination (3), umbilical cord (4), remote management (9), chatroom (7), business (10) and walkman (8) are *modifying* places through rather habitual practices: Walkman (8) leads to the transfer of urban (and national) media culture even to remote villages through routinised media consumption; business (10) to the emergence of some new locales for business making and transactions; micro-coordination (3) to a flexibilization and a loss of meaning of landmarks and fixed meeting places; remote management (9), umbilical cord (4) and chatroom (7), through their everyday practising, add a strong translocal layer to places where they are performed.

Dateline (2) and remittances (1) are *moulding* place, as there is more strategic acting involved: in the case of remittances (1), while the users might routinely use the services, the agents and providers of the mobile finance system operate strategically in setting up the necessary infrastructure at selected places. For the dateline (2) practice, actors in some cases very strategically select and use places where they can covertly call each other, thus actively 'occupying' places. But there are also practices that do rather have little influence on place: Infoline (5), helpline (6) and hotline (11) can be very important for actors life and wellbeing, however they are performed normally not on an everyday basis, and if they are, they do not influence places a lot, and therefore are rather *maintaining* place.

To sum up, the mediatization of translocal social practices has an observable influence on the spatial and temporal organization of the translocal social constellations of migrants and their

rural ‘counterparts’: on the one hand, mediatization leads to a quotidianization of previously episodic translocal practices, and thus to ‘bringing back’ of the translocal into everyday life. This is also accompanied by a re-location of position-practice relations. Both together can be summarized under ‘re-regionalization’. On the other hand, there are also more direct changes of places, above all of immaterial, but also of material aspects, for example in the case of mediatized remittance sending and the setting-up of agents’ offices.

It is important to note that, in my opinion, mediatization does not lead to a general “loss of place” (e.g. RELPH 1976); although the mobility afforded by the mobile phone theoretically makes communication more independent of place, at least some practices clearly show that the quality of places (quietness, privacy, accessibility) becomes even more important.

7.5 Limitations: Critical reflection on concepts and methodology

There are some limitations of the study that need to be included here, in order to put the results and conclusions into perspective and enable a critical evaluation of the study. These limitations can be organized into the following areas: limitations regarding the conceptual framework, limitations regarding the methodology and study design, and limitations regarding the data collection and analysis.

Regarding the concepts, there are two shortcomings: the first concerns the lack of a more elaborated concept how agency and structure interact; the second to the insufficient explication of power relations within the position-practice-relations.

A more detailed concept of the interaction of agency and structure would have allowed a more targeted collection of data and likely more precise statements on the degree and especially causal mechanisms of these interactions and relations. However, I did not (also for reasons of time) break down the former from a the abstract to a more concrete, *in-situ* level of ontology; there would have been some approaches for that, for example by differentiating between the external and internal structures of actors (STONES 2005), by focusing more on the temporality of the changes (e.g. ARCHER 1995), or by seeking for generative causal mechanisms (e.g. SAYER 1992). This implies that with my conceptual approach as-is, statements about the causal relationships between changes in practices and in structures are limited and stay on a rather general level. A deeper elaboration of the concept in this direction however would probably also have required a narrower methodological and empirical focus on certain types of structures (e.g. normative structures regarding gender, or certain positions, e.g. factory workers or women staying behind) in order to remain manageable.

The second shortcoming relates to the lack of a more explicit conceptualisation of power, and, linked to this, different actor types. Especially the concept of position-practice-relations is open to and in principle easy to adapt in this regard, however I did not further explicate power or actor types here. Although power differentials and inequalities show up in my data, they remain vague, and a more comprehensive and explicit conceptualisation would have likely implied also more and better data gathering on this.

Regarding methodology and procedure, a stronger focus on specific subtopics would have been beneficial as it would have allowed for a more detailed data collection and in-depth study.

7.5 *Limitations: Critical reflection on concepts and methodology*

This would then have made it possible to better differentiate actors, for example, by position (see above, power) and also to consider the embedding of actors in different (thematic) position-practice-relations and their overlap. An example for this would be the overlaps and interactions of the translocal social constellations of migrants and their relatives on the one hand, and the positionalities of mobile financial services agents within their own (functional) position-practice relations of mobile banking on the other. Although I did differentiate the perspectives of the respective actors in interpreting my data, the study would probably have benefitted if this would have been more explicit.

Regarding the data collection, the limited time for fieldwork was a constraint; due to that, I was not able to talk to all types of actors that I would have regarded as important (for example mobile financial service agents) for getting more robust information especially on structural change. Due to the limited fieldwork I also had only limited information about the resource base of the actors; it would have been desirable to have better data on this to make statements about the effects of mediatization on livelihoods.

Regarding data analysis, one shortcoming was the late completion of the quantitative survey, and the delay in digitising the questionnaires. This made it difficult to take full advantage of this data, as I was then embedded into another project and my time for analysis was limited after 2015. Also, the analysis and abstraction presented in chapter 7 builds on the interpretation of selected interviews, which were re-analysed on the basis of the types of mediatized practices, with regard to structural changes. It would have been better to carry out a complete recoding of all interviews with regard to the changes and also to include the results of the quantitative survey; however due to time constraints, this additional step was not undertaken.

8 Conclusion: Empirical, conceptual and methodological contributions to the understanding of the mediatization of translocal constellations

In this study I investigated the links between mediatization of communication practices and changes in the translocal social constellations of rural-to-urban migrants and their rural family and household members in Bangladesh. In the following, I give a summary of the key results, embed the results in the larger context of social change processes in Bangladesh, reflect on the conceptual framework and the methodology, and give a brief outlook.

Changing practices

The translocal arrangements in which migrants and their household and family members at places of origin are living were conceptualised as translocal social constellations, based on a relational perspective on society and place, and embedded in a theoretical framework of structuration and practice theory. This helped to go beyond seeing the mobile phone use of actors as ‘just calling’, or analysing phone use predominantly from a developmental-utilitarian perspective. Instead it sees actors as drawing upon the affordances that help them in achieving desired outcomes, or overcoming constraints (material, normative, structural/economic). They embed the mobile phone and what it affords to them in their everyday practices in such a way that is meaningful to them: through this interaction of agency and technology, their practices become mediatized.

Like in many other countries of the ‘Global South’, this is a process of transitioning from face-to-face to person-to-person communication, leapfrogging the place-to-place stage as happened in many (“developed”) countries with the diffusion of the landline phone. One important aspect that is linked to this is the quotidianization of translocal practices through their mediatization: without having access to communication media to bridge the distance between migration destinations and origins, social relations of actors embedded in translocal social constellations are largely reduced to their structural aspects (the existence of romantic relationships, networks, friendships, etc.), because these relations would be practiced—performed and experienced—rather episodically during rare visits, and certainly not every day.

Through an inductive approach, mediatized translocal practices identified during the fieldwork could be systematised in eleven different types, covering aspects of livelihoods, social relations, individual wellbeing, and information exchange. While some of these eleven practice types could also be realised with any functional distant communication, for others the mobility and individuality afforded by the mobile phone are clearly necessary. Practices that were

bound to specific places and times are now also being carried out at other places and times (e.g. connecting to family, performing intimacy, transferring remittances), and, thanks to the affordance of mobility, partly also from a larger variety of places and at different times. It is important to note that mediated interaction is only partially substituting face-to-face interaction; actors rather blend and complement both modes into hybrid forms of interaction, according to their specific constraints and situative contexts.

Although my empirical material on changes in social practices is richer than that on social structure, I was still able to draw some conclusions from my data on structural changes and the linkages to the mediatization of practices.

Change in positions and relations

There are clearly some structural changes observable and attributable to mediatization, but the magnitude of these changes is limited. I can therefore not see the mobile phone as an agent (or actant) of social transformation, as was expected or at least hoped for by some in the ICT4D research community at the beginning of the 2000s. However, within the context of my study—the translocal social constellations of rural-to-urban migrants—and with my empirical data, I was able to describe some processes of change in social structures and also plausibly attribute them to mediatization. These changes are not manifesting uniformly and vary for different types of structures, also depending on the type of mediatized practices. Important types of structures in which these changes can be observed are relations and social institutions, positionalities, the everyday regionalisations and places themselves.

Important changes occurred in the field of translocal relations, here above all due to the sudden change in communication intensity: before the use of the mobile phone, communication between migrants and their non-migrant family and household members happened only episodic; mediatization has led to a quotidianization of interaction. This has resulted in an intensification of relations and to an increase of interaction processes.

Changes in positions and relative positionalities are to a lesser extent induced by mediatization; mediatized practices can and do lead to an increase in the room for manoeuvre within positions, for example by enabling actors to call other for support when in acute problems. In contrast, the changes in positions themselves are less pronounced. In the positionalities, for example, hierarchical differences change as a result of access to other power actors, or due to the far-reaching restructuring of the actor constellations through which remittance flows are handled. The less pronounced changes in positions can also be explained by the fact that the latter are embedded in positionality systems of the larger social context (what makes a mother, a son, a factory worker, a farmer, etc.), so that the effect of mediatization is not sufficient to initiate or promote far-reaching processes of change here.

In some cases a marked pluralization of structures could be observed, for example when illicit love affairs were created and practiced through the mobile phone. This did not only happen in individual cases, but as a socially shared practice, so the patterns and regularities that developed justify to refer to this as emergent parallel structures. In my cases, however, there were no examples of attempts to strategically initiate major social change processes with the help of the mobile phone, analogous to the toppling of Philippine President Estrada in 2001 through protests organized over the mobile phone.

Change in place and regionalization

More pronounced changes could be observed with regard to places and regionalisation: places undergo change in their material characteristics, for example through the changed remittance infrastructure. More often, their immaterial characteristics change, some places become for example important as preferred locales from where actors call distant others to hold private or intimate conversations. Most of the eleven practices types studied were leading to some sort of changes of places, but, the shift in remittance infrastructure was by far the most notable one.

The processes of everyday regionalisation are subject to greater change. This makes sense when we understand everyday regionalisation as the spatial and structural processes that emerge from the interlinkages between positions, practices and places, and as spatio-temporal patterns specific to certain position-practice relations. Because the mediatization of communication influences the whole fabric of these positions, practices and places, more far-reaching processes of change should not be surprising. The translocal social constellations, together with the practices specific to them, thus have a regionalising effect. Because it was only with the introduction of the mobile phone that distance-spanning translocal practices suddenly became possible in everyday life (e.g. umbilical cord / mobile parenting, chatroom), these overall constellations of positional practices and places, and with them the regionalisation of everyday life, have changed more profoundly.

That means that the things that people do with their phones take literally ‘new place’; theoretically one can perform intimacy for example from any place or location, from offices, factories, from footpaths and roads, from the back of a rickshaw or in a bus. But despite this increasing independence from *location* that the portability of mobile phones afford, I would rather confront the notion that *place* loses its importance. For some of the practices I would even argue for the opposite, that the material and immaterial characteristics of places become more important: privacy, quietness, accessibility for actors, among others.

One could say that, essentially, the mobile phone changes where many everyday practices are *taking place*. But as argued above, this transcends a mundane sense of just ‘changing the locations’ from where people call: it involves a reshaping of the fabric of positions, practices and place, and extends to changes in the way how places are experienced and socially constructed.

Putting the results in to context

However, these changes must also be seen in the context of larger scale processes of social, economic, political and cultural change in Bangladesh: these include processes on macro- and meso-level, for example the increasing level of education, partly rising incomes, the mechanisation of agriculture, changing producer and input prices, and changing agricultural policies, shifts in the key sectors where many migrants are working, including the increasing pressure on rickshaw pullers and streetfood vendors or the constant and in the past years increasing threat of evictions of informal settlements. Regarding gender and women’s empowerment, there are also conflictive discourses between more liberal and increasingly conservative positions. But there are also changes in family and household structures, partly due to migration, as well as electrification and improving transportation infrastructure and cultural change in the rural areas. Many of these influence the scope for agency and the degree of marginalisation and

vulnerability of rural-to-urban migrants, and it is important to contextualise the findings of the study against that.

Even though the study did not aim at a normative assessment of mobile communication with regard to its advantages or disadvantages, the results can be read to be positively biased. This is mostly due to the judgement by the interviewees, the vast majority of whom emphasized the benefits of mobile phone technology for them. Nevertheless, negative effects of the mobile phone were also mentioned: what is portrayed as ‘mobile romancing’ for many men, and thus a joyful escape from everyday hardships, turns out to be a form of remote harassment and stalking for many women; criminals use mobile phones to cheat people out of their money or to organise robberies and worse; parents are worried about their children’s excessive telephone usage, and political parties use the mobile phone to coordinate street violence.

Reflection on theory & methods

Overall, the theoretical approach with its dialectical perspective on the relations of structure-action, society-technology and local-translocal has sensitised me for technical and other determinisms, and the respective approaches were fitting well within the framework of structuration and practice theory. The iterative approach to theory development and the combination of inductive and deductive procedures, as well as the thinking in differentiated levels of ontology (ontology-in-general, ontology-in-situ, the ontic) helped me to develop a conceptual framework that is on the one hand as coherent as possible, but on the other hand also adapted (and adaptable) to the local situation. Analytically combining affordances with constraints and a (phenomenological) perspective on practices yields relevant insights into potential motives for mediatization.

The multisited research approach enabled me to gain insights into the life worlds of the urban and rural parts of the translocal social constellations, without which it would have been difficult to obtain the necessary data and without which I would not have acquired the necessary contextual knowledge to analyse and interpret these data accordingly. Mixed Methods Research has shown to be helpful in guiding methodology and method design; both in terms of the rationale for method development and of complementarity: The questionnaire was designed based on the results of the qualitative study, and the survey results contributed to selecting further interview partners. The qualitative results could be better contextualised with the help of the quantitative results, and the latter could be better interpreted with the former. I have tried to capture the topic of gender and intra-household power dynamics, but I did not specifically address this conceptually or methodically, which could certainly be improved.

Outlook

During fieldwork, but also in phases of analysis and writing, I came across a variety of open ends and promising themes for further research. I only would like to mention three of them here:

On a theoretical level, it would be interesting to connect thematic types of translocal practices (such as the situation-based ones in this study) with specific constellations of actor types and their position-practice-relations—both local and translocal—who are strongly and thematically

involved in these practices. This would on the one hand help to better focus the empirical research, and on the other hand one comes close to something that could be called translocal social *formations*, analogous to Elias' understanding of formations; that would certainly be exciting to explore.

With regard to methods, an important issue is that the use of mobile phones is not only interesting because of its effects on social change, but also because it produces massive amounts of data; this applies not only to the internet use by richer users, but also to the basic functions of telephony used by poorer people. The use of such data—both as a subject, as well as a method for research—is still relatively new, at least in the social sciences and in geography.

Lastly, in terms of research topics, the intersection of media convergence and a newly emerging digital divide seems to become relevant. In many developing countries, mediatization through mobile communication was for a long time limited to basic voice and text functionality, but this is rapidly changing in recent years. With this, there are new inequalities emerging: while the 'old' digital divide of access to voice and text services seems to disappear, a 'new' divide is opening with regard to (mobile) internet access. It would be important to understand how this new divide affects inequalities in terms of opportunities and scope of agency—one important question would be, for example, which other and new dynamics and differentials of vulnerability are triggered by the inequalities of access to mobile internet services.

Regardless of which technology reaches people, it is ultimately the actors and their perception of technology that shape its use and impact. This, the underlying structural inequalities and the anticipated unequal outcomes, is perfectly illustrated by Ahmad, a college lecturer in the village in Rangpur:

“Now, with this, everyone will get benefit according to their mode of communication. Those who are highly educated, they are using it for many purposes like office, and so on. Those who are businessmen, they are using it for business purpose. Those who belong to lower class, they use it for talking to their friends and relatives.”

9 References

- Adeleke, R., 2020. Digital divide in Nigeria. The role of regional differentials. *African Journal of Science, Technology, Innovation and Development* 24, 1-14.
- Adeoti, J.O., Adeoti, A.I., 2008. Easing the burden of fixed telephone lines on small-scale entrepreneurs in Nigeria. GSM lines to the rescue. *Telematics and Informatics* 25, 1-18.
- Afsar, R., 2009. Unravelling the vicious cycle of recruitment. *Labour Migration from Bangladesh to the Gulf States*, Geneva.
- Agnew, J.A., 1987. *Place and politics. The geographical mediation of state and society*. Allen & Unwin, Boston.
- Ahlin, T., 2020. Frequent Callers. "Good Care" with ICTs in Indian Transnational Families. *Medical Anthropology* 39, 69-82.
- Ahmed, A., 2013. *Bangladesh Integrated Household Survey (BIHS) 2011-2012*.
- Alampay, E.A., Moshi, G.C., 2018. Impact of Mobile Financial Services in Low- and Lower-Middle-Income Countries. A Systematic Review. *Information Technologies & International Development* 14, 164-181.
- Anadozie, C., Fonkam, M., Cleron, J.-P., Kah, M.M.O., 2019. The impact of mobile phone use on farmers' livelihoods in post-insurgency Northeast Nigeria. *Information Development* 33, 026666691988690.
- Archer, M.S., 1995. *Realist social theory: the morphogenetic approach*. Cambridge University Press, Cambridge, New York.
- Asongu, S., Le Roux, S., Nwachukwu, J.C., Pyke, C., 2019. The mobile phone as an argument for good governance in sub-Saharan Africa. *ITP* 32, 897-920.
- Babbie, E.R., 2009. *The practice of social research*. Wadsworth Inc Fulfillment, Belmont, Calif.
- Baird, T.D., Hartter, J., 2017. Livelihood diversification, mobile phones and information diversity in Northern Tanzania. *Land Use Policy* 67, 460-471.
- Bangladesh Bureau of Statistics (BBS), 2015. *Population and Housing Census 2011 Database*. <http://redatam.bbs.gov.bd/binbgd/RpWebEngine.exe/Portal> (30 June 2020).
- Bangladesh Bureau of Statistics (BBS), 2016. *Statistical Yearbook of Bangladesh 2015*, Dhaka.

- Bangladesh Bureau of Statistics (BBS), 2018. Small Area Atlas Bangladesh. Rangpur District. <http://203.112.218.65:8008/WebTestApplication/userfiles/Image/Atlas/Rangpur.pdf> (18 January 2022).
- Bangladesh Bureau of Statistics (BBS), 2020. Bangladesh - Subnational Administrative Boundaries. <https://github.com/wmgeolab/geoBoundaries/raw/3dd9e1e8b0691b23b75f295ed1ef7b26/BGD-ADM4-all.zip>.
- Bangladesh Garment Manufacturers and Exporters Association (BGMEA), 2020. Bangladesh Garment Manufacturers and Exporters Association – BGMEA at a glance. <http://bgmea.com.bd/home/pages/aboutus> (5 July 2020).
- Barber, P.G., 2008. Cell phones, complicity, and class politics in the Philippine labor diaspora. *Focaal* 2008, 28-42.
- Basch, L.G., Schiller, N.G., Szanton Blanc, C., 1994. Nations unbound. Transnational projects, postcolonial predicaments, and deterritorialized nation-states. Routledge, London.
- Bégout, B., 2005. *La découverte du quotidien. Éléments pour une phénoménologie du monde de la vie*. Allia, Paris.
- Bell, G., 2005. The age of the thumb: A cultural reading of mobile technologies from Asia. In: Glotz, P., Locke, C., Bertschi, S. (Eds.), *Thumb Culture. The Meaning of Mobile Phones for Society*. transcript Verlag, Bielefeld, pp. 67-88.
- Bell, M., Charles-Edwards, E., 2013. Cross-national comparisons of internal migration: An update on global patterns and trends.
- Bell, M., Charles-Edwards, E., Bernard, A., Ueffing, P., 2017. Global trends in internal migration. In: Champion, T., Cooke, T., Shuttleworth, I. (Eds.), *Internal Migration in the Developed World*. Routledge, London, pp. 76-97.
- Beuermann, D.W., McKelvey, C., Vakis, R., 2012. Mobile Phones and Economic Development in Rural Peru. *Journal of Development Studies* 48, 1617-1628.
- Bhaskar, R., 1979. *Philosophy and the human sciences*. Harvester Pr, Brighton.
- Bhaskar, R., 1998. General Introduction. In: Archer, M., Bhaskar, R., Collier, A., Lawson, T., Norrie, A. (Eds.), *Critical Realism. Essential Readings*. Routledge, London, pp. ix-xxiv.
- Bhuiyan, A. J. M. Shafiul Alam, 2004. Universal Access in Developing Countries. A Particular Focus on Bangladesh. *The Information Society* 20, 269-278.
- Boas, I., 2020. Social networking in a digital and mobile world. The case of environmentally-related migration in Bangladesh. *Journal of Ethnic and Migration Studies* 46, 1330-1347.
- Bolger, N., Davis, A., Rafaeli, E., 2003. Diary Methods. Capturing Life as it is Lived. *Annu. Rev. Psychol.* 54, 579-616.
- Bommes, M., Tacke, V., 2007. Das Allgemeine und das Besondere des Netzwerkes. In: Hollstein, B., Straus, F. (Eds.), *Qualitative Netzwerkanalyse: Konzepte, Methoden, Anwendungen*. VS Verlag für Sozialwissenschaften, pp. 37-62.

- Bork-Hüffer, T., 2012. Migrants' health seeking actions in Guangzhou, China. Zugl.: Köln, Univ., Diss., 2012, Steiner, Stuttgart (eng).
- Bork-Hüffer, T., Etzold, B., Gransow, B., Tomba, L., Sterly, H., Suda, K., Kraas, F., Flock, R., 2016. Agency and the Making of Transient Urban Spaces. Examples of Migrants in the City in the Pearl River Delta, China, and Dhaka, Bangladesh. *Popul. Space Place* 22, 128-145.
- Bourdieu, P., 1980. *le sens pratique*. Les Éditions de Minuit, Paris.
- Bourdieu, P., 1988. *Homo academicus*. Suhrkamp, Frankfurt am Main.
- Bourdieu, P., 1998. *On television*. New Press, New York.
- Bourdieu, P.B., 1992. *Language and symbolic power*. Polity Press, Cambridge.
- Brickell, K., Datta, A., 2011. Introduction: Translocal Geographies. In: Brickell, K., Datta, A. (Eds.), *Translocal Geographies. Spaces, Places, Connections*. Ashgate, Surrey, Burlington, pp. 3-22.
- Burns, J., Scapens, R.W., 2000. Conceptualizing management accounting change: an institutional framework. *Management Accounting Research* 11, 3-25.
- Cabanes, J.V.A., Acedera, K.A.F., 2012. Of mobile phones and mother-fathers. Calls, text messages, and conjugal power relations in mother-away Filipino families. *New Media & Society* 14, 916-930.
- Carmody, P., 2012. The Informationalization of Poverty in Africa? Mobile Phones and Economic Structure. *Information Technologies & International Development* 8, 1-17.
- Carr, E.R., 2005. Development and the Household. Missing the point? *GeoJournal* 62, 71-83.
- Castells, M., Fernández-Ardèvol, M., Linchuan Qiu, J., Sey, A., 2007. *Mobile communication and society. A global perspective*. MIT Press; MIT, Cambridge, Mass., London.
- Castles, S., Haas, H. de, Miller, M.J., 2014. *The age of migration. International population movements in the modern world*. Guilford Press, New York, NY.
- Chao, C.-T., 2010. Proportional Sampling. In: Salkind, N.J. (Ed.), *Encyclopedia of research design*. SAGE, Thousand Oaks, Calif, pp. 1119-1121.
- Charles-Edwards, E., Bell, M., Bernard, A., Zhu, Y., 2019. Internal migration in the countries of Asia. Levels, ages and spatial impacts. *Asian Population Studies* 15, 150-171.
- Chib, A., Malik, S., Aricat, R.G., Kadir, S.Z., 2014. Migrant mothering and mobile phones. Negotiations of transnational identity. *Mobile Media & Communication* 2, 73-93.
- Chowdhury, S.K., 2006. Access to a Telephone and Factor Market Participation of Rural Households in Bangladesh. *J Agricultural Economics* 57, 563-576.

9 References

- Cloke, P.J., Cook, I., Crang, Philip, Goodwin, M.A., Painter, J., Philo, C., 2004. *Practising human geography*. SAGE Publications, Inc, Los Angeles.
- Coad, A.F., Glyptis, L.G., 2014. Structuration: A position–practice perspective and an illustrative study. *Critical Perspectives on Accounting* 25, 142-161.
- Cohen, I.J., 1989. *Structuration theory. Anthony Giddens and the constitution of social life*. Macmillan, Houndmills, Basingstoke, Hampshire.
- Coles-Kemp, L., Jensen, R.B., Talhouk, R., 2018. In a New Land. Mobile Phones, Amplified Pressures and Reduced Capabilities. *Proceedings of the 2018 Chi Conference on Human Factors in Computing Systems (Chi 2018)*.
- Cook, J., Laidlaw, J., Mair, J., 2009. What if there is no Elephant? Towards a Conception of an Un-sited Field. In: Falzon, M.-A. (Ed.), *Multi-Sited Ethnography. Theory, Praxis and Locality in Contemporary Research*. Taylor and Francis, London, pp. 47-72.
- Corbane, C., Politis, P., Syrris, V., Pesaresi, M., 2018. GHS built-up grid, derived from Sentinel-1 (2016), R2018A. <http://data.europa.eu/89h/jrc-ghsl-10008>.
- Costa, E., 2018. Affordances-in-practice. An ethnographic critique of social media logic and context collapse. *New Media & Society* 20, 3641-3656.
- Couldry, N., Hepp, A., 2013. Conceptualizing Mediatization. *Contexts, Traditions, Arguments. Commun Theor* 23, 191-202.
- Couldry, N., Hepp, A., 2017. *The mediated construction of reality*. Polity, Cambridge, Malden, MA.
- Coulter, J., 2001. Human practices and the observability of the 'macro-social'. In: Schatzki, T.R., Knorr-Cetina, K., Savigny, E.v. (Eds.), *The practice turn in contemporary theory*. Routledge, New York, pp. 37-49.
- Crang, M., Crosbie, T., Graham, S., 2007. Technology, Time–Space, and the Remediation of Neighbourhood Life. *Environ Plan A* 39, 2405-2422.
- Cresswell, T., 2004. *Place. A short introduction*. Blackwell Pub., Malden, MA.
- Cresswell, T., 2011. Mobilities I. Catching up. *Progress in Human Geography* 35, 550-558.
- Creswell, J.W., Creswell, J.D., 2018. *Research design. Qualitative, quantitative, and mixed methods approaches*. SAGE, Los Angeles, London, New Delhi.
- Cuban, S., 2014. Transnational families, ICTs and mobile learning. *International Journal of Lifelong Education* 33, 737-754.
- Danermark, B., Ekström, M., Jakobsen, Liselotte, Karlsson, J.C., 2002. *Explaining society. Critical realism in the social sciences*. Routledge, London, New York.
- Dekker, R., Engbersen, G., 2012. *How social media transform migrant networks and facilitate migration*, Oxford.

- Dekker, R., Engbersen, G., Klaver, J., Vonk, H., 2018. Smart Refugees. How Syrian Asylum Migrants Use Social Media Information in Migration Decision-Making. *Social Media + Society* 4, 205630511876443.
- Donner, J., 2008. Research Approaches to Mobile Use in the Developing World. A Review of the Literature. *The Information Society* 24, 140-159.
- Dresing, T., Pehl, T., Schmieder, C., 2012. Manual (on) Transcription. Transcription Conventions, Software Guides and Practical Hints for Qualitative Researchers, Marburg.
- Ehrhardt, D., 2000. Impact of Market Structure on Service Options for the Poor, London.
- Etim, A.S., 2012. The Emerging Market of Sub-Saharan Africa and Technology Adoption. *International Journal of ICT Research and Development in Africa* 3, 14-26.
- Faist, T., 2010. Diaspora and Transnationalism: What Kind of Dance Partners? In: Bauböck, R., Faist, T. (Eds.), *Diaspora and transnationalism. Concepts, theories and methods*. Amsterdam University Press, Amsterdam, pp. 9-34.
- Falzon, M.-A. (Ed.), 2009. *Multi-Sited Ethnography. Theory, Praxis and Locality in Contemporary Research*. Taylor and Francis, London.
- Faraj, S., Azad, B., 2012. The Materiality of Technology. An Affordance Perspective. In: Nardi, B.A., Kallinikos, J., Leonardi, P.M. (Eds.), *Materiality and organizing. Social interaction in a technological world*. Oxford University Press, Oxford, pp. 237-258.
- Fischer, C.S., 1992. *America calling. A social history of the telephone to 1940*. University of California Press, Berkeley.
- Fitzgerald, D., 2006. Towards a Theoretical Ethnography of Migration. *Qual Sociol* 29, 1-24.
- Flick, U., 2010. *An introduction to qualitative research*. SAGE, Los Angeles, Calif.
- Freitag, U., Oppen, A.v. Introduction: 'Translocality': An Approach to Connection and Transfer in Area Studies, pp. 1-24.
- Frouws, B., Brenner, Y., 2019. Hype or hope? Evidence on use of smartphones & social media in mixed migration. <http://www.mixedmigration.org/articles/hype-or-hope-new-evidence-on-the-use-of-smartphones-and-social-media-in-mixed-migration/> (12 July 2020).
- GADM, 2011. Database of Global Administrative Areas, Bangladesh Country files (Version 2.0). https://gadm.org/download_country_v3.html (5 July 2020).
- Gallo, E., 2009. In the Right Place at the Right Time? Reflections on Multi-sited Ethnography in the Age of Migration. In: Falzon, M.-A. (Ed.), *Multi-Sited Ethnography. Theory, Praxis and Locality in Contemporary Research*. Taylor and Francis, London, pp. 87-102.

9 References

- Gardner, K., 2009. Lives in Motion. *Journal of South Asian Development* 4, 229-251.
- Garfinkel, H., 1963. A conception of and experiments with "trust" as a condition of stable concerted actions. In: Harvey, O.J. (Ed.), *Motivation and social interaction. Cognitive determinants*. Ronald, New York, pp. 187-238.
- Geertz, C., 1973. *The interpretation of cultures. Selected essays*. Basic Books, New York.
- Gibson, J.J., 1979. *The ecological approach to visual perception*. Psychology Press, New York, London.
- Giddens, A., 1979. *Central problems in social theory. Action, structure and contradiction in social analysis*. Macmillan, London.
- Giddens, A., 1984. *The constitution of society. Outline of the theory of structuration*. Univ. of Californai Press, Berkeley.
- Glick Schiller, N., Basch, L.G., Szanton Blanc, C. (Eds.), 1992. *Towards a transnational perspective on migration. Race, class, ethnicity, and nationalism reconsidered*, New York, NY.
- Goffman, E., 1959. *The presentation of self in everyday life*. Anchor Books, New York.
- Goffman, E., 1986. *Frame analysis. An essay on the organization of experience*. Northeastern University Press, Boston.
- Goodman, D.S.G., 2006. Shanxi as translocal imaginary. Reforming the local. In: Oakes, T., Schein, L. (Eds.), *Translocal China: Linkages, Identities and the Reimagining of Space*. Routledge, pp. 56-73.
- Gordano Peile, C., Ros Híjar, A., 2016. Immigrants and mobile phone uses. Spanish-speaking young adults recently arrived in London. *Mobile Media & Communication* 4, 405-423.
- Gordon, E., de Souza e Silva, Adriana, 2013. The Urban Dynamics of Net Localities. How Mobile and Location-Aware Technologies Are Transforming Places. In: Wilken, R., Goggin, G. (Eds.), *Mobile Technology and Place*. Routledge, New York, London, pp. 89-103.
- Greene, J.C., Caracelli, V.J., Graham, W.F., 1989. Toward a Conceptual Framework for Mixed-Method Evaluation Designs. *Educational Evaluation and Policy Analysis* 11, 255-274.
- Greenhalgh, T., Stones, R., 2010. Theorising big IT programmes in healthcare: strong structuration theory meets actor-network theory. *Social science & medicine* (1982) 70, 1285-1294.
- Greiner, C., 2012. Can Households be Multilocal? Conceptual and Methodological Considerations based on a Namibian Case Study. *Die ERDE* 143, 195-212.
- Greiner, C., Sakdapolrak, P., 2013a. Translocality. Concepts, Applications and Emerging Research Perspectives. *Geography Compass* 7, 373-384.

- Greiner, C., Sakdapolrak, P., 2013b. Rural–urban migration, agrarian change, and the environment in Kenya. A critical review of the literature. *Popul Environ* 34, 524-553.
- Haas, H. de, Czaika, M., Flahaux, M.-L., Mahendra, E., Natter, K., Vezzoli, S., Villares-Varela, M., 2019. International Migration. Trends, Determinants, and Policy Effects. *Population and Development Review* 45, 885-922.
- Hackenbroch, K., 2013. The spatiality of livelihoods. Negotiations of access to public space in Dhaka, Bangladesh. Zugl.: Dortmund, Techn. Univ., Diss., 2012. Steiner, Stuttgart.
- Hammersley, M., Atkinson, P., 2007. *Ethnography. Principles in practice*. Routledge, London.
- Hannerz, U., 1998. Transnational Research. In: Bernard, H.R. (Ed.), *Handbook of methods in cultural anthropology*. AltaMira Press, Walnut Creek, pp. 235-256.
- Harney, N., 2013. Precarity, Affect and Problem Solving with Mobile Phones by Asylum Seekers, Refugees and Migrants in Naples, Italy. *Journal of Refugee Studies* 26, 541-557.
- Hart, G., 1995. Gender and household dynamics: Recent theories and their implications. In: Quibria, M.G. (Ed.), *Critical issues in Asian development : theories, experiences, and policies*. Oxford University Press, Hong Kong, New York, pp. 39-74.
- Hedberg, C., do Carmo, R.M., 2012. Translocal Ruralism: Mobility and Connectivity in European Rural Spaces. In: Hedberg, C., Carmo, R.M.d. (Eds.), *Translocal ruralism mobility and connectivity in European rural spaces*. Springer, Dordrecht, pp. 1-9.
- Heeks, R., 2007. Theorizing ICT4D Research. *Information Technologies and International Development* 3, 1-4.
- Heeks, R., 2018. *Information and Communication Technology for Development (ICT4D)*. Routledge Taylor & Francis Group, London, New York, NY.
- Hilbert, M., 2014. Technological information inequality as an incessantly moving target. The redistribution of information and communication capacities between 1986 and 2010. *J Assn Inf Sci Tec* 65, 821-835.
- Horst, C., 2009. Expanding Sites: The Question of ‘Depth’ Explored. In: Falzon, M.-A. (Ed.), *Multi-Sited Ethnography. Theory, Praxis and Locality in Contemporary Research*. Taylor and Francis, London, pp. 119-134.
- Howard, P.N., Mazaheri, N., 2009. Telecommunications Reform, Internet Use and Mobile Phone Adoption in the Developing World. *World Development* 37, 1159-1169.
- Hurley, P.J., Watson, L., 2018. *A concise introduction to logic*. Cengage Learning, Boston, MA.
- Hutchby, I., 2001. *Conversation and technology. from the telephone to the internet*. Polity Press, Cambridge.

- Ibahrine, M., 2008. Mobile Communication and Sociopolitical Change in the Arab World. In: Katz, J.E. (Ed.), *Handbook of mobile communication studies*. MIT Press, Cambridge, Mass, pp. 257-272.
- Ito, M., 2005. Mobile Phones, Japanese Youth, and the Re-placement of Social Contact. In: Ling, R.S., Pedersen, P.E. (Eds.), *Mobile communications. Re-negotiation of the social sphere*. Springer, London, pp. 131-148.
- ITU, 2019. ITU World Telecommunication/ICT Indicators (WTI) Database 2019. <https://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>.
- James, J., 2009. Leapfrogging in mobile telephony. A measure for comparing country performance. *Technological Forecasting and Social Change* 76, 991-998.
- Jensen, K.B., 2010. *Media convergence. The three degrees of network, mass, and interpersonal communication*. Routledge, New York, NY.
- Jensen, R., 2007. The Digital Provide. Information (Technology), Market Performance, and Welfare in the South Indian Fisheries Sector. *The Quarterly Journal of Economics* 122, 879-924.
- Johnson, M.C., 2013. Culture's Calling. Mobile Phones, Gender, and the Making of an African Migrant Village in Lisbon. *Anthropological Quarterly* 86, 163-190.
- Johnson, R.B., Onwuegbuzie, A.J., Turner, L.A., 2007. Toward a Definition of Mixed Methods Research. *Journal of Mixed Methods Research* 1, 112-133.
- Johnston, R. (Ed.), 1995. *Geographies of global change. Remapping the world in the late twentieth century*. Blackwell, Oxford.
- Kabir, M.A., Lipi, N.N., Afrin, S., Seeley, G., 2008. *Social Protection by and for Temporary Work Migrants and their Households in Northwest Bangladesh*. Final Report (Bangladesh) January 2008.
- Kalba, K., 2008. The Adoption of Mobile Phones in Emerging Markets: Global Diffusion and the Rural Challenge. *International Journal of Communication* 2, 631-661.
- Kasesniemi, E.-L., Rautiainen, P., 2002. Mobile culture of children and teenagers in Finland. In: Katz, J.E., Aakhus, M.A. (Eds.), *Perpetual contact. Mobile communication private talk public performance*. Cambridge Univ. Press, Cambridge, pp. 170-192.
- Katz, C., 2004. *Growing up global. Economic restructuring and children's everyday lives*. University of Minnesota Press, Minneapolis.
- Katz, J.E., Aspden, P., 1997. Barriers to and motivations for using the Internet: Results of a national opinion survey. *Internet Research Journal: Technology, Policy & Applications* 7, 170-188.
- Katz, J.E., Sugiyama, S., 2005. Mobile Phones as Fashion Statements: The Co-creation of Mobile Communication's Public Meaning. In: Ling, R.S., Pedersen, P.E. (Eds.), *Mobile communications. Re-negotiation of the social sphere*. Springer, London, pp. 63-81.

- Kaufmann, K., 2018. Navigating a new life. Syrian refugees and their smartphones in Vienna. *Information, Communication & Society* 21, 882-898.
- Kavoori, A.P., Chadha, K., 2006. The cell phone as a cultural technology: lessons from the Indian case. In: Kavoori, A.P., Arceneaux, N. (Eds.), *The cell phone reader. Essays in social transformation*. Lang, New York, NY, pp. 227-240.
- Kenny, C., 2004. What Drives Postal Performance – A Cross-Country Analysis. In: Guislain, P. (Ed.), *The Postal Sector in Developing and Transition Countries. Contributions to a Reform Agenda*, Washington, D.C., pp. 16-28.
- Khondker, H.H., 2011. Role of the New Media in the Arab Spring. *Globalizations* 8, 675-679.
- Kikulwe, E.M., Fischer, E., Qaim, M., 2014. Mobile Money, Smallholder Farmers, and Household Welfare in Kenya. *Plos One* 9.
- Kim, D.-Y., Park, J., Morrison, A.M., 2008. A model of traveller acceptance of mobile technology. *Int. J. Tourism Res.* 10, 393-407.
- Kirwin, M., Anderson, J., 2018. Identifying the Factors Driving West African Migration.
- Kish, L., 1995. *Survey sampling*. Wiley, New York.
- Kleine, D., 2010. ICT4WHAT?—Using the choice framework to operationalise the capability approach to development. *J. Int. Dev.* 22, 674-692.
- Kleine, D., 2011. The capability approach and the ‘medium of choice’: steps towards conceptualising information and communication technologies for development. *Ethics Inf Technol* 13, 119-130.
- Kothari, U., 2008. Global peddlers and local networks. *Migrant cosmopolitanisms. Environ. Plann. D* 26, 500-516.
- Kraemer, D., 2017. ‘Do you have a mobile?’ Mobile phone practices and the refashioning of social relationships in Port Vila Town. *Aust J Anthropol* 28, 39-55.
- Kriem, M.S., 2009. Mobile telephony in Morocco. A changing sociality. *Media, Culture & Society* 31, 617-632.
- Krone, M., Dannenberg, P., 2018. Analysing the effects of information and communication technologies (ICTs) on the integration of East African farmers in a value chain context. *Zeitschrift für Wirtschaftsgeographie* 62, 65-81.
- Krotz, F., 2009. Mediatization. A concept with which to grasp media and societal change. In: Lundby, K. (Ed.), *Mediatization. Concept, changes, consequences*. Lang, New York, NY, Washington, DC, Baltimore, MD, Bern, Frankfurt, M., Berlin, Brussels, Vienna, Oxford, pp. 19-38.
- Kusimba, S., Yang, Y., Chawla, N., 2016. Heartholds of mobile money in western Kenya. *Economic Anthropology* 3, 266-279.
- Ledgard, J.M., 2011. *Digital Africa. The Economist: Intelligent Life*.

- Leonardi, P.M., 2012. Materiality, Sociomateriality, and Socio-Technical Systems: What Do these Terms Mean? How Are they Different? Do We Need them? In: Nardi, B.A., Kallinikos, J., Leonardi, P.M. (Eds.), *Materiality and organizing. Social interaction in a technological world*. Oxford University Press, Oxford, pp. 25-48.
- Lesitaokana, W.O., 2017. Mobile phone use in intimate relationships. The case of youth in Botswana. *International Journal of Cultural Studies* 21, 393-404.
- Levitt, P., 2001. *The transnational villagers*. University of California Press, Berkeley, Calif.
- Lima, P. de, 2012. Boundary Crossings: Migration, Belonging/'Un-Belonging in Rural Scotland. In: Hedberg, C., Carmo, R.M.d. (Eds.), *Translocal ruralism mobility and connectivity in European rural spaces*. Springer, Dordrecht, pp. 203-217.
- Lincoln, Y.S., Lynham, S.A., Guba, E.G., 2018. Paradigmatic Controversies, Contradictions, and Emerging Confluences, Revisited. In: Denzin, N.K., Lincoln, Y.S. (Eds.), *The SAGE handbook of qualitative research*. SAGE, Los Angeles, London, New Delhi, Singapore, Washington DC, Melbourne, pp. 213-263.
- Ling, R.S., Yttri, B., 2002. Hyper-coordination via mobile phones in Norway. In: Katz, J.E., Aakhus, M.A. (Eds.), *Perpetual contact. Mobile communication private talk public performance*. Cambridge Univ. Press, Cambridge, pp. 139-169.
- LirneAsia, 2009. *Teleuse at the bottom of the pyramid data booklet. Findings from a six-country study in emerging Asia*.
- Liu, P.L., Leung, L., 2017. Migrant Parenting and Mobile Phone Use. Building Quality Relationships between Chinese Migrant Workers and their Left-behind Children. *Applied Research in Quality of Life* 12, 925-946.
- Liu, X., Wu, F.-S., Chu, W.-L., 2012. Diffusion of Mobile Telephony in China. Drivers and Forecasts. *IEEE Trans. Eng. Manage.* 59, 299-309.
- Lizardo, O., 2010. Beyond the antinomies of structure: Levi-Strauss, Giddens, Bourdieu, and Sewell. *Theor Soc* 39, 651-688.
- Lopez, L.K., 2017. Always on the Phone. The Invisible Role of Hmong Women in Diasporic Media Industries. *Communication, Culture & Critique* 10, 185-202.
- López, J., Scott, J., 2000. *Social Structure*. Open University Press, Berkshire.
- Lundby, K. (Ed.), 2014. *Mediatization of Communication*. DE GRUYTER, Berlin, Boston.
- Madianou, M., 2012. Migration and the accentuated ambivalence of motherhood. The role of ICTs in Filipino transnational families. *Global Networks* 12, 277-295.
- Madianou, M., 2016. Ambient co-presence. Transnational family practices in polymedia environments. *Global Networks* 16, 183-201.
- Madianou, M., Miller, D., 2011. Mobile phone parenting. Reconfiguring relationships between Filipina migrant mothers and their left-behind children. *New Media & Society* 13, 457-470.

- Mahler, S.S., Hansing, K., 2005. How Toward a Transnationalism of the Middle: Transnational Religious Practices Help Bridge the Divides Between Cuba and Miami. *Latin American Perspectives* 32, 121-146.
- Mallick, B., Etzold, B., 2015. Introduction And State-Of-The-Art. In: Mallick, B., Etzold, B. (Eds.), *Environment, migration, and adaptation. Evidence and politics of climate change in Bangladesh*. A H Development Publishing House, Dhaka, Kolkata, pp. 1-26.
- Marcus, G.E., 1995. Ethnography in/of the World System. The Emergence of Multi-Sited Ethnography. *Annual Review of Anthropology* 24, 95-117.
- Marshall, R., Rahman, Shibaab, 2013. *Internal Migration in Bangladesh: Character, Drivers and Policy Issues*, Dhaka.
- Massey, D.B., 1991. A Global Sense of Place. *Marxism Today*, 24-29.
- Massey, D.B., 2005. *For space*. SAGE, Los Angeles, Calif.
- Mayring, P., 2015. *Qualitative Inhaltsanalyse. Grundlagen und Techniken*. Beltz, Weinheim.
- Merton, R.K., 1968. *Social theory and social structure*. Macmillan Publishing, New York, NY.
- Mesch, G., Talmud, I., 2008. Cultural Differences in Communication Technology Use: Adolescent Jews and Arabs in Israel. In: Katz, J.E. (Ed.), *Handbook of mobile communication studies*. MIT Press, Cambridge, Mass, pp. 313-324.
- Moore, S., 2004. THE DOUBLING OF PLACE. Electronic media, time~space arrangements and social relationships. In: Couldry, N., McCarthy, A. (Eds.), *MEDIASPACE. Place, scale and culture in a media age*. Routledge, London, pp. 21-36.
- Moore, S., 2012. *Media, place and mobility*. Palgrave Macmillan, Basingstoke.
- Mouzelis, N.P., 1991. *Back to sociological theory. The construction of social orders*. Macmillan, London.
- Muzzini, E., Aparicio, G., 2013. *Bangladesh*. The World Bank.
- Nadai, E., Maeder, C., 2009. Contours of the Field(s): Multi-sited Ethnography as a Theory-driven Research Strategy for Sociology. In: Falzon, M.-A. (Ed.), *Multi-Sited Ethnography. Theory, Praxis and Locality in Contemporary Research*. Taylor and Francis, London, pp. 233-250.
- Narayanasamy, N., 2009. *Participatory rural appraisal. Principles, methods and application*. SAGE Publications, Los Angeles.
- Neumann, W.L., 2003. *Social Research Methods: Qualitative and Quantitative Approaches*. Pearson Education Limited, Harlow.
- Newman, M. E. J, 2010. *Networks. An introduction*. Oxford University Press, Oxford, New York.

9 References

- Ojong, N., 2016. Remittances, mobile phones and informality. Insights from Cameroon. *African Journal of Science Technology Innovation & Development* 8, 299-308.
- Oliver, N., Lepri, B., Sterly, H., Lambiotte, R., Deletaille, S., Nadai, M. de, Letouzé, E., Salah, A.A., Benjamins, R., Cattuto, C., Colizza, V., Cordes, N. de, Fraiberger, S.P., Koebe, T., Lehmann, S., Murillo, J., Pentland, A., Pham, P.N., Pivetta, F., Saramäki, J., Scarpino, S.V., Tizzoni, M., Verhulst, S., Vinck, P., 2020. Mobile phone data for informing public health actions across the COVID-19 pandemic life cycle. *Sci. Adv.* 6, eabc0764.
- Open Street Map, 2020. Map Data. <https://www.openstreetmap.org>.
- Page, B., 2011. Fear of Small Distances: Home Associations in Douala, Dar es Salaam and London. In: Brickell, K., Datta, A. (Eds.), *Translocal Geographies. Spaces, Places, Connections*. Ashgate, Surrey, Burlington, pp. 127-144.
- Palackal, A., Nyaga Mbatia, P., Dzorgbo, D.-B.S., Duque, R.B., Ynalvez, M.A., Shrum, W.M., 2011. Are mobile phones changing social networks? A longitudinal study of core networks in Kerala. *New Media & Society* 13, 391-410.
- Parker, J., 2000. *Structuration*. Open University, Buckingham, Philadelphia, Pa.
- Pashapa, T., Rivett, U., 2018. Gender of household head and the digital divide in South Africa's settlements. *Gender, Technology and Development* 21, 232-249.
- Peleikis, A., 2003. *Lebanese in Motion. Gender and the Making of a Translocal Village*. transcript Verlag, Bielefeld.
- Perkins, R., Neumayer, E., 2013. The ties that bind. The role of migrants in the uneven geography of international telephone traffic. *Global Networks* 13, 79-100.
- Peth, S.A., Sterly, H., Sakdapolrak, P., 2018. Between the village and the global city. The production and decay of translocal spaces of Thai migrant workers in Singapore. *Mobilities* 13, 455-472.
- Pew Research Center, 2019. *Mobile Divides in Emerging Economies*.
- Pool, Ithiel de Sola, 1977. *The social impact of the telephone*. MIT Press, Cambridge Massachusetts.
- Porst, L., Sakdapolrak, P., 2017. How scale matters in translocality. Uses and potentials of scale in translocal research. *Erdkunde* 71, 111-126.
- Porter, G., 2015. *Mobile Phones, Mobility Practices, and Transport Organization in Sub-Saharan Africa*. *Mobility in History* 6.
- Porter, G., Hampshire, K., Abane, A., Munthali, A., Robson, E., Tanle, A., Owusu, S., Lannoy, A. de, Bango, A., 2018. Connecting with home, keeping in touch. Physical and virtual mobility across stretched families in sub-Saharan Africa. *Africa* 88, 404-424.
- Porter, G., Turner, J., 2019. Meeting Young People's Mobility and Transport Needs. *Review and Prospect. Sustainability* 11, 6193.

- Potnis, D., 2016. Inequalities creating economic barriers to owning mobile phones in India. *Information Development* 32, 1332-1342.
- Puchta, C., Potter, J., 2004. *Focus group practice*. SAGE, London, Thousand Oaks.
- Pype, K., 2016. '[Not] talking like a Motorola'. *Mobile phone practices and politics of masking and unmasking in postcolonial Kinshasa*. *J R Anthropol Inst* 22, 633-652.
- Rafael, V.L., 2003. *The Cell Phone and the Crowd: Messianic Politics in the Contemporary Philippines*. *Public Culture* 15, 399-425.
- Rahman, M.M., Akter, S., Rahman, A., 2010. Distance associated with marriage migration in a northern and a southern region of Bangladesh: an empirical study. *J. Biosoc. Sci.* 42, 577-586.
- Reckwitz, A., 2002. *Toward a Theory of Social Practices: A Development in Culturalist Theorizing*. *European Journal of Social Theory* 5, 243-263.
- Rettie, R., 2008. *Mobile Phones as Network Capital: Facilitating Connections*. *Mobilities* 3, 291-311.
- Reuver, M. de, Bouwman, H., Prieto, G., Visser, A., 2011. Governance of flexible mobile service platforms. *Futures* 43, 979-985.
- Rheingold, H., 2002. *Smart mobs. The next social revolution*. Perseus, Cambridge.
- Rockenbauch, T., Sakdapolrak, P., Sterly, H., 2019a. Beyond the local – Exploring the socio-spatial patterns of translocal network capital and its role in household resilience in Northeast Thailand. *Geoforum* 107, 154-167.
- Rockenbauch, T., Sakdapolrak, P., Sterly, H., 2019b. Do translocal networks matter for agricultural innovation? A case study on advice sharing in small-scale farming communities in Northeast Thailand. *Agric Hum Values* 36, 685-702.
- Rose, G., 1997. Situating knowledges. Positionality, reflexivities and other tactics. *Progress in Human Geography* 21, 305-320.
- Sakdapolrak, P., 2010. *Orte und Räume der Health Vulnerability. Bourdieus Theorie der Praxis für die Analyse von Krankheit und Gesundheit in megaurbanen Slums von Chennai, Südindien*. 2010. Verl. für Entwicklungspolitik, Saarbrücken.
- Sakdapolrak, P., 2014. *Building resilience through translocality. Climate change, migration and social resilience of rural communities in Thailand*.
- Sakdapolrak, P., Naruchaikusol, S., Ober, K., Peth, S.A., Porst, L., Rockenbauch, T., Tolo, V., 2016. Migration in a changing climate. Towards a translocal social resilience approach. *Die ERDE* 147, 81-94.
- Sanjek, R., 2010. household. In: Barnard, A., Spencer, J. (Eds.), *The Routledge Encyclopedia of Social and Cultural Anthropology*. Routledge, London and New York, pp. 357-361.
- Sayer, A., 1992. *Method in Social Science. A Realist Approach*. Routledge, London.
- Scannell, P., 1996. *Radio, television and modern life. A phenomenological approach*. Blackwell, Oxford.

9 References

- Schaub, M.L., 2011. Lines across the desert. Mobile phone use and mobility in the context of trans-Saharan migration. *Information Technology for Development* 18, 126-144.
- Schouten, P., 2012. 'Theory Talk #47: Jean Francois Bayart on Globalization, Subjectification, and the Historicity of State Formation', Theory Talks, <http://www.theory-talks.org/2012/02/theory-talk-47.html>
- Schrock, A.R., 2015. Communicative Affordances of Mobile Media: Portability, Availability, Locatability, and Multimediality. *International Journal of Communication* 9, 1229-1246.
- Schwandt, T.A., 2000. Three epistemological stances for qualitative inquiry. In: Denzin, N.K., Lincoln, Y.S. (Eds.), *The handbook of qualitative research*. SAGE, Thousand Oaks, pp. 189-213.
- Schwandt, T.A., 2007. *The Sage dictionary of qualitative inquiry*. Sage Publ, Los Angeles, Calif.
- Sekabira, H., Qaim, M., 2017. Mobile money, agricultural marketing, and off-farm income in Uganda. *Agricultural Economics* 48, 597-611.
- Sheller, M., Urry, J., 2006. The New Mobilities Paradigm. *Environ Plan A* 38, 207-226.
- Silva, H. de, Ratnadiwakara, D., Zainudeen, A., 2009. Social Influence in Mobile Phone Adoption. Evidence from the Bottom of Pyramid in Emerging Asia. *SSRN Journal*.
- Skeldon, R., 2018. *International migration, internal migration, mobility and urbanization: Towards more integrated approaches*, Geneva.
- Smith, M.P., 2001. *Transnational urbanism. Locating globalization*. Blackwell, Malden, Mass.
- Smith, M.P., Guarnizo, L.E. (Eds.), 1998. *Transnationalism from below*. Transaction Publishers, New Brunswick, NJ.
- Smith, R.C., 1998. Transnational Localities: Community, Technology and the Politics of Membership within the Context of Mexico and U.S. Migration. In: Smith, M.P., Guarnizo, L.E. (Eds.), *Transnationalism from below*. Transaction Publishers, New Brunswick, NJ, pp. 196-240.
- Srinuan, C., Srinuan, P., Bohlin, E., 2012. An analysis of mobile Internet access in Thailand. Implications for bridging the digital divide. *Telematics and Informatics* 29, 254-262.
- Steel, G., Winters, N., Sosa, C., 2011. Mobility, translocal development and the shaping of development corridors in (semi-)rural Nicaragua. *International Development Planning Review* 33, 409-428.
- Steinbrink, M., 2009. *Leben zwischen Land und Stadt. Migration, Translokalisierung und Verwundbarkeit in Südafrika*. Zugl.: Osnabrück, Univ., Diss., 2008 u.d.T.: Steinbrink, Malte: *Leben zwischen Land und Stadt, zur Translokalisierung der Existenzsicherung*. VS Verlag für Sozialwissenschaften / GWV Fachverlage GmbH Wiesbaden, Wiesbaden.

- Sterly, H., 2015. "Without a Mobile Phone, I Suppose I Had to Go There". *Mobile Communication and Translocal Social Constellations in Bangladesh*. ASIEN 134, 31-46.
- Sterly, H., 2018. Regionalization revisited. Mediatization of translocal social practices and the spatial reconfiguration of life in rural- urban Bangladesh. In: Felgenhauer, T., Gäbler, K. (Eds.), *Geographies of digital culture*. Routledge, London, New York, pp. 52-68.
- Sterly, H., Gerads, D., 2016. "Call Me in the Dorm". *Mobile Communication and the Shifting Topographies of Intimate Relationships in Bangladesh*. *Internationales Asienforum* 47, 273-296.
- Sterly, H., Ober, K., Sakdapolrak, P., 2016. Migration for Human Security? The Contribution of Translocality to Social Resilience. *The Georgetown Journal of Asian Affairs* 3, 57-66.
- Sterly, H., Sakdapolrak, P., forthcoming 2020. Multiple dimensions of mediated translocal social practices. A case study on domestic migrants in Bangladesh. *Mitteilungen der Österreichischen Geographischen Gesellschaft* 162.
- Stones, R., 2005. *Structuration Theory*. Palgrave Macmillan, Basingstoke, New York.
- Stones, R., 2012. Causality, Contextual Frames and International Migration: Combining Strong Structuration Theory, Critical Realism and Textual Analysis. Paper presented at the second workshop in the IMI series of Social Theory and Migration workshops on 12-13 April 2012 at the University of Pisa, Oxford.
- Svensson, J., Wamala Larsson, C., 2015. Situated empowerment. Mobile phones practices among market women in Kampala. *Mobile Media & Communication* 4, 205-220.
- Swyngedouw, E., 1997. Neither Global nor Local: 'Glocalization' and the Politics of Scale. In: Cox, K.R. (Ed.), *Spaces of globalization. Reasserting the power of the local*. Guilford Press, New York, pp. 137-166.
- Taylor-Powell, E., 1998. *Questionnaire design: Asking questions with purpose*.
- Tazanu, P.M., 2015. On the liveness of mobile phone mediation. Youth expectations of remittances and narratives of discontent in the Cameroonian transnational family. *Mobile Media & Communication* 3, 20-35.
- Teddlie, C., Tashakkori, A., 2010. *Foundations of mixed methods research. Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Sage Publ, Los Angeles.
- Thompson, E.C., 2009. Mobile phones, communities and social networks among foreign workers in Singapore. *Global Networks* 9, 359-380.
- Thompson, Herbert G., Jr., Garbacz, C., 2007. Mobile, fixed line and Internet service effects on global productive efficiency. *INFORMATION ECONOMICS AND POLICY* 19, 189-214.

- Thrift, N., 1996. *Spatial Formations*. SAGE, London.
- Tobbin, P., 2012. Towards a model of adoption in mobile banking by the unbanked. A qualitative study. *INFO* 14, 74-88.
- Tongia, R., 2007. Connectivity in emerging regions. The need for improved technology and business models. *IEEE Commun. Mag.* 45, 96-103.
- Tran, M.C., Labrique, A.B., Mehra, S., Ali, H., Shaikh, S., Mitra, M., Christian, P., West Jr, K., 2015. Analyzing the Mobile “Digital Divide”. *Changing Determinants of Household Phone Ownership Over Time in Rural Bangladesh*. *JMIR mHealth uHealth* 3, e24.
- United Nations Development Program (UNDP), 2009. *Overcoming barriers. Human mobility and development*. Palgrave Macmillan, Houndmills, New York.
- United Nations Department of Economic and Social Affairs, Population Division, 2012. *International Migration 2012, by Origin and Destination*. Table 7 Total migrant stock ad mid-year by origin and destination and by major area, region, country or area of destination, 2010. UN database. http://www.un.org/en/development/desa/population/migration/data/estimates2/data/UN_MigStock_Origin.xls (5 July 2020).
- United Nations Department of Economic and Social Affairs, Population Division, 2019. *International Migrant Stock 2019 (United Nations database, POP/DB/MIG/Stock/Rev.2019)*. https://www.un.org/en/development/desa/population/migration/data/estimates2/data/UN_MigrantStockByOriginAndDestination_2019.xlsx (10 June 2020).
- Universal Postal Union, 2020. *Postal Statistics Database*. <http://www.upu.int/en/resources/postal-statistics/query-the-database.html> (11 June 2020).
- Urry, J., 2000. *Sociology beyond societies. Mobilities for the twenty-first century*. Routledge, London.
- Urry, J., 2007. *Mobilities*. Polity Press, Cambridge.
- van Schendel, W., 2009. *A history of Bangladesh*. Cambridge University Press, Cambridge.
- Velayutham, S., Wise, A., 2005. Moral economies of a translocal village. Obligation and shame among South Indian transnational migrants. *Global Networks* 5, 27-47.
- Walker, R., Koh, L., Wollersheim, D., Liamputtong, P., 2015. Social connectedness and mobile phone use among refugee women in Australia. *Health Soc Care Community* 23, 325-336.
- Warf, B., 2013. Geographies of global telephony in the age of the internet. *Geoforum* 45, 219-229.
- Weber, M., 1922. *Wirtschaft und Gesellschaft*. Mohr, Tübingen.
- Weiss, J.W., Yates, D.J., Gulati, G.J.J., 2016. Affordable Broadband. Bridging the Global Digital Divide, a Social Justice Approach. In: Bui, T.X., Sprague, R.H. (Eds.),

- Proceedings of the 49th Annual Hawaii International Conference on System Sciences. 5-8 January 2016, Kauai, Hawaii. IEEE, Piscataway, NJ, pp. 3848-3857.
- Wellenius, B., 2000. Extending Telecommunications beyond the Market. Toward universal service in competitive environments.
- Wellman, B., 2001. Physical Place and Cyberplace: The Rise of Personalized Networking. *International Journal of Urban and Regional Research* 25, 227-252.
- Werlen, B., 2009. Zur Räumlichkeit des Gesellschaftlichen: Alltägliche Regionalisierungen. In: Hey, M., Engert, K. (Eds.), *Komplexe Regionen - Regionenkomplexe. Multiperspektivische Ansätze zur Beschreibung regionaler und urbaner Dynamiken*. VS Verlag für Sozialwissenschaften / GWV Fachverlage GmbH Wiesbaden, Wiesbaden, pp. 99-118.
- Wesolowski, A., Buckee, C.O., Engø-Monsen, K., Metcalf, C.J.E., 2016. Connecting Mobility to Infectious Diseases. The Promise and Limits of Mobile Phone Data. *J Infect Dis.* 214, S414-S420.
- Williams, S., White, A., Waiganjo, P., Orwa, D., Klopp, J., 2015. The digital matatu project. Using cell phones to create an open source data for Nairobi's semi-formal bus system. *Journal of Transport Geography* 49, 39-51.
- Wimmer, A., Glick Schiller, N., 2002. Methodological nationalism and beyond. Nation-state building, migration and the social sciences. *Global Networks* 2, 301-334.
- Zijlstra, J., van Liempt, I., 2017. Smart(phone) travelling. Understanding the use and impact of mobile technology on irregular migration journeys. *IJMBS* 3, 174.
- Zoomers, A., van Westen, G., 2011. Introduction. Translocal development, development corridors and development chains. *International Development Planning Review* 33, 377-388.

10 Annexes

10.1 Annex 1: List of qualitative interviews

No.	Interview ID	Type	Place_1	Place_2	Gender	Date	Included in analysis	Duration
1	EX-01	Expert Interview	Dhaka		female	25.03.2011	transcript	00:31:01
2	EX-02	Expert Interview	Rangpur		male	12.11.2011	transcript	00:16:46
3	EX-03	Expert Interview	Dhaka		male	08.12.2011	transcript	01:00:03
4	EX-04	Expert Interview	Dhaka		male	08.12.2011	transcript	02:19:13
5	EX-05	Expert Interview	Dhaka		male	11.12.2011	transcript	00:15:22
6	EX-06	Expert Interview	Dhaka		male	25.11.2012	only notes	
7	EX-07	Expert Interview	Rangpur		male	08.03.2013	transcript	01:07:44
8	EX-08	Expert Interview	Rangpur		male	10.03.2013	transcript	01:07:00
9	DH-FGD-01	FGD	Dhaka	Settlement 2	mixed	29.03.2011	transcript	00:47:25
10	DH-FGD-02	FGD	Dhaka	Settlement 3	male	02.11.2011	transcript	00:39:50
11	RP-FGD-01	FGD	Rangpur	Village 1	mixed	12.11.2011	transcript	01:04:23
12	RP-FGD-02	FGD	Rangpur	Village 2	mixed	14.11.2011	transcript	00:56:57
13	DH-01	Interview	Dhaka	Settlement 1	female	22.03.2011	transcript	00:27:03
14	DH-02	Interview	Dhaka	Settlement 1	female	22.03.2011	transcript	00:35:45
15	DH-03	Interview	Dhaka	Settlement 1	male	22.03.2011	transcript	01:29:02
16	DH-04	Interview	Dhaka	Settlement 1	female	23.03.2011	transcript	00:28:56
17	DH-05	Interview	Dhaka	Settlement 2	male	24.03.2011	transcript	00:31:03
18	DH-06	Interview	Dhaka	Settlement 2	male	24.03.2011	transcript	00:24:43
19	DH-07	Interview	Dhaka	Settlement 1	male	24.03.2011	transcript	00:42:36
20	DH-09	Interview	Dhaka	Settlement 3	male	30.10.2011	transcript	00:36:00
21	DH-10	Interview	Dhaka	Settlement 3	female	31.10.2011	transcript	00:27:21
22	DH-12	Interview	Dhaka	Settlement 3	male	31.10.2011	transcript	00:39:51
23	DH-13	Interview	Dhaka	Settlement 3	male	31.10.2011	transcript	01:03:46
24	DH-14	Interview	Dhaka	Settlement 3	male	31.10.2011	transcript	00:31:56
25	DH-16	Interview	Savar	Settlement 4	male	01.11.2011	transcript	00:42:26
26	DH-17	Interview	Savar	Settlement 4	male	01.11.2011	transcript	00:47:51
27	DH-19	Interview	Dhaka	Settlement 5	male	05.11.2011	transcript	00:21:56
28	DH-20	Interview	Dhaka	Settlement 3	male	05.11.2011	transcript	00:45:16
29	DH-22	Interview	Dhaka	Settlement 6	male	06.11.2011	transcript	00:22:46
30	DH-23	Interview	Dhaka	Settlement 6	male	06.11.2011	transcript	00:29:49
31	DH-24	Interview	Dhaka	Settlement 6	male	06.11.2011	transcript	00:38:57
32	DH-28	Interview	Dhaka	Settlement 3	female	01.12.2011	transcript	00:51:15
33	DH-30	Interview	Dhaka	Settlement 3	female	06.12.2011	transcript	00:18:28
34	RP-01	Interview	Rangpur	Village 1	male	12.11.2011	transcript	00:22:13
35	RP-02	Interview	Rangpur	Village 1	male	12.11.2011	transcript	00:17:15
36	RP-03	Interview	Rangpur	Village 1	male	12.11.2011	transcript	00:29:27
37	RP-04	Interview	Rangpur	Village 1	female	12.11.2011	transcript	00:21:32
38	RP-05	Interview	Rangpur	Town	male	13.11.2011	transcript	00:30:51

10.1 Annex 1: List of qualitative interviews

No.	Interview ID	Type	Place_1	Place_2	Gender	Date	Included in analysis	Duration
39	RP-06	Interview	Rangpur	Town	male	13.11.2011	transcript	00:31:04
40	RP-07	Interview	Rangpur	Town	male	13.11.2011	transcript	00:20:23
41	RP-08	Interview	Rangpur	Village 1	mixed	13.11.2011	transcript	00:43:41
42	RP-09	Interview	Rangpur	Village 1	male	14.11.2011	transcript	00:34:58
43	RP-11	Interview	Rangpur	Village 2	male	15.11.2011	transcript	00:43:23
44	RP-12	Interview	Rangpur	Village 2	male	15.11.2011	transcript	00:40:31
45	RP-13	Interview	Rangpur	Village 2	mixed	15.11.2011	transcript	00:32:02
46	RP-14	Interview	Rangpur	Village 2	mixed	15.11.2011	transcript	00:50:26
47	RP-15	Interview	Rangpur	Village 1	male	16.11.2011	transcript	01:51:48
48	RP-16	Interview	Rangpur	Village 1	female	16.11.2011	transcript	00:52:14
49	RP-17	Interview	Rangpur	Village 1	female	16.11.2011	transcript	00:41:14
50	RP-19	Interview	Rangpur	Village 1	female	08.03.2013	transcript	00:53:02
51	RP-20	Interview	Rangpur	Village 1	male	08.03.2013	transcript	00:18:23
52	RP-21	Interview	Rangpur	Village 1	male	08.03.2013	transcript	00:27:13
53	RP-22	Interview	Rangpur	Village 1	male	09.03.2013	transcript	00:44:23
54	RP-23	Interview	Rangpur	Village 1	male	09.03.2013	transcript	00:42:00
55	RP-24	Interview	Rangpur	Village 2	male	10.03.2013	only notes	00:25:04
56	RP-25	Interview	Rangpur	Village 2	male	10.03.2013	only notes	00:17:39
57	RP-26	Interview	Rangpur	Village 1	male	10.03.2013	only notes	00:37:39
58	RP-27	Interview	Rangpur	Village 1	male	10.03.2013	only notes	00:13:47
59	RP-28	Interview	Rangpur	Village 1	male	11.03.2013	transcript	00:47:06
60	RP-29	Interview	Rangpur	Village 1	female	11.03.2013	only notes	00:36:03
61	RP-30	Interview	Rangpur	Village 1	female	12.03.2013	only notes	00:24:20
62	DH-31	Interview	Dhaka	Settlement 7	female	14.12.2011	transcript	00:32:27
63	DH-05	Short Interview	Dhaka	Settlement 2	male	24.03.2011	transcript	00:10:03
64	DH-11	Short Interview	Dhaka	Settlement 2	female	31.10.2011	transcript	00:16:52
65	DH-15	Short Interview	Savar	Settlement 4	male	01.11.2011	transcript	00:07:08
66	DH-18	Short Interview	Savar	Settlement 4	male	01.11.2011	transcript	00:14:49
67	DH-21	Short Interview	Dhaka	Settlement 5	male	06.11.2011	transcript	00:08:04
68	DH-25	Short Interview	Dhaka	Settlement 6	male	06.11.2011	transcript	00:05:45
69	DH-26	Short Interview	Dhaka	Settlement 6	male	06.11.2011	transcript	00:10:57
70	DH-27	Short Interview	Dhaka	Settlement 1	male	01.12.2011	transcript	00:18:56
71	DH-29	Short Interview	Dhaka	Settlement 1	male	01.12.2011	transcript	00:11:39
72	RP-10	Short Interview	Rangpur	Village 2	male	14.11.2011	transcript	00:04:33
73	RP-18	Short Interview	Rangpur	Town	male	16.11.2011	transcript	00:04:09

10.2 Annex 2: Guideline for interviews (phase 4)

The following guideline is the core that was used in phase (4) in 2011; it was modified according to specific situations, and questions were omitted when they did not make sense in the context of a given interview. All questions were also translated to Bangla, which is left out here.

Introduction: Salaam Alaykum. My name is Rana and my friend's name here is Harry. He is a PhD student researcher from Germany and is interested in how migrants in Bangladesh make use of mobile phones. We would be very glad if we could ask you some questions about this – this will take approximately 1 hour of your time.
Because Harry does not speak Bangla, he would like to record the interview. This is a university project and all your information will be treated with absolute confidence. Do you agree with the interview being recorded? Please feel free to reject if you don't feel comfortable with it, we will then do the interview without it.
What is your name?
Do you own a mobile phone? If NO , do you have access to a mobile phone? Since WHEN and HOW?
Household and Family
Talking about you and your family in the village, and family members / relatives in Dhaka – do you consider all of you together one household? Does the mobile phone change the sense of belonging of people to their households in the village / in Dhaka?
If you think about your family relations between the village and Dhaka – what is the importance of the mobile phone for this relation?
If you think about the relations of younger and older generations (e.g. youth and parents), how did the mobile phone change these relations?
Resources and Migration
Please think of remittances and other things being sent to you from Dhaka. How do your calls to your family in Dhaka affect the amount that is being sent to you?
Regarding remittances – do you get sometimes money sent with the mobile phone, so you can pick it up at a mobile phone shop?
Regarding travelling in the Upazila, but also to Rangpur or Dhaka – does the mobile phone help you to save on travel cost? Why is that so?
If you think about making appointments and meeting people, how do you use your mobile phone for this? If you compare this to having no mobile phone, what are the main differences? Are there special benefits of the mobile phone? Why?
If you think of migration and migrants in Dhaka, are there any specific places in the village and nearby that come to your mind? Which are these? Why are they connected to Dhaka?
To which kind of useful information does the mobile phone help you to get access?
If you think back to the past year, were there times of need (e.g. sickness, flood, job loss, etc.), when your mobile phone was a help for you? How and why?

10.2 Annex 2: Guideline for interviews (phase 4)

Is migrating to Dhaka easier than 10 years ago? Could you explain why this is the case?
Social – network, support system, trust, community
If you think of the village community, has the mobile phone made people more equal, or more unequal? Could you give me some examples?
Do some people benefit from the mobile phone more than others? Which groups of people, and why is that so? Could you tell us an example?
Compared to the situation some 10 years earlier, is there more or less trust and good relations among the people in the village? Does the mobile phone play any role here?
What does it mean for the village community (the sense of community, trust and good relations of neighbours) that many people migrate to Dhaka and other places?
Dhaka – does the mobile phone also help you to keep contact to friends and relatives at other places inside Dhaka? Could you give us an example?
If you think of powerful people (e.g. landlord, rickshaw malik, officials, ...), does the mobile phone help you to feel in a better position towards them? Think also of negotiating things (e.g. rent, place to put a rickshaw, paying fees, etc.) with them? How and why?
If you think of organization (mutual help in the community, colleagues, associations, getting help and helping others), how is your mobile phone changing this?
Place, Identity, Culture
Are there any new ideas, goals in life or desires that came to you because of talking to family or friends in Dhaka with the mobile phone? Please describe them for us.
Would you say that the village is more traditional than the city? In which sense is this so? If your family members in Dhaka return to the village, do they follow the village traditions, or do they try to live the way that they live in Dhaka?
What if you talk over the mobile phone often – do you think that also changes the tradition in the village? How does that happen?
When you talk to your family member in Dhaka on the mobile phone does that create a desire in yourself for migrating in the city? Why, why not?
When you talk to your family members in Dhaka, does that create a desire in them to return to the village? What do you think is most important for them in the village?
There are always many things going on in Dhaka and other parts of the country – does the mobile phone and calling your family in Dhaka make you feel more connected to events, politics, development in Dhaka and Bangladesh?
Dhaka: Where do you feel more attached to – your village or your neighbourhood in Dhaka?
DHAKA: As you are living in Dhaka for such a long time, did the feeling of attachment and belonging to the village get less over the time? What keeps it up? What is the role of the mobile phone?
DHAKA: Does the attachment to the village mean that you feel less attached to Dhaka? What do you feel most attached to in Dhaka? What is most important for you in the village?

10.3 Annex 3: Interview protocol sheet

The following sheet was filled out for every interview, in order to provide a quick overview over interviews, their contexts the potential heuristic value.

Date of Interview: ____/____/____ Time of Interview: ____:____ - ____:____
 Name of the interviewer: _____
 Name of the person interviewed: _____
 Mobile Number: _____
 Location/Place name in Dhaka: _____
 Village : _____

Atmosphere – how was the atmosphere during the interview? How was it changing?						
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
conflictive	tense	Uneasy	easy	relaxed	friendly	
						<input type="checkbox"/> same during the interview <input type="checkbox"/> was getting more friendly <input type="checkbox"/> was getting more uneasy/tense
Where was the interview being carried out?						
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Inside house	At workplace	Tea stall	Roadside	Other:	_____	
What was the person interviewed doing / about to do at the time of the interview?						
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Job/working	Household work	Relaxing	Others:	_____		
Other people present during the interview... how many: ~ _____						
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Husband/ wife	Children	Relatives	Neighbours/ colleagues	Employer	Landlord	Others: _____
Disturbances						
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ambient noise	Interruptions by others	Events	Phone calls	Others:	_____	
Degree of disturbances						
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Severely	Some	Little	none
Informational value “felt” after the interview:						
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				Very high	High	Medium little
Other comments:						

10.4 Annex 4: Transcription guidelines

The following transcription guidelines were used in the transcriber trainings and was also handed to all transcribers for their reference.

		Example	
VERBATIM	Transcription is to be done verbatim and literally , i.e. <i>every single word</i> . Nothing must be omitted, nothing added. Translation is to be done as close to the original as possible.	Q: OK, so now, what will be your (...) actually what do you expect from your work as a student, as a (...) research assistant in the project , if you join in this interview transcriptions? #00:01:01-0#	This must not be shortened to e.g. "what do you expect from the work as a research assistant?"
SPEAKER = PARAGRAPH	Every time the speaker changes a new paragraph is to be started. Between the contributions of different speakers a blank line is to be added. At the end of a paragraph a timestamp is to be made.	R: Think will learn a little more from this work, especially English language, because for me is very important (...) if I apply for my studies abroad. #00:01:26-4#	Timestamp
NON-VERBALS	Nonverbal, e.g. emotional expressions relevant to the dialogue are to be noted in brackets (e.g. laughs, sighs, etc.).	Q: Why do you go abroad? #00:01:30-2# R: Because of education and many of my batch are abroad (laughs) #00:01:33-3#	Nonverbal expression
PAUSES	Interruptions in speaking are to be expressed by points in brackets (...).	Q: How many of them? #00:01:35-4# R: About one, two, (...) six of them. #00:01:41-5#	Break between two words
VOCALIZATION	Affirmative or negative vocalizations (e.g. mhm, huh) are to be transcribed always and, if necessary, denoted (affirmative, negative)	Q: Are you in contact with them? #00:01:50-6# R: Hmh (affirmative) #00:01:50-7#	Vocalization
EMPHASIS	Special emphasis is to be denoted with CAPITALS.	Q: How close are they to you? #00:01:53-7# R: SO VERY close . Almost family. #00:01:58-8#	Emphasis
INCOMPREHENSIVE	Incomprehensible passages or words are to be denoted with (inc.); if necessary, reasons are to be given. If long parts are incomprehensible, time stamps for beginning and end of the part.	Q: Since when do you know each other? #00:02:04-9# R: Long time (inc., truck passing) years. #00:02:010-10#	Incomprehensible words (reason)
SPEAKERS	The interviewer is to be labelled "Q:", the respondent "R."; if more than one respondent is present, they are to be numbered "R 1:", "R 2", etc... Thus all paragraphs are to be started with either "Q:" (or "Q1:", ...), "R:" or "R 1:" (R 2:, ...)	Q: Sorry, I couldn't understand. #00:02:13-11# R 1: He said "four years". #00:02:15-12# R 2: yes, four years, since the start of university. #00:02:19-13#	
BACK-TRANSLATION	All dialogues between interviewer and researcher in English are to be transcribed as well (e.g. back-translation to researcher).	R: ... <i>talking in bangla</i> ... #00:02:28-14# Q 2: What did he say? #00:02:35-15# Q 1: He said that during this period he won't be able to visit his family. #00:02:40-16#	Transcription of an oral interpretation into English
INTERRUPTION	Short interruptions, repetitions and affirmative statements by others (mhm, I see,...) that do not stop the flow of words can be added in brackets. Interruptions that stop the flow of words, add something new or ask a question have to be considered as separate contributions.	R: The main problem is that if we get electricity, the owner of these houses will demand more rent (Q: Oh yes, I see) so it will be ... #00:03:05-17# R: There is water logging in the roads. We have (interrupted by other respondent from here onwards) come to school with great difficulty. #00:03:20-18# R: (interrupting other respondent, speaking at the same time) I suffer a lot. It is time for school but I can not, I am late. #00:03:27-19#	If two participants speak at the same time, please indicate like this.

REMARKS	Remarks – interpretations of the content by the transcriber – are to be given in [square brackets].	R: Later they [the government] provided us with the electricity connection. #00:03:35-20#
FILE	The transcription is to be saved as Rich Text Format (.rtf) or Word Format (.doc). The filename is the same as the audiofile.	2011[11]06_Interview_Bimol.rtf

Common mistakes:

- ☹ **Words are left out, replaced or added** – following our natural tendency to anticipate and interpret what others say and add missing parts. BUT this often substantially changes the meaning of the text!
- ☹ Answers by respondents are incomprehensible (eg due to noise), being repeated by interviewer –and the **answer given by the interviewer is assigned to the respondent**. This should not be done. Instead mark the answer by the respondent as incomprehensible and write down the bits you can understand. Then **assign the repetition given to the translator**.
- ☹ **Repetitions due to translation are omitted in the transcript**. It might seem boring and repetitive but each word that has been said is to be part of the transcript. This means that the **statements** of the interviewer(s) **in English have to be written down word for word** and the **Bangla statements** of the translators have to be translated into English **word for word**.

Tips:

- 📍 **Do take breaks!** No one is able to transcribe for many hours at a stretch without losing concentration! Scientists recommend taking breaks of 5 to 10 minutes for each hour of work.
- 📍 **Do not overdo it!** More than 6 hours of transcription work per day is not possible without substantially increasing the mistake rate.
- 📍 **Do work thoroughly!** Before sending the file, go through the transcript again and check for misspellings and overall accuracy.

10.5 Annex 5: Survey questionnaire

Mobile Phone and Social Change	Mobile Phone Users Survey	<i>Project Address:</i> University of Cologne Geography Department Albertus-Magnus-Platz, 50923 Cologne, Germany <i>Responsible Researchers:</i> Team-Leader: Harald Sterly , 0194 – 8338580 h.sterly@uni-koeln.de Team-Supervisor: Rana, Md. Sohel, 01728-228850
--------------------------------	---------------------------	---

Before starting the interview, please read out the following:

আমার নাম _____ . **আমি ঢাকা বিশ্ববিদ্যালয়ের ছাত্র।** বাংলাদেশের মানুষ কিভাবে মোবাইল ফোন ব্যবহার করে এই বিষয়ের উপর জার্মান ইউনিভার্সিটি অব কোলন একটি গবেষণা করছে। ঢাকা বিশ্ববিদ্যালয়ের ভূগোল বিভাগের সহযোগিতায় এই গবেষণাটি করা হচ্ছে। আমি এই প্রকল্পে কাজ করি।

এখন আমি আপনার মোবাইল ফোন ব্যবহারের ব্যাপারে কিছু প্রশ্ন করব। এই সাক্ষাতকার নিতে ৪৫-৬০ মিনিট লাগবে।

আপনি নিশ্চিত থাকতে পারেন যে আপনি আমাদেরকে যে তথ্যগুলো দিবেন এগুলো চূড়ান্ত সতর্কতার সাথে ব্যবহার করা। সব তথ্যগুলো শিক্ষাগত কারণে ব্যবহার করা হবে এবং এগুলো কোন সরকারি কর্তৃপক্ষের কাছে দেওয়া হবে না।

আরও তথ্যের জন্য দয়া করে **মো: সোহেল রানা** (ফোন নাম্বার: ০১৭২৮-২২৮৮৫০) এর সাথে যোগাযোগ করবেন, যিনি এই গবেষণা দলের তত্ত্বাবধানের দায়িত্বে আছেন। আপনি প্রত্যেকটা প্রশ্নের উত্তর না দিলেও চলবে। আপনি কি আমাদেরকে সহযোগিতা করবেন এবং প্রশ্নগুলোর উত্তর দিবেন?

Hello, my name is _____. I am a student of _____ University.

The German University of Cologne is doing research in Rangpur and Dhaka about the ways how people use mobile phones in Bangladesh. This research is done in close collaboration with the Department of Geography of Dhaka University. I work for this research project.

Now, I would like to ask some questions regarding your use of mobile phones. The interview will need about 45-60 minutes.

Please be aware that all information you give us will be treated with the utmost discretion. All information will be used for academic purposes only and will not be forwarded to any government authority or other corporation.

For further information please contact Md. Rana Sohel, the supervisor of the research team (Cell No. 01728228850). You can for every single question decline the answer. Are you willing to co-operate with us and answer our questions?

01 Sample Number: _____ Sample	02 Name of Interviewer	03 Date of Interview __ / __ / __ (DD/MM/YY)	04 Duration of interview Start: __ : __ a.m./p.m. End: __ : __ a.m./p.m.
05 Response to the interview request:	1 Agreed 2 Declined	please indicate reason, why declined: 06 _____	
Interview Site	07 Number of Ward	08 Name of Residential Area	09 Name of place in the area
10 Comments / Notice:		Name of the interviewee	Phone number of the interviewee: _____
11 পীরগঞ্জ থানায় বসবাসকারী আপনার আত্মীয়-স্বজনের থেকে আমরা আপনার নাম এবং ফোন নম্বর পেয়েছি। মার্চ মাসের দ্বিতীয় সপ্তাহে আমরা দশমৌজা-সাদুল্লাহপুরে/ হাসানপুরে বসবাসকারী আপনার পরিবারের সাথে কথা বলেছিলাম। আমরা তাদেরকে একই ধরনের প্রশ্ন করেছিলাম এটা জানতে যে মোবাইল ফোন কিভাবে তাদের জীবনকে এবং ঢাকায় বসবাসকারী তাদের পরিবারের সদস্যদের সাথে সম্পর্কের পরিবর্তন করেছে। We have your contact information from your relatives in Pirganj Thana. In the 2 nd week of March we did interview with your family living in the village of 10 Mouza-Sudullahpur/Hassanpur. We asked them similar kinds of questions, to get information on how the mobile phone changes their life and relations to their family members living in Dhaka.			

1. LIVELIHOOD CONFIGURATION

1.1 আপনার পরিবারের কতজন সদস্য আপনার ঢাকার এই বাড়িতে বসবাস করে(আপনার সাথে থাকে এবং খায়)?

_____ (number)

98 99
DK NA

11 How many people of your family live in this household (live with you and take meals with you) at this place in Dhaka?

1.2 ঢাকায় বসবাসকারী আপনার এই পরিবারের সদস্যদের অবস্থান কি?

What are the positions of the members of your household/family in Dhaka

Name	অবস্থান/যিনি সাক্ষাতকার দিচ্ছেন তার সাথে সম্পর্ক Position/relation to interviewee	বয়স Age in years	লিঙ্গ Sex/ Gender	বৈবাহিক অবস্থা Marital Status	উচ্চ শিক্ষা Highest Education	পেশা Occupation	যদি ঢাকায় না থাকে তাহলে কোথায় থাকে? If not in Dhaka, where staying?
1 (Interviewee)	n.a.						
2							
3							
4							
5							
Key:	1: পরিবারের প্রধান Head of household 2: স্বামী/স্ত্রী Wife/Husband 3: বাবা/মা Father/Mother, 4: ভাই/বোন Brother/Sister, 5: সন্তান Child, 6: নাতি-নাতনি Grandchild, 7: অন্যান্য আত্মীয়-স্বজন Other relative, 8: অধিনস্থ কর্মকর্তা Employee 9: আত্মীয়-স্বজন বাদে অন্যরা Other nonrelative		1. Male, পুরুষ 2. Female মহিলা	1. Married, বিবাহিত 2. Divorced, ভলাকপ্রাপ্ত/প্রাপ্তা 3. Widow, বিধবা 4. Unmarried অবিবাহিত	0. নিরক্ষর illiterate 1. প্রাইমারি স্কুল পর্যন্ত Visited primary school, 2. প্রাইমারি স্কুলে পড়ছি Reading in primary school, 3. মাধ্যমিক স্কুল পর্যন্ত Visited high school, 4. মাধ্যমিক স্কুলে পড়ছি Reading in high school, 5. এস. এস. সি S.S.C., 6. এইচ. এস. সি H.S.C., 7. বিশ্ববিদ্যালয়ে পড়ছি reading university, 8. বিশ্ববিদ্যালয় পড়া শেষ করেছি Completed university		

1.3a গ্রামে আপনার পরিবারের কতজন সদস্য বসবাস করে?

12 How many members of your family live in the village?

_____ (number)

98 99
DK NA

1.3b আপনার পরিবারের সদস্যদের মধ্যে কারা পীরগঞ্জে আপনার গ্রামে বসবাস করছেন এবং/অথবা যাদেরকে আপনি টাকা পাঠাচ্ছেন? কোন দূর সম্পর্কের আত্মীয়-স্বজনদের যদি আপনি নিয়মিত ভাবে টাকা পাঠিয়ে থাকেন তাহলে দয়া করে তাদের কথাও উল্লেখ করবেন।

Who are the family members living in your village in Pirganj and/or that you are financially supporting? Please also consider more distant relatives who get regular financial support from you.

Name	অবস্থান/যিনি সাক্ষাতকার দিচ্ছেন তার সাথে সম্পর্ক Position/relation to interviewee (see 1.2)	বয়স Age in years	লিঙ্গ Sex/ Gender	বৈবাহিক অবস্থা Marital Status	উচ্চ শিক্ষা Highest Education	পেশা Occupation	
1							
2							
3							
4							
5							
6							
7							

1.4 আপনি কতবার আপনার গ্রামের বাড়ি বেড়াতে যান?

15 How often do you visit your home in the village?

_____ (times per year)

98 99
DK NA

1.5 আপনি কি নিয়মিত ভাবে বাড়ি যান? [Tick all that applies] 14 Do you go home regularly?	1 হ্যাঁ, বিভিন্ন ধরনের কৃষিকাজ যেমন, ফসল তোলা, ফসল রোপন করা ইত্যাদির জন্য [yes, for agricultural purposes like harvesting, planting]	2 হ্যাঁ, অন্যান্য মৌসুমী কাজ করার জন্য [yes, for other seasonal events]	3 হ্যাঁ, গুরুত্বপূর্ণ ছুটি যেমন ঈদ উপলক্ষে [yes, for major holidays, e.g. Eid]	98	99
	4 হ্যাঁ, গুরুত্বপূর্ণ পারিবারিক অনুষ্ঠানে যোগদানের জন্য [yes, for important family occasions]	5 হ্যাঁ, অন্যান্য কারণে [yes, for others]	6 না, আমি অনিয়মিত ভাবে যাই [no, I visit irregularly]	DK	NA

1.6 যদি পুরো একটি বছরের কথা চিন্তা করেন তাহলে এক বছরে সাধারণত কত সপ্তাহ গ্রামে/শহরে থাকেন? 13 If you think about the whole year, how many weeks do you usually spend in the village/in the city?	_____ (weeks in the village)	_____ (weeks in the city)	98	99
			DK	NA

2. MIGRATION AND MOBILITY

2.1 ঢাকা আসতে আপনাকে সবচেয়ে কে বেশি সাহায্য করেছিল? 17 Who helped you most with your move to Dhaka?	1 কেউ না Nobody	2 গ্রাম থেকে আমার পরিবার your family from village	3 পরিবারের সদস্য যারা আগে থেকেই ঢাকা থাকেন family members already living in Dhaka	98	99
	4 ঢাকায় বসবাসকারি দূর সম্পর্কের আত্মীয় distant relatives living in Dhaka	5 অন্যান্য বন্ধুরা যারা আগে থেকেই ঢাকা থাকে other friends from the village living already in Dhaka	6 চাকরি দেয় এমন এজেন্টের মাধ্যমে a work recruitment agency	DK	NA
	7 এক জনের সাথে পরিচয় হয়েছিল যে আমাকে চাকরি দিয়েছে somebody who got me a job	8 অন্য কোন মাধ্যম, দয়া করে সুনির্দিষ্টভাবে বুঝিয়ে বলবেন others, please specify _____			

2.2 আপনি কি নিজেই ইচ্ছায় ঢাকায় চলে এসেছেন নাকি অন্যকেউ আপনাকে ঢাকায় চলে আসতে প্রভাবিত করেছে? 18 Did you chose yourself to migrate, or was someone else taking the decision?	1 নিজের ইচ্ছায় I alone	2 পরিবারের কিছুটা প্রভাব ছিল Family had some influence	3 অন্যান্য আত্মীয়দের কিছুটা প্রভাব ছিল Other relatives had some influence	4 বন্ধুদের কিছুটা প্রভাব ছিল Friends had some influence	98	99
					DK	NA

2.3 আপনার ঢাকায় চলে আসার ক্ষেত্রে মোবাইল ফোন কি কোন ভাবে গুরুত্বপূর্ণ ছিল? 19 Was the mobile phone somehow important in your choice for migrating?	1 হ্যাঁ, কারণ: Yes, because of	2 সামান্য Only very little	3 না, একেবারেই না No, not at all	98	99
				DK	NA

2.4 যারা (আত্মীয়-স্বজন, প্রতিবেশি) আগে থেকে শহরে চলে এসেছিলেন তারা কি শহরে আসার জন্য আপনাদের মধ্যে আগ্রহ জাগিয়েছেন? 22 Did people who already migrated (relatives, neighbors) influence your decision to migrate as well?	1 হ্যাঁ, ব্যক্তিগত ভাবে তাদের সাথে দেখা করে কথা বলার মাধ্যমে yes, while talking to them personally at visits	2 হ্যাঁ, মোবাইল ফোনে তাঁদের সাথে কথা বলার মাধ্যমে yes, while talking to them on the mobile phone	3 হ্যাঁ, কারণ তাদের সফলতা আমাকে আকৃষ্ট করেছে yes, because of their success I liked	4 হ্যাঁ, অন্যান্য কারণে yes, other reasons	5 না, তারা আমার মধ্যে আগ্রহ জাগায়নি no, they didnt influence my decision	98	99
					DK	NA	

2.5 আপনি কি মনে করেন ঢাকা শহরে অথবা অন্যান্য শহরে বসবাসকারী আত্মীয়দের সাথে কথা বললে যারা গ্রামে থাকে তাদের মধ্যে ঢাকা শহরে বা অন্যান্য শহরে চলে আসার আগ্রহ জন্মে? 20 Do you think that talking to relatives in the city / Dhaka creates a desire in those who stay in the village to migrate as well?	1 হ্যাঁ, খুব বেশি Yes, very much	2 হ্যাঁ, কিছুটা Yes, to some extent	3 বলা যায় আবার যায় ও না Partly yes, partly no	4 খুবই কম Only very little	5 না, একেবারেই না No, not at all	98	99
					DK	NA	

2.6 যদি মনে করেন হ্যাঁ, তাহলে এক্ষেত্রে মোবাইল ফোন কতটা গুরুত্বপূর্ণ বলে আপনি মনে করেন? 21 If yes, how important would you think is the mobile phone in this?	1 হ্যাঁ, খুব বেশি Yes, very much	2 হ্যাঁ, কিছুটা Yes, to some extent	3 বলা যায় আবার যায় ও না Partly yes, partly no	4 খুবই কম Only very little	5 না, একেবারেই না No, not at all	98	99
					DK	NA	

2.7 মোবাইল ফোন থাকার পরে, আপনি কি আরও বেশি/কম বা মাঝেমাঝে/প্রায়ই গ্রামে দেখা করার জন্য যান? 24 Since having a mobile phone, do you visit your family in the village more or less often/frequent??	1 ঘন ঘন Much more often	2 প্রায়ই More often	3 কোন পরিবর্তন নেই No change	4 একটু কম Less often	5 অনেক কম Much less often	98	99
					DK	NA	

2.8 দেখা করতে আসার পরিমাণ পরিবর্তনের ক্ষেত্রে মোবাইল ফোন কতটা গুরুত্বপূর্ণ বলে আপনি মনে করেন? How important do you think is the mobile phone for this change in visiting frequency?	1 খুব গুরুত্বপূর্ণ Very important	2 গুরুত্বপূর্ণ important	3 কিছুটা গুরুত্বপূর্ণ Partly important	4 কম গুরুত্বপূর্ণ Little important	5 একেবারেই গুরুত্বপূর্ণ না Not important at all	98	99
					DK	NA	

2.9 মোবাইল ফোন থাকার কারণে আপনি কি আগের (যখন মোবাইল ফোন ছিলনা) চেয়ে বেশি জায়গায় যাতায়াত করেন? Tick all that applies 23 Getting around in the city/village: Having your mobile phone, do you visit more places than without the phone?	2.9.1 হ্যাঁ, কারণ মানুষ নির্দিষ্ট স্থানে আসার জন্য আমন্ত্রণ জানায় yes, because people ask me to come to certain places	2.9.2 হ্যাঁ, কারণ মোবাইল ফোনের মাধ্যমে অনুসন্ধান/জিজ্ঞেস করে আমি আরো ভালোভাবে গন্তব্য স্থান খুঁজে পাই yes, because I can get help for better finding places by asking over the phone	2.9.3 অন্যান্য কারণ, দয়া করে সুনির্দিষ্ট করে ব্যাখ্যা করুন yes, other reason, please specify _____	2.9.4 না No	98	99
				DK	NA	

2.10 মোবাইল ফোন কি শহরের মধ্যে আপনার যাতায়াতের সময় কমাতে সাহায্য করে? Tick all that applies 25 Does the mobile phone help you to reduce travel time within the village/city?	1 হ্যাঁ, যেহেতু গিয়ে দেখা করার চেয়ে ফোন করে এবং মোবাইলে মেসেজ পাঠিয়ে কার্য সমাধা করা যায় yes, as I can replace personal visits by calls and messages	2 হ্যাঁ, কারণ খুব সহজে মানুষজনের সাথে দেখা করার সময় ঠিক করতে পারি yes, because I can be more flexible in meeting people	3 যাতায়াতের সময় ফোন এবং মেসেজ পাঠিয়ে সময়ের উত্তম ব্যবহার করতে পারি I can use time spent in traffic for making calls and sending messages	4 না, সত্যিকারে এমন কিছু না No, not really	98	99
				DK	NA	

2.11 মোবাইল ফোন কী কারো সাথে দেখা করার সময় ঠিক করতে বা পূর্বনির্ধারিত সময় পরিবর্তন করতে আপনাকে সাহায্য করে? 26 Does the mobile phone help you arrange or shift meetings/appointments with people?	1 হ্যাঁ, অনেক বেশি কারণ মোবাইল ফোন ছাড়া প্রতিদিনের কাজের তালিকা তৈরি করতে পারি না yes, a lot, as without mobile phone I couldnt make my daily schedule	2 হ্যাঁ, কিন্তু এক্ষেত্রে খুব কম উপকারে পাই yes, but it is only a little difference	3 না, এটা আসলে কোন সাহায্য করে না no, it is no real help	4 এই উদ্দেশ্যে আমি এটা ব্যবহার করি না I don't use it for this purpose	98	99
				DK	NA	

3. MATERIAL AND FINANCIAL RESOURCES

3.1 আপনারা দিন কয় বেলা খাবার খান?						98	99																														
<i>On a normal week day, how many meals do you take?</i> _____ Number of meals						DK	NA																														
3.2 আপনি কি ক্ষুধার্ত অবস্থায় ঘুমাতে যান?						98	99																														
<i>Do you go sometimes go to bed hungry?</i>						DK	NA																														
<table style="width: 100%; border: none;"> <tr> <td style="width: 20%; text-align: center;">1</td> <td style="width: 20%; text-align: center;">2</td> <td style="width: 20%; text-align: center;">3</td> <td style="width: 20%; text-align: center;">4</td> <td style="width: 20%; text-align: center;">5</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">হ্যাঁ, প্রায় ই যাই, সপ্তাহে একবারের বেশি</td> <td style="text-align: center;">নিয়মিত, মাসে এবার</td> <td style="text-align: center;">মাসে একবারে কম</td> <td style="text-align: center;">খুব কম, বছরে কয়েকবার</td> <td style="text-align: center;">কখনই না</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">yes, very often, more than once a week</td> <td style="text-align: center;">regularly, once a month</td> <td style="text-align: center;">Less than once a month</td> <td style="text-align: center;">rarely, few times in a year</td> <td style="text-align: center;">never</td> <td></td> <td></td> </tr> </table>						1	2	3	4	5			হ্যাঁ, প্রায় ই যাই, সপ্তাহে একবারের বেশি	নিয়মিত, মাসে এবার	মাসে একবারে কম	খুব কম, বছরে কয়েকবার	কখনই না			yes, very often, more than once a week	regularly, once a month	Less than once a month	rarely, few times in a year	never													
1	2	3	4	5																																	
হ্যাঁ, প্রায় ই যাই, সপ্তাহে একবারের বেশি	নিয়মিত, মাসে এবার	মাসে একবারে কম	খুব কম, বছরে কয়েকবার	কখনই না																																	
yes, very often, more than once a week	regularly, once a month	Less than once a month	rarely, few times in a year	never																																	
3.3 আপনার বসবাস ব্যবস্থা/বাসা কি ধরনের?						98	99																														
<i>27 What is the type of your housing arrangement?</i>						DK	NA																														
<table style="width: 100%; border: none;"> <tr> <td style="width: 25%; text-align: center;">1</td> <td style="width: 25%; text-align: center;">2</td> <td style="width: 25%; text-align: center;">3</td> <td style="width: 25%; text-align: center;">4</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">নিজের ঘর/ফ্ল্যাট</td> <td style="text-align: center;">ভাড়া রুম/ফ্ল্যাট/বাসা</td> <td style="text-align: center;">মেস</td> <td style="text-align: center;">রাস্তা</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">own house or flat</td> <td style="text-align: center;">rented room / flat / house</td> <td style="text-align: center;">mess</td> <td style="text-align: center;">street</td> <td></td> <td></td> </tr> </table>						1	2	3	4			নিজের ঘর/ফ্ল্যাট	ভাড়া রুম/ফ্ল্যাট/বাসা	মেস	রাস্তা			own house or flat	rented room / flat / house	mess	street																
1	2	3	4																																		
নিজের ঘর/ফ্ল্যাট	ভাড়া রুম/ফ্ল্যাট/বাসা	মেস	রাস্তা																																		
own house or flat	rented room / flat / house	mess	street																																		
3.4 আপনার বাসার কাঠামোগত পরিস্থিতি কেমন?						98	99																														
<i>28 what is the structure of the house you live in?</i>						DK	NA																														
<table style="width: 100%; border: none;"> <tr> <td style="width: 20%; text-align: center;">1</td> <td style="width: 20%; text-align: center;">2</td> <td style="width: 20%; text-align: center;">3</td> <td style="width: 20%; text-align: center;">4</td> <td style="width: 20%; text-align: center;">5</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">পাকাঃ শক্ত পাথুরে বাড়ি (ইট, সিমেন্ট)</td> <td style="text-align: center;">অর্ধ-পাকাঃ টিনের পাত, টিন, ইটের দেয়াল, সিমেন্ট ফ্লোর</td> <td style="text-align: center;">কাঁচাঃ টিন, বাঁশ, কাঠ, প্লাস্টিক, মাটির ফ্লোর</td> <td style="text-align: center;">বুপুরী/কুটিরঃ বাঁশ, প্লাস্টিক, খড়ের মাট, মাটির ফ্লোর</td> <td style="text-align: center;">এ গুলোর কোনটাই নাঃ রাস্তায় বাস করি</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Pucca: solid stone building (brick, cement)</td> <td style="text-align: center;">Semi-pucca: corrugated iron sheets, tin, brick walls, cement floor</td> <td style="text-align: center;">Kutchra: tin, bamboo, wood, plastic, mud floor</td> <td style="text-align: center;">Jhupri/Thach: bamboo, plastic, straw-mats, mud floor</td> <td style="text-align: center;">None of these: living on the street</td> <td></td> <td></td> </tr> </table>						1	2	3	4	5			পাকাঃ শক্ত পাথুরে বাড়ি (ইট, সিমেন্ট)	অর্ধ-পাকাঃ টিনের পাত, টিন, ইটের দেয়াল, সিমেন্ট ফ্লোর	কাঁচাঃ টিন, বাঁশ, কাঠ, প্লাস্টিক, মাটির ফ্লোর	বুপুরী/কুটিরঃ বাঁশ, প্লাস্টিক, খড়ের মাট, মাটির ফ্লোর	এ গুলোর কোনটাই নাঃ রাস্তায় বাস করি			Pucca: solid stone building (brick, cement)	Semi-pucca: corrugated iron sheets, tin, brick walls, cement floor	Kutchra: tin, bamboo, wood, plastic, mud floor	Jhupri/Thach: bamboo, plastic, straw-mats, mud floor	None of these: living on the street													
1	2	3	4	5																																	
পাকাঃ শক্ত পাথুরে বাড়ি (ইট, সিমেন্ট)	অর্ধ-পাকাঃ টিনের পাত, টিন, ইটের দেয়াল, সিমেন্ট ফ্লোর	কাঁচাঃ টিন, বাঁশ, কাঠ, প্লাস্টিক, মাটির ফ্লোর	বুপুরী/কুটিরঃ বাঁশ, প্লাস্টিক, খড়ের মাট, মাটির ফ্লোর	এ গুলোর কোনটাই নাঃ রাস্তায় বাস করি																																	
Pucca: solid stone building (brick, cement)	Semi-pucca: corrugated iron sheets, tin, brick walls, cement floor	Kutchra: tin, bamboo, wood, plastic, mud floor	Jhupri/Thach: bamboo, plastic, straw-mats, mud floor	None of these: living on the street																																	
3.5 আপনার পরিবার কি আপনার সাথে থাকে?						98	99																														
<i>Does your family live with you?</i>						DK	NA																														
<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; text-align: center;">1</td> <td style="width: 33%; text-align: center;">2</td> <td style="width: 33%; text-align: center;">3</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">হ্যাঁ, একই ঘরে/ফ্ল্যাটে/রুমে</td> <td style="text-align: center;">না, তারা ঢাকার অন্য জায়গায় থাকে</td> <td style="text-align: center;">না, তারা গ্রামের বাড়ি থাকে (দেশের বাড়ি)</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Yes, in same house/flat/room</td> <td style="text-align: center;">No, they live in other place in Dhaka</td> <td style="text-align: center;">No, they live in rural area (home district)</td> <td></td> <td></td> <td></td> </tr> </table>						1	2	3				হ্যাঁ, একই ঘরে/ফ্ল্যাটে/রুমে	না, তারা ঢাকার অন্য জায়গায় থাকে	না, তারা গ্রামের বাড়ি থাকে (দেশের বাড়ি)				Yes, in same house/flat/room	No, they live in other place in Dhaka	No, they live in rural area (home district)																	
1	2	3																																			
হ্যাঁ, একই ঘরে/ফ্ল্যাটে/রুমে	না, তারা ঢাকার অন্য জায়গায় থাকে	না, তারা গ্রামের বাড়ি থাকে (দেশের বাড়ি)																																			
Yes, in same house/flat/room	No, they live in other place in Dhaka	No, they live in rural area (home district)																																			
3.6 আপনার ঢাকার বাসায় কি নিম্নোক্ত জিনিস গুলো আছে?						98	99																														
<i>29 In your Dhaka home, do you have permanent access to ...</i>						DK	NA																														
<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; text-align: center;">8.7.1 পানি water</td> <td style="width: 33%; text-align: center;">8.7.2 বিদ্যুত electricity</td> <td style="width: 33%; text-align: center;">8.7.3 গ্যাস gas</td> <td style="width: 33%; text-align: center;">8.7.4 পর্যায়ক্রমিক/ স্বাস্থ্যব্যবস্থা sanitation</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">1 Yes</td> <td style="text-align: center;">1 Yes</td> <td style="text-align: center;">1 Yes</td> <td style="text-align: center;">1 Yes</td> <td style="text-align: center;">2 No</td> <td style="text-align: center;">2 No</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">98 DK</td> <td style="text-align: center;">99 NA</td> </tr> </table>						8.7.1 পানি water	8.7.2 বিদ্যুত electricity	8.7.3 গ্যাস gas	8.7.4 পর্যায়ক্রমিক/ স্বাস্থ্যব্যবস্থা sanitation			1 Yes	1 Yes	1 Yes	1 Yes	2 No	2 No					98 DK	99 NA														
8.7.1 পানি water	8.7.2 বিদ্যুত electricity	8.7.3 গ্যাস gas	8.7.4 পর্যায়ক্রমিক/ স্বাস্থ্যব্যবস্থা sanitation																																		
1 Yes	1 Yes	1 Yes	1 Yes	2 No	2 No																																
				98 DK	99 NA																																
3.7 আপনার ঢাকার বাসায় কতগুলো রুম আছে?						98	99																														
<i>30 How many rooms do your household in Dhaka have?</i>						DK	NA																														
_____ কক্ষসংখ্যা number of rooms																																					
3.8 ঢাকায় আপনার ঘরে কয়টি মোবাইল ফোন আছে?						98	99																														
<i>32 How many mobile phones do you have in the household in Dhaka?</i>						DK	NA																														
_____ টি Phones																																					
3.9 যদি নিজস্ব কোন মোবাইল না থাকে: কোন মোবাইল ফোন আপনি ব্যবহার করেন?						98	99																														
<i>35 If 0: Which mobile phone do you use?</i>						DK	NA																														
<table style="width: 100%; border: none;"> <tr> <td style="width: 20%; text-align: center;">1</td> <td style="width: 20%; text-align: center;">2</td> <td style="width: 20%; text-align: center;">3</td> <td style="width: 20%; text-align: center;">4</td> <td style="width: 20%; text-align: center;">5</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">কোন দোকানের ফোন</td> <td style="text-align: center;">আত্মীয়ের ফোন</td> <td style="text-align: center;">বন্ধুদের ফোন</td> <td style="text-align: center;">প্রতিবেশীদের ফোন</td> <td style="text-align: center;">অন্যান্য, (দয়া করে নির্দিষ্ট করবেন):</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Public Phone</td> <td style="text-align: center;">Relative's phone</td> <td style="text-align: center;">Friend's phone</td> <td style="text-align: center;">Neighbour's phone</td> <td style="text-align: center;">Others</td> <td></td> <td></td> </tr> </table>						1	2	3	4	5			কোন দোকানের ফোন	আত্মীয়ের ফোন	বন্ধুদের ফোন	প্রতিবেশীদের ফোন	অন্যান্য, (দয়া করে নির্দিষ্ট করবেন):			Public Phone	Relative's phone	Friend's phone	Neighbour's phone	Others													
1	2	3	4	5																																	
কোন দোকানের ফোন	আত্মীয়ের ফোন	বন্ধুদের ফোন	প্রতিবেশীদের ফোন	অন্যান্য, (দয়া করে নির্দিষ্ট করবেন):																																	
Public Phone	Relative's phone	Friend's phone	Neighbour's phone	Others																																	
3.10 যদি নিজস্ব কোন মোবাইল না থাকে: আপনার বাসার নিকটস্থ ফোন ব্যবহার করতে এ স্থানে পৌঁছাতে কত সময় লাগে?						98	99																														
<i>34 if 0: How much time does it take you to reach the nearest phone?</i>						DK	NA																														
<table style="width: 100%; border: none;"> <tr> <td style="width: 20%; text-align: center;">1</td> <td style="width: 20%; text-align: center;">2</td> <td style="width: 20%; text-align: center;">3</td> <td style="width: 20%; text-align: center;">4</td> <td style="width: 20%; text-align: center;">5</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">৫ মিনিটের কম</td> <td style="text-align: center;">৫-১০ মিনিট</td> <td style="text-align: center;">১০-৩০ মিনিট</td> <td style="text-align: center;">৩০-৬০ মিনিট</td> <td style="text-align: center;">৬০ মিনিটের বেশী</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Less than 5 min</td> <td style="text-align: center;">5-10 minutes</td> <td style="text-align: center;">10-30 minutes</td> <td style="text-align: center;">30-60 minutes</td> <td style="text-align: center;">>60 minutes</td> <td></td> <td></td> </tr> </table>						1	2	3	4	5			৫ মিনিটের কম	৫-১০ মিনিট	১০-৩০ মিনিট	৩০-৬০ মিনিট	৬০ মিনিটের বেশী			Less than 5 min	5-10 minutes	10-30 minutes	30-60 minutes	>60 minutes													
1	2	3	4	5																																	
৫ মিনিটের কম	৫-১০ মিনিট	১০-৩০ মিনিট	৩০-৬০ মিনিট	৬০ মিনিটের বেশী																																	
Less than 5 min	5-10 minutes	10-30 minutes	30-60 minutes	>60 minutes																																	
3.11 যদি নিজস্ব মোবাইল থাকে: কার কাছে মোবাইল ফোনটি থাকে?						98	99																														
<i>33 Who owns the mobile phone/phones (please mark all appropriate)?</i>						DK	NA																														
<table style="width: 100%; border: none;"> <tr> <td style="width: 20%; text-align: center;">1</td> <td style="width: 20%; text-align: center;">2</td> <td style="width: 20%; text-align: center;">3</td> <td style="width: 20%; text-align: center;">4</td> <td style="width: 20%; text-align: center;">5</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">ইন্টারভিউ দাতা</td> <td style="text-align: center;">স্বামি/স্ত্রী</td> <td style="text-align: center;">ছেলে</td> <td style="text-align: center;">মেয়ে</td> <td style="text-align: center;">অন্যরা</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">interviewee</td> <td style="text-align: center;">Husband/wife</td> <td style="text-align: center;">son</td> <td style="text-align: center;">daughter</td> <td style="text-align: center;">other</td> <td></td> <td></td> </tr> </table>						1	2	3	4	5			ইন্টারভিউ দাতা	স্বামি/স্ত্রী	ছেলে	মেয়ে	অন্যরা			interviewee	Husband/wife	son	daughter	other													
1	2	3	4	5																																	
ইন্টারভিউ দাতা	স্বামি/স্ত্রী	ছেলে	মেয়ে	অন্যরা																																	
interviewee	Husband/wife	son	daughter	other																																	
3.12 যদি নিজস্ব মোবাইল থাকে: আপনার বাসায় কেমন ধরনের মোবাইল আছে?						98	99																														
<i>31 What kind of mobile phone do you have in the household?</i>						DK	NA																														
<table style="width: 100%; border: none;"> <tr> <td style="width: 25%; text-align: center;">Type:</td> <td style="width: 25%; text-align: center;">Price when bought:</td> <td style="width: 25%; text-align: center;">Bought used/new</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">3.12.1 simple</td> <td style="text-align: center;">2 multimedia</td> <td style="text-align: center;">3 smartphone</td> <td style="text-align: center;">3.12.2.....BDT</td> <td style="text-align: center;">3.12.3 1 new</td> <td style="text-align: center;">2 used</td> </tr> <tr> <td style="text-align: center;">3.12.4 1 simple</td> <td style="text-align: center;">2 multimedia</td> <td style="text-align: center;">3 smartphone</td> <td style="text-align: center;">3.12.5.....BDT</td> <td style="text-align: center;">3.12.6 1 new</td> <td style="text-align: center;">2 used</td> </tr> <tr> <td style="text-align: center;">3.12.7 1 simple</td> <td style="text-align: center;">2 multimedia</td> <td style="text-align: center;">3 smartphone</td> <td style="text-align: center;">3.12.8.....BDT</td> <td style="text-align: center;">3.12.9 1 new</td> <td style="text-align: center;">2 used</td> </tr> <tr> <td style="text-align: center;">3.12.10 1 simple</td> <td style="text-align: center;">2 multimedia</td> <td style="text-align: center;">3 smartphone</td> <td style="text-align: center;">3.12.11.....BDT</td> <td style="text-align: center;">3.12.12 1 new</td> <td style="text-align: center;">2 used</td> </tr> </table>						Type:	Price when bought:	Bought used/new				3.12.1 simple	2 multimedia	3 smartphone	3.12.2.....BDT	3.12.3 1 new	2 used	3.12.4 1 simple	2 multimedia	3 smartphone	3.12.5.....BDT	3.12.6 1 new	2 used	3.12.7 1 simple	2 multimedia	3 smartphone	3.12.8.....BDT	3.12.9 1 new	2 used	3.12.10 1 simple	2 multimedia	3 smartphone	3.12.11.....BDT	3.12.12 1 new	2 used		
Type:	Price when bought:	Bought used/new																																			
3.12.1 simple	2 multimedia	3 smartphone	3.12.2.....BDT	3.12.3 1 new	2 used																																
3.12.4 1 simple	2 multimedia	3 smartphone	3.12.5.....BDT	3.12.6 1 new	2 used																																
3.12.7 1 simple	2 multimedia	3 smartphone	3.12.8.....BDT	3.12.9 1 new	2 used																																
3.12.10 1 simple	2 multimedia	3 smartphone	3.12.11.....BDT	3.12.12 1 new	2 used																																
3.13 আপনি কতবার নতুন অথবা পুরাতন মোবাইল ফোন কিনেছিলেন?						98	99																														
<i>36 How many times did you buy a new/used mobile phone?</i>						DK	NA																														
_____ বার Times																																					
3.14 আপনি কী কারণে আর একটা মোবাইল ফোন কিনেছিলেন? আমার পুরাতন ফোন...						98	99																														
<i>37 What were the reasons for you to buy another phone? My old phone was</i>						DK	NA																														
<table style="width: 100%; border: none;"> <tr> <td style="width: 20%; text-align: center;">1</td> <td style="width: 20%; text-align: center;">2</td> <td style="width: 20%; text-align: center;">3</td> <td style="width: 20%; text-align: center;">4</td> <td style="width: 20%; text-align: center;">5</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">চুরি হয়েছিল / হারিয়ে গিয়েছিল</td> <td style="text-align: center;">বিক্রয় করা হয়েছিল</td> <td style="text-align: center;">নষ্ট হয়ে গিয়েছিল</td> <td style="text-align: center;">অন্য কাউকে দিয়েছি</td> <td style="text-align: center;">আমার ভাল একটা দরকার ছিল</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">...stolen/lost</td> <td style="text-align: center;">...sold</td> <td style="text-align: center;">...broken</td> <td style="text-align: center;">... gave it to someone</td> <td style="text-align: center;">(গান শোনা, সিনেমা দেখার জন্য) Needed better one (music, movies)</td> <td></td> <td></td> </tr> </table>						1	2	3	4	5			চুরি হয়েছিল / হারিয়ে গিয়েছিল	বিক্রয় করা হয়েছিল	নষ্ট হয়ে গিয়েছিল	অন্য কাউকে দিয়েছি	আমার ভাল একটা দরকার ছিল			...stolen/lost	...sold	...broken	... gave it to someone	(গান শোনা, সিনেমা দেখার জন্য) Needed better one (music, movies)													
1	2	3	4	5																																	
চুরি হয়েছিল / হারিয়ে গিয়েছিল	বিক্রয় করা হয়েছিল	নষ্ট হয়ে গিয়েছিল	অন্য কাউকে দিয়েছি	আমার ভাল একটা দরকার ছিল																																	
...stolen/lost	...sold	...broken	... gave it to someone	(গান শোনা, সিনেমা দেখার জন্য) Needed better one (music, movies)																																	
3.18 ঢাকায় আপনার বা আপনার পরিবারের সদস্যদের নিচের কোন জিনিসগুলো আছে?						98	99																														
<i>40 Do you or someone in your household in Dhaka possess some of the following:</i>						DK	NA																														
<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; text-align: center;">3.21.1 টিভি TV</td> <td style="width: 33%; text-align: center;">3.21.2 স্টোভ Stove</td> <td style="width: 33%; text-align: center;">3.21.3 রেফ্রিজারেটর fridge</td> <td style="width: 33%; text-align: center;">3.21.4 কিছু অলঙ্কার some jewellery</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">1 Yes</td> <td style="text-align: center;">1 Yes</td> <td style="text-align: center;">1 Yes</td> <td style="text-align: center;">1 Yes</td> <td style="text-align: center;">2 No</td> <td style="text-align: center;">2 No</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">98 DK</td> <td style="text-align: center;">99 NA</td> </tr> </table>						3.21.1 টিভি TV	3.21.2 স্টোভ Stove	3.21.3 রেফ্রিজারেটর fridge	3.21.4 কিছু অলঙ্কার some jewellery			1 Yes	1 Yes	1 Yes	1 Yes	2 No	2 No					98 DK	99 NA														
3.21.1 টিভি TV	3.21.2 স্টোভ Stove	3.21.3 রেফ্রিজারেটর fridge	3.21.4 কিছু অলঙ্কার some jewellery																																		
1 Yes	1 Yes	1 Yes	1 Yes	2 No	2 No																																
				98 DK	99 NA																																
3.19 আপনার অথবা আপনার পরিবারের কোন সদস্যের কি গ্রামে নিম্নোক্ত জিনিসগুলো আছে?						98	99																														
<i>43 Do you or someone from your household own the following in the village?</i>						DK	NA																														
<table style="width: 100%; border: none;"> <tr> <td style="width: 60%; text-align: center;">.1 Land: Yes, _____ bigha / decimals (please underline)</td> <td style="width: 40%; text-align: center;">2 no</td> <td></td> </tr> <tr> <td style="text-align: center;">.2 House: _____ rooms</td> <td style="text-align: center;">2 no</td> <td></td> </tr> <tr> <td style="text-align: center;">.3 cows _____ head</td> <td style="text-align: center;">2 no</td> <td></td> </tr> </table>						.1 Land: Yes, _____ bigha / decimals (please underline)	2 no		.2 House: _____ rooms	2 no		.3 cows _____ head	2 no																								
.1 Land: Yes, _____ bigha / decimals (please underline)	2 no																																				
.2 House: _____ rooms	2 no																																				
.3 cows _____ head	2 no																																				
3.22 ঢাকায় আপনার পরিবারের মাসিক আয় কত?						98	99																														
<i>88 How much is your monthly income in the Dhaka household?</i>						DK	NA																														
_____ টাকা BDT																																					
3.23 কোন জিনিস গুলোর জন্য আপনি/আপনার পরিবার আপনাদের আয়ের বেশিরভাগ অংশ খরচ করেন?						98	99																														
<i>87 What are the things you /your household spent most of your income for??</i>						DK	NA																														
<table style="width: 100%; border: none;"> <tr> <td style="width: 5%;">1:.....</td> <td></td> </tr> <tr> <td style="width: 5%;">2:.....</td> <td></td> </tr> <tr> <td style="width: 5%;">3:.....</td> <td></td> </tr> <tr> <td style="width: 5%;">4:.....</td> <td></td> </tr> <tr> <td style="width: 5%;">5:.....</td> <td></td> </tr> </table>						1:.....		2:.....		3:.....		4:.....		5:.....																							
1:.....																																					
2:.....																																					
3:.....																																					
4:.....																																					
5:.....																																					

3.24 আপনি/আপনার পরিবার মোবাইলের জন্য প্রতি সপ্তাহে গড়ে কত টাকা খরচ করেন? 89 How much BDT do you / your household spend on your mobile (recharge) every week on average?	টাকা BDT	98 DK	99 NA			
3.27 আপনি কি গ্রামে টাকা পাঠান? 90 Do you send money (remittances) to the village?	1 হ্যাঁ, প্রতি মাসে গড়ে Yes, monthly average BDT	2 না no	98 DK 99 NA			
3.28 আপনি যখন আপনার গ্রামের পরিবারের সাথে মোবাইলে কথা বলেন, আপনাকে (আরও) টাকা পাঠাতে বলা হয় কি? 91 when you talk to your family in the village on the mobile phone, are you being asked for sending (more) remittances?	1 হ্যাঁ, এবং এতে করে আমি আরও টাকা পাঠাতে বাধ্যবাধকতা অনুভব করি yes, and then I feel obliged to send more money	2 হ্যাঁ, কিন্তু আমি আর টাকা পাঠাই না বা পাঠাতে পারিনা yes, but I dont or cannot send more money	3 না, তারা আরও টাকা পাঠাতে বলেনা no, they dont ask for more remittance being sent	98 DK 99 NA		
3.29 গত বছর আপনি কি আপনার গ্রামের আত্মীয়-স্বজনের কাছ থেকে কোন জিনিসপত্র এবং সেবা পেয়েছেন? 104 In the past year, did you get goods and kind from your relatives in your village?	1 no 2. _____ approx value (BDT)/month _____ 3. _____ approx value (BDT)/month: _____ 4. _____ approx value (BDT)/month: _____ 5. _____ approx value (BDT)/month: _____ 6. _____ approx value (BDT)/month: _____		98 DK 99 NA			
3.30 টাকা পাঠানোর সাথে সাথে গত বছর আপনি কি আপনার গ্রামের আত্মীয়-স্বজনকে অন্য কোন জিনিসপত্র এবং সেবা পাঠিয়েছিলেন? 104 In addition to remittances, did you also send goods and kind to your relatives in your village in the past year?	1. no 2. _____ approx value (BDT)/month _____ 3. _____ approx value (BDT)/month: _____ 4. _____ approx value (BDT)/month: _____ 5. _____ approx value (BDT)/month: _____ 6. _____ approx value (BDT)/month: _____		98 DK 99 NA			
3.31 মোবাইল ফোন কি টাকা ও গ্রামের পরিবারের মধ্যে কি পরিমাণ জিনিসপত্র বা নগদ টাকা আদান-প্রদান প্রয়োজন সেটা স্পষ্টভাবে বুঝতে আপনাকে সাহায্য করে? 109 Does the mobile phone help you clarify the need for certain goods or amounts of cash to be between Dhaka and the village?	1 হ্যাঁ, খুব বেশী Yes, very much	2 হ্যাঁ, একটু বেশী Yes, much	3 হ্যাঁ, কিন্তু মাঝে মাঝে Yes, but moderately	4 খুব কম A little	5 কখনই না Not at all	98 DK 99 NA
3.32 আপনার গৃহস্থালীর গ্রামের অংশ টা ঢাকায় আপনার পরিবার কে কি ধরনের সাহায্য করে? [please mark all that applies] 127 What kind of services does the village part of the household provide for the family part living in Dhaka?	1 আপনার সন্তানদের কে যত্ন নিতে সাহায্য taking care of your children back in the village 2 ঘরের যত্ন নিতে সাহায্য করে taking care of the house 3 পরিবারের বয়স্ক দের যত্ন নিতে সাহায্য করে taking care of the elderly household members 4 আপনার খামার ও পশুদের যত্ন নেয়া taking care of your farm or animals 5 ঢাকায় অন্যদের সাথে ব্যবসা গড়ে তোলা organizing business together with people in Dhaka 6 অন্যান্য Others _____		98 DK 99 NA			
3.33 প্রয়োজনের সময় অন্যের কাছ থেকে কি কিছু টাকা (মনে করেন ২০০০ টাকা) সহজেই ধার করতে পারেন? 85 Can you in times of need easily borrow some money (lets say 2000 Taka) from other people [pls mark everything that applies]?	1 ঢাকার একই এলাকা/বস্তির পরিবার এবং আত্মীয়-স্বজনের _____ 98DK 99 NA family and relatives in the same bosti/area 3: গ্রামের আত্মীয়-স্বজন এবং পরিবারের সদস্যদের _____ 98DK 99 NA family and relatives in the village 5: ঢাকার অন্য এলাকার/ বস্তির বন্ধু এবং মানুষের _____ 98DK 99 NA friends and other nonrelatives in another bosti/area 7: ঢাকার একই এলাকার/বস্তিতে ব্যবসাজনিত কারণে পরিচিত মানুষের _____ 98 DN 99 NA business contacts in the same bosti/area 9: গ্রামের/দেশের বাড়িতে ব্যবসায়ী কারণে পরিচিত মানুষের _____ 98 DN 99 NA business contacts in the village / home district 11 অন্যান্য মানুষের _____ 98 DN 99 NA other people	2: ঢাকার অন্য এলাকার/বস্তির আত্মীয়-স্বজন এবং পরিবারের সদস্যদের _____ 98 DN 99 NA family and relatives in another bosti/area: 4: ঢাকার একই এলাকার/বস্তির বন্ধু এবং প্রতিবেশীদের _____ 98DK 99 NA friends and neighbours in the same bosti/area 6: গ্রামে বসবাসকারী বন্ধু এবং আত্মীয়দের _____ 98DK 99 NA friends and other non-relatives in the village 8: ঢাকার অন্য এলাকার/বস্তিতে ব্যবসাজনিত কারণে পরিচিত মানুষের _____ 98 DN 99 NA business contacts in another bosti/area 10: গুরুত্বপূর্ণ মানুষ (ফেমন-চকুরিদাতা, জমির মালিক, রাজনৈতিক নেতা) _____ 98DN 99NA important people (e.g. landlord, employer, leader)	98 DK 99 NA			
3.34 মুখোমুখী সাক্ষাত ছাড়া যখন আপনি এই মানুষগুলোর কাছ থেকে টাকা ধার করতে চান- মোবাইল ফোনের মাধ্যমে কার কাছ থেকে টাকাটা চাইবেন [দয়াকরে "M" চিহ্ন দিয়ে দাগ দিবেন]? When borrowing money from these people – whom could you ask for money on the mobile phone (instead of face to face)? Please mark with "M"	1 হ্যাঁ, কারণ এটা সময় বাচায়, আমি সাথে সাথে উত্তর পায় Yes, because it saves time, I get a reply immediately	2 হ্যাঁ, কারণ আমি দূরের মানুষদের ফোন করতে পারি yes, because I can call people at distant places	3 হ্যাঁ, কারণ মোবাইলের মাধ্যমে টাকা পাঠান যায় Yes, because money gets sent over mobile	4 না, কারণ আমি তখনই টাকা ধার নিতে পারি যখন মানুষের সাথে সরাসরি গিয়ে কথা বলি No, because I can only borrow money when talking to people personally	5 অন্যান্য Other:	98 DK 99 NA
3.35 প্রয়োজনের সময় টাকা ধার করার ক্ষেত্রে মোবাইল ফোন কি সাহায্য করে? [mark everything that applies] 86Is the mobile phone helpful for borrowing money in times of need? [mark everything that applies]	1 হ্যাঁ, কারণ এটা সময় বাচায়, আমি সাথে সাথে উত্তর পায় Yes, because it saves time, I get a reply immediately	2 হ্যাঁ, কারণ আমি দূরের মানুষদের ফোন করতে পারি yes, because I can call people at distant places	3 হ্যাঁ, কারণ মোবাইলের মাধ্যমে টাকা পাঠান যায় Yes, because money gets sent over mobile	4 না, কারণ আমি তখনই টাকা ধার নিতে পারি যখন মানুষের সাথে সরাসরি গিয়ে কথা বলি No, because I can only borrow money when talking to people personally	5 অন্যান্য Other:	98 DK 99 NA
3.36 জিনিসপত্র ও আর্থিক সম্পদের বিবেচনায় ঢাকাতে আপনার প্রতিবেশী পরিবার গুলোর তুলনায় আপনি নিজেকে কোন অবস্থানে ফেলবেন? 41 Compared to other households in your place in Dhaka, how would you rate yourself in terms of material and financial wealth?	1 বেশ ধনী Quite rich	2 গড়মানের চেয়ে ধনী More than average	3 গড় মানের ধনী Average	4 গড় মানের চেয়ে কম ধনী Less than average	5 খুবই গরিব Quite poor	98 DK 99 NA

4. SOCIAL, HEALTH AND PSYCHOLOGICAL RESOURCES

<p>4.35 আপনি আপনার অতীতের জীবনের সুখটাকে কোন অবস্থানে দেখেন ১-১০ স্কেলের মধ্যে? ১ দিয়ে একেবারেই অসুখি বোঝানো হচ্ছে, ১০ দিয়ে সম্পূর্ণ সুখি বোঝানো হচ্ছে?</p> <p><i>65 How would you rate your general happiness in life in the past year on a scale from 1 - 10, 1 indicating totally unhappy, 10 indicating totally happy?</i></p>	☺	<p>1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____ 8 _____ 9 _____ 10</p> <p style="text-align: right;">☹</p>	98 DK	99 NA			
<p>4.1 আপনার পার্সোনাল মোবাইলে কতজনের নাম্বার সেভ করা আছে?</p> <p><i>49 How many contacts do you have saved in your personal mobile phone?</i></p>	contacts		98 DK	99 NA			
<p>4.2 এগুলোর মধ্যে কতগুলো সচল নাম্বার রয়েছে যেগুলোতে আপনি আসলে ফোন করেন (গত ৬ মাসের মধ্যে ফোন করেছেন)</p> <p><i>49a Out of those, how many are "active contacts" you actually call (called in the past 6 months)?</i></p>	"active" contacts		98 DK	99 NA			
<p>4.4 এই সচল নাম্বারগুলোর মধ্যে, কতগুলো...(দয়া করে দ্রুত একটি পরিমাণ জানাবেন)</p> <p><i>50 out of those "active contacts", how many are (please give a quick estimate)</i></p>	<p>1 ঢাকার একই এলাকা/বস্তির পরিবার এবং আত্মীয়-স্বজনের _____ 98DK 99 NA family and relatives in the same bosti/area</p> <p>3: গ্রামের আত্মীয়-স্বজন এবং পরিবারের সদস্যদের _____ 98DK 99 NA family and relatives in the village</p> <p>5: ঢাকার অন্য এলাকা/বস্তির বন্ধু এবং মানুষের _____ 98DK 99 NA friends and other nonrelatives in another bosti/area</p> <p>7: ঢাকার একই এলাকা/বস্তিতে ব্যবসাজনিত কারণে পরিচিত মানুষের _____ 98 DN 99 NA business contacts in the same bosti/area</p> <p>9: গ্রামের/দেশের বাড়িতে ব্যবসায়ী কারণে পরিচিত মানুষের _____ 98 DN 99 NA business contacts in the village / home district</p> <p>11 অন্যান্য মানুষের _____ 98 DN 99 NA other people</p>	<p>2: ঢাকার অন্য এলাকা/বস্তির আত্মীয়-স্বজন এবং পরিবারের সদস্যদের _____ 98 DN 99 NA family and relatives in another bosti/area:</p> <p>4: ঢাকার একই এলাকা/বস্তির বন্ধু এবং প্রতিবেশীদের _____ 98DK 99 NA friends and neighbours in the same bosti/area</p> <p>6: গ্রামে বসবাসকারী বন্ধু এবং আত্মীয়দের _____ 98DK 99 NA friends and other non-relatives in the village</p> <p>8: ঢাকার অন্য এলাকা/বস্তিতে ব্যবসাজনিত কারণে পরিচিত মানুষের _____ 98 DN 99 NA business contacts in another bosti/area</p> <p>10: গুরুত্বপূর্ণ মানুষ (যেমন- চাকুরিলাত জমির মালিক, রাজনৈতিক নেতা) _____ 98DN 99NA important people (e.g. landlord, employer, leader)</p>					
<p>4.5 এই মানুষগুলো ছাড়াও আরও কতজন মানুষ গুরুত্বপূর্ণ যারা আপনার সামাজিক বন্ধনের একটা অংশ?</p> <p><i>51 Excluding these people in your mobile phone, how many more people are important to you, part of your social network?</i></p>	_____ people		98 DK	99 NA			
<p>4.6 তারা কেন আপনার ফোনে নেই?</p> <p><i>51 Why don't you have those people in your telephone as well?</i></p>	1 তাদের ফোন নেই They don't have a phone	2 তাদের কে মোবাইল দিয়ে ফোন করা হয় না I dont call them with the mobile phone	3 তাদের মোবাইল নাম্বার সেভ করা হয়নি I didnt manage to save their contacts in the phone	4 অন্য কারণ Other reasons	98 DK	99 NA	
<p>4.12 মোবাইল থাকা এবং ব্যবহারের কারণে নিম্নোক্ত মানুষগুলোর সাথে আপনার সম্পর্ক কিভাবে পরিবর্তিত হয়েছে?</p> <p><i>53 How did having and using the mobile phone change your relations to the following people?</i></p>	উন্নতি হয়েছে Improved	একটু উন্নতি হয়েছে Little improved	কোন প্রভাব ফেলেনি No effect	একটু খারাপ হয়েছে Slightly worsened	খুব খারাপ হয়েছে Worsened	98 DK	99 NA
<p>1... আপনার স্বামী/স্ত্রীর মধ্যে সম্পর্ক ... relations with your husband/wife</p> <p>2... আপনার ছেলে মেয়ের সাথে সম্পর্ক ... relations with your children</p> <p>3... আপনার বাবা মায়ের সাথে সম্পর্ক ... relations with your parents</p> <p>4... আপনার ভাই এবং বোনের সাথে সম্পর্ক ... relations with your brothers and sisters</p> <p>5... আপনার গ্রামের অন্যান্য আত্মীয়-স্বজনদের সাথে সম্পর্ক ... relations with other relatives in the village</p> <p>6... আপনার ঢাকার অন্যান্য আত্মীয়-স্বজনদের সাথে সম্পর্ক ... relations with other relatives in Dhaka</p> <p>7... আপনার গ্রামের বন্ধু এবং আত্মীয়-স্বজন বাদে অন্যদের সাথে সম্পর্ক ... relations with friends and other non-relatives in the village</p> <p>8 ঢাকায় আপনার বন্ধু এবং আত্মীয়-স্বজন বাদে অন্যদের সাথে সম্পর্ক ... relations with friends and other non-relatives in Dhaka</p> <p>9 আপনার চাকরীদাতার সাথে সম্পর্ক ... relations with your employer</p> <p>10 আপনার অধীনস্থ চাকরিরজীবীদের সাথে সম্পর্ক ... relations with your employees</p> <p>11 আপনার গ্রামের জমির মালিকের সাথে সম্পর্ক ... relations with land owner in the village</p> <p>12 ঢাকায় আপনার জমির মালিকের সাথে সম্পর্ক ... relations with your landlord in Dhaka</p> <p>13 গ্রামের রাজনৈতিক নেতাদের সাথে সম্পর্ক ... relations to political leaders in the village</p> <p>14 ঢাকায় রাজনৈতিক নেতাদের সাথে সম্পর্ক ... relations to political leaders in Dhaka</p> <p>15 আপনার গ্রামের এবং শহরের পরিবারের মধ্যে সাধারণ সম্পর্ক ... relations between family parts in the village and in Dhaka in general</p>	1	2	3	4	5		
<p>4.7 যখন একদম নতুন ঢাকা এসেছিলেন, তখন কি মোবাইল ফোন বন্ধু এবং প্রয়োজনীয় মানুষদের পেতে সাহায্য করেছিলো?</p> <p><i>52 When arriving in Dhaka as a new migrant, was the mobile phone helpful for you to get friends and helpful contacts?</i></p>	1 খুব সাহায্য করেছিলো Very helpful	2 সাহায্য করেছিলো Helpful	3 কিছুটা সাহায্য করেছিলো Partly helpful	4 কম সাহায্য করেছিলো Little helpful	5 একেবারেই সাহায্য করে নি Not helpful at all	98 DK	99 NA

4.8 ঢাকার মধ্যে আপনি কি বসবাসস্থান কখনো পরিবর্তন করেছেন? <i>53 Did you ever change your house site / living area inside Dhaka?</i>	1 Yes, _____ সময় times	2 no	98 DK	99 NA			
4.9 শেষবার যেখানে ছিলেন সেখান থেকে এখন কতদূরে বাস করছেন? <i>53 How far away from your last house are you staying now?</i>	1 <৫মিনিট Less than 5 min	2 ৫-১০মিনিট 5-10 minutes	3 ১০-৩০ মিনিট 10-30 minutes	4 ৩০-৬০ মিনিট 30-60 minutes	5 >৬০ মিনিট >60 minutes	98 DK	99 NA
4.10 আপনি আগে যেখানে ছিলেন সেখানকার প্রতিবেশীদের সাথে যোগাযোগ করার ক্ষেত্রে মোবাইল ফোন কি আপনাকে সাহায্য করে? <i>51 Is the mobile phone helpful for you to keep the contact with the neighbours of your previous house location in Dhaka?</i>	1 খুব গুরুত্বপূর্ণ Very important	2 গুরুত্বপূর্ণ Important	3 কিছুটা গুরুত্বপূর্ণ Partly important	4 কম গুরুত্বপূর্ণ Little important	5 একেবারেই গুরুত্বপূর্ণ না Not important at all	98 DK	99 NA
4.11 এটার কারণগুলো কি কি? (দয়া করে যেগুলো আপনার জন্য প্রযোজ্য সেগুলো চিহ্নিত করুন) <i>51 What are reasons for this? (please read out all options and mark everything that applies)</i>	1 মোবাইল ছাড়া আমি যোগাযোগ রাখতে পারতাম না দুরত্বের কারণে without a mobile I could not keep most of the contacts due to distance	2 এটা সুবিধা জনক mostly because it is convenient	3 আমাকে যোগাযোগ রাখতে হয় যেকোন ভাবে I meet the contacts anyway	4 যেহেতু আমি নতুন বাসায় নতুন মানুষের সাথে পরিচিত হয়েছি I have made new contacts at the new location of my house	5 অন্যকারণ _____	98 DK	99 NA

4.67A কিছু লোকের সাথে সম্পর্ক ধরে রাখতে নিয়মিত এবং বারবার যোগাযোগ করাটা খুবই জরুরী যেন সম্পর্কটি ভেঙ্গে না যায়। FOR KEEPING THE RELATIONSHIP WITH SOME KINDS OF PEOPLE IT IS OFTEN NECESSARY TO MAINTAIN REGULAR AND FREQUENT COMMUNICATION SO THAT THE RELATIONSHIP DOES NOT BREAK.	1 খুব গুরুত্বপূর্ণ VERY IMPORTANT	2 গুরুত্বপূর্ণ IMPORTANT	3 কিছুটা SOME	4 একটু LITTLE	5 একেবারেই না NOT AT ALL	98 DN	99 NA
1 ঢাকার একই এলাকায় বসবাসকারী পরিবারের সদস্যবৃন্দ Family members in the same area of Dhaka	1	2	3	4	5	98 DN	99 NA
2: গ্রামে বসবাসকারী পরিবারের সদস্যবৃন্দ Family members in your village	1	2	3	4	5	98 DN	99 NA
3: ঢাকার একই এলাকার আত্মীয়-স্বজন Relatives in the same area of Dhaka	1	2	3	4	5	98 DN	99 NA
4: ঢাকার অন্য এলাকার আত্মীয়-স্বজন Relatives in another area of Dhaka	1	2	3	4	5	98 DN	99 NA
5: গ্রামের বন্ধু এবং প্রতিবেশী Friends and neighbours in the village	1	2	3	4	5	98 DN	99 NA
6: ঢাকার একই এলাকার বন্ধু এবং প্রতিবেশী friends and neighbours in the same area of Dhaka	1	2	3	4	5	98 DN	99 NA
7: ঢাকার অন্য এলাকার বন্ধু এবং অনাত্মীয় মানুষের friends and other nonrelatives in another area of Dhaka	1	2	3	4	5	98 DN	99 NA
8: ঢাকার একই এলাকার ব্যবসাজনিত কারণে পরিচিত মানুষের business contacts in the same area of Dhaka	1	2	3	4	5	98 DN	99 NA
9: ঢাকার অন্য এলাকার ব্যবসাজনিত কারণে পরিচিত মানুষের business contacts in another area of Dhaka	1	2	3	4	5	98 DN	99 NA
10: গ্রামের/দেশের বাড়িতে ব্যবসায়িক কারণে পরিচিত মানুষের business contacts in the village / home district	1	2	3	4	5	98 DN	99 NA
11: গুরুত্বপূর্ণ মানুষ (যেমন- চাকুরিদাতা, জমির মালিক, রাজনৈতিক নেতা) important people (e.g. landlord, employer, leader)	1	2	3	4	5	98 DN	99 NA
12 অন্যান্য মানুষের other people	1	2	3	4	5	98 DN	99 NA
4.67B মোবাইল ফোনে কাউকে কল করা যেহেতু অনেক সহজ হয়েছে, মানুষের যোগাযোগের পরিমাণ আগের চাইতে অনেক বেড়েছে। যখন মোবাইল ফোন ছিলোনা তখনকার তুলনায় এখন এই মোবাইলের যুগে মানুষ হয়ত আশা করে যে তার আত্মীয়-স্বজন এখন অনেক বেশী যোগাযোগ করবে। SINCE CALLING SOMEONE WITH THE MOBILE PHONE IS QUITE EASY, PEOPLE OFTEN HAVE MORE COMMUNICATION THAN BEFORE. OTHERS ALSO MAY EXPECT TO BE CONTACTED MORE OFTEN THAN AT THE TIMES WHEN NO PHONE WAS AVAILABLE.	1 অনেক বেশী MUCH MORE	2 একটু বেশী LITTLE MORE	3 একই রকমের আছে STAYED SAME	4 একটু কমেছে LITTLE LESS	5 অনেক কমে গিয়েছে MUCH LESS	98 DN	99 NA
নিচে উল্লেখিত বিভিন্ন ধরনের আত্মীয়-স্বজনদের ক্ষেত্রে, মোবাইল ফোন পাওয়ার পর থেকে তাদের সাথে আপনার যোগাযোগের মাত্রা/পরিমাণ কেমন পরিবর্তন হয়েছে? REGARDING THE FOLLOWING GROUPS, HOW DID THE FREQUENCY OF COMMUNICATION CHANGE SINCE YOU AND THEY HAVE A MOBILE PHONE?	1 1	2 2	3 3	4 4	5 5	98 DN	99 NA
1 ঢাকার একই এলাকায় বসবাসকারী পরিবারের সদস্যবৃন্দ Family members in the same area of Dhaka	1	2	3	4	5	98 DN	99 NA
2: গ্রামে বসবাসকারী পরিবারের সদস্যবৃন্দ Family members in your village	1	2	3	4	5	98 DN	99 NA
3: ঢাকার একই এলাকার আত্মীয়-স্বজন Relatives in the same area of Dhaka	1	2	3	4	5	98 DN	99 NA
4: ঢাকার অন্য এলাকার আত্মীয়-স্বজন Relatives in another area of Dhaka	1	2	3	4	5	98 DN	99 NA
5: গ্রামের বন্ধু এবং প্রতিবেশী Friends and neighbours in the village	1	2	3	4	5	98 DN	99 NA
6: ঢাকার একই এলাকার বন্ধু এবং প্রতিবেশী friends and neighbours in the same area of Dhaka	1	2	3	4	5	98 DN	99 NA
7: ঢাকার অন্য এলাকার বন্ধু এবং অনাত্মীয় মানুষের friends and other nonrelatives in another area of Dhaka	1	2	3	4	5	98 DN	99 NA

(CONTINUED FROM PREVIOUS PAGE)	1 অনেক বেশী MUCH MORE	2 একটু বেশী LITTLE MORE	3 একই রকমের আছে STAYED SAME	4 একটু কমেছে LITTLE LESS	5 অনেক কমে গিয়েছে MUCH LESS	98 DN	99 NA
8: ঢাকার একই এলাকার ব্যবসাজনিত কারণে পরিচিত মানুষের business contacts in the same area of Dhaka	1	2	3	4	5	98 DN	99 NA
9: ঢাকার অন্য এলাকার ব্যবসাজনিত কারণে পরিচিত মানুষের business contacts in another area of Dhaka	1	2	3	4	5	98 DN	99 NA
10: গ্রামের/দেশের বাড়িতে ব্যবসায়ীকারণে পরিচিত মানুষের business contacts in the village / home district	1	2	3	4	5	98 DN	99 NA
11: গুরুত্বপূর্ণ মানুষ (যেমন- চাকুরিদাতা, জমির মালিক, রাজনৈতিক নেতা) important people (e.g. landlord, employer, leader)	1	2	3	4	5	98 DN	99 NA
12 অন্যান্য মানুষের other people	1	2	3	4	5	98 DN	99 NA
4.67B মোবাইল ফোন যখন ছিলোনা তখনকার তুলনায় বেশী বার যোগাযোগ করার কারণ কি? What are the reasons for you to communicate more than when you had no mobile phone? Please tick all that applies	1 লোকজন চায় যেন খুব প্রায়-ই তাদের সাথে কথা বলি PEOPLE EXPECT TO COMMUNICATE MORE OFTEN 4 আমি আসলে প্রায়-ই কথা বলতে অভ্যস্ত I AM JUST USED TO CALL THAT OFTEN	2 আমি তাদের সাথে খুব প্রায়-ই কথা বলতে চাই I JUST WANT TO CALL THEM MORE OFTEN	3 কারণ, মোবাইল ফোনের মাধ্যমে যোগাযোগ করা সহজ BECAUSE COMMUNICATION WITH THE MOBILE PHONE IS EASY			98 DN	99 NA

5.1 গ্রামের গৃহস্থালি বা কৃষিকাজ দেখভালের জন্য অনেক সময় অনেক সিদ্ধান্ত নিতে হয় এবং অনেক কিছু অর্গানাইজ করা দরকার হয়। গ্রামের এইসব নিম্নোক্ত বিষয়ের উপর সিদ্ধান্ত নিতে/ অর্গানাইজ করতে মোবাইল ফোন আপনার জন্য কতখানি গুরুত্বপূর্ণ? For managing a household or a farm in the village, many decisions have to be taken and many things have to be organized. How much important is the mobile phone for you to participate in deciding/organizing the following things in the village?	1 খুব গুরুত্বপূর্ণ Very important	2 গুরুত্বপূর্ণ Important	3 কিছুটা গুরুত্বপূর্ণ Partly important	4 কম গুরুত্বপূর্ণ Little important	5 একেবারেই গুরুত্বপূর্ণ না Not important at all	98 DK	99 NA
কোন ফসল পরবর্তীতে ফলাতে হবে which plants to grow next	1	2	3	4	5	98 DK	99 NA
কৃষিকাজের জন্য যন্ত্রপাতি এবং সার-বীজ সমূহ কিনতে the buying of tools and inputs for agriculture	1	2	3	4	5	98 DK	99 NA
কৃষিকাজ বা অন্যান্য কাজের জন্য শ্রমিক/মজুর ঠিক করতে hiring labour for agriculture or others	1	2	3	4	5	98 DK	99 NA
বিভিন্ন ধরনের NGO কর্মকাণ্ডে অংশগ্রহণে participation in NGO activities	1	2	3	4	5	98 DK	99 NA
গ্রামের আত্মীয়-স্বজনের বিয়ে উপলক্ষে marriages of relatives in the village	1	2	3	4	5	98 DK	99 NA
গ্রামে নবজাতক শিশুর নাম রাখতে, স্নানতে খাণ্ডা/মুসলমানী উপলক্ষে child name giving, circumcision in the village	1	2	3	4	5	98 DK	99 NA
গ্রামে কোন আত্মীয়-স্বজন বা শিশুর শিক্ষার ক্ষেত্রে education of children/relatives in the village	1	2	3	4	5	98 DK	99 NA
গ্রামের বাড়ী সারাতে (পুনর্গঠন/মাড়) বড় করতে repair or extension of house in the village	1	2	3	4	5	98 DK	99 NA
কিছু জিনিস যেমন টিভি, রেডিও ইত্যাদি কিনতে buying of things like TV, radio, etc.	1	2	3	4	5	98 DK	99 NA
কিছু গৃহস্থালির জিনিসপত্র যেমন বিছানা/খাট, চেয়ার ইত্যাদি কিনতে buying of household equipment like bed, chair, etc.	1	2	3	4	5	98 DK	99 NA
4.13 মোবাইল ফোন ব্যবহার অথবা থাকাটা কি আপনার বন্ধু এবং প্রতিবেশীদের মধ্যে আপনার সামাজিক অবস্থা কে উন্নত করেছে? 56 Does owning or using a mobile phone improve your social status among your neighbours and friends??	1 হ্যাঁ, অনেক বেশী Yes, very much	2 হ্যাঁ, একটু Yes, a little	3 মাঝামাঝি Partly yes, partly no	4 না, তেমন না Not, not really	5 না, একেবারেই না Not, not at all	98 DK	99 NA
4.14 আপনি কি নিজেই অন্যদের (তুলনামূলক ধনীদের) সমমানের মনে করেন যখন আপনি মোবাইল ব্যবহার করেন? 57 Do you feel more equal to other (richer) people when you use your mobile phone?	1 হ্যাঁ, অবশ্যই Yes, very much	2 হ্যাঁ, একটু Yes, a little	3 মাঝামাঝি Partly yes, partly no	4 না, তেমন না Not, not really	5 না, একেবারেই না Not, not at all	98 DK	99 NA
4.15 যদি কেউ খুব তীব্রভাবে মোবাইল ব্যবহার করে এবং জনসম্মুখে কানের মধ্যে হেডফোন দিয়ে গান শুনে তখন কি এইলোকটিকে ডেকে কথা বলাটা উচিত হবে? 58 If someone uses the mobile phone intensely, and maybe also uses earplugs to listen to music in public, would it be less appropriate to address this person to talk to him or her?	1 হ্যাঁ, অবশ্যই Yes, very much	2 হ্যাঁ, একটু Yes, a little	3 মাঝামাঝি Partly yes, partly no	4 না, তেমন না Not, not really	5 না, একেবারেই না Not, not at all	98 DK	99 NA
4.16 যদি আপনি চান যে কেউ আপনাকে জনসম্মুখে না ডাকুক, সেক্ষেত্রে আপনি কি আপনার মোবাইল ফোন অথবা হ্যান্ডসেটটা ব্যবহার করেন তাকে এড়িয়ে যেতে? 59 If you don't want to be addressed by other people in public, do you sometimes use your mobile phone or headset in a way that may help you to avoid contact?	1 খুব ঘন ঘন Very often	2 ঘন ঘন Often	3 মাঝেমাঝে sometimes	4 অল্প কয়েকবার অথবা একবার Only few times or once	5 কখনই না never	98 DK	99 NA

4.17 এমন কোন মানুষ আছে যাদের সাথে আপনার কোন যোগাযোগ থাকতো না যদি আপনি তাদের ফোন না করতেন? 47 Are there people that you would lose contact if you wouldn't have the mobile to call them?	1 হ্যাঁ, অনেক Yes, many	2 হ্যাঁ, কিছু মানুষ আমার কাছে গুরুত্বপূর্ণ yes, some people important to me	3 হ্যাঁ, কিন্তু খুব কম yes, but only few	4 হ্যাঁ, কিন্তু এমন গুরুত্বপূর্ণ কেউ না yes, but no one important to me	না no	98 DK	99 NA		
4.18 মোবাইল ফোন ছাড়া (নিজের অথবা বন্ধু/পরিবারের মোবাইল ফোন) এই সমাজে চলতে কি কারও সমস্যা হত? 48 Would someone without a mobile phone (or access to a mobile phone through friends/family) have difficulties to stay part of the social life?	1 হ্যাঁ, খুব বেশি Yes, very much	2 হ্যাঁ, কিন্তু খুব কম/কিছু ক্ষেত্রে yes, but only little/in some cases	3 না, মোবাইল ফোন সমাজের গুরুত্বপূর্ণ অংশ না no, mobile phone is not important to be part of social life			98 DK	99 NA		
4.19 আপনি কি মাঝেমধ্যে গ্রামে আপনার কাজ (যেমন কৃষিকাজ, গৃহস্থালীর কাজ) করানোর জন্য মানুষ/মজুর নিয়োগ করেন? 46 Do you sometimes recruit people to work for you in the village?	1 না, no	2 হ্যাঁ, কি ধরনের কাজ এর জন্য? Yes, for what kind works?				98 DK	99 NA		
4.20 গ্রামে কাজ করার জন্য মানুষ/মজুর ভাড়া করার ক্ষেত্রে মোবাইল ফোন আপনার সামর্থ্যের কেমন পরিবর্তন এনেছে? 46 How much has the mobile phone changed your ability to hire people for work in the village?	1 উন্নতি হয়েছে Improved	2 একটু উন্নতি হয়েছে Little improved	3 কোন পরিবর্তন হয় নি No change	4 একটু অবনতি হয়েছে Slightly worsened	5 খুব খারাপ হয়েছে Worsened	98 DK	99 NA		
4.21 কোন সংগঠন যেমন এনজিও থেকে সাহায্য বা পরামর্শ নেয়ার জন্য আপনি কি মোবাইল ফোন ব্যবহার করেন? 45 Do you use your mobile phone for getting help or advice from organisations like NGOs?	1 খুব ঘন ঘন Very often	2 ঘন ঘন Often	3 মাঝে-মাঝে sometimes	4 অল্প কয়েকবার অথবা একবার Only few times or once	5 কখনই না never	98 DK	99 NA		
4.22 একটা ভাল জীবন হল... 60 A good life is ...	1 ...গ্রামের জীবন ... life in the village	2 শহরের জীবন ... life in the city	3 দুইটাই, দুইদিকেই আসা যাওয়া ... both, travelling in between	4 ...এখনশহরে, পরে আবার গ্রামে ফিরে আসা ... now city, later return to the village		98 DK	99 NA		
4.23 আপনি আপনার ভবিষ্যত জীবনকে কিভাবে দেখেন- গ্রামে বাস করছেন অথবা শহরে বাস করছেন? 61 How do you envisage your own future life - in the city or the village??	1 ...গ্রামে ... life in the village	2 শহরে ... life in the city	3 দুইটাই, দুই দিকেই আসা যাওয়া ... both, travelling in between	4 ঢাকার চেয়ে ছোট শহরে বাস করছি ... living in a smaller town than Dhaka		98 DK	99 NA		
4.24 আপনি যদি আপনার ঢাকার জীবন কে গ্রামের জীবনের সাথে তুলনা করেন- আপনার কি মনে হবে যে আপনার জীবনে বেশি অথবা কম সুযোগ আছে গ্রামের তুলনায়? 64 If you compare your life in Dhaka now to your life back in the village - would you say that you have more or less choices in life than back at the village?	1 অনেক বেশি Much more	2 একটু বেশি Little more	3 একই About same	4 একটু কম Little less	5 অনেক কম Much less	98 DK	99 NA		
4.26 যদি আপনার মোবাইলে ক্যামেরা থাকে তাহলে কি আপনি সেটা ব্যবহার করেন? If your phone has a camera, do you use it?	1 প্রত্যেকদিন Every day	2 কমপক্ষে সপ্তাহে একবার at least once every week	3 কমপক্ষে মাসে একবার at least once every month	4 মাসে একবারের কম less than once a month	5 কখনই না never	98 DK	99 NA		
4.27 আপনি কার সাথে আপনার গুরুত্বপূর্ণ পারিবারিক বিষয় নিয়ে কথা বলেন? 62 With whom do you discuss important family matters?	1 গ্রামে অন্যান্য পরিবারের সদস্যদের সাথে family members in the village	2 গ্রামের বন্ধু, আত্মীয়-স্বজনদের সাথে friends, relatives in the village	3 গ্রামের অন্যান্য মানুষদের সাথে other people in the village	4 ঢাকায় পরিবারের অন্যান্য সদস্যদের সাথে family members in Dhaka	5 ঢাকার বন্ধু, আত্মীয়-স্বজনদের সাথে friends, relatives in Dhaka	6 ঢাকার অন্যান্য মানুষদের সাথে other people in Dhaka	7 অন্য জায়গার অন্য মানুষদের সাথে other people elsewhere	98 DK	99 NA
4.28 এই মানুষ গুলোর সাথে পারিবারিক বিষয় নিয়ে আলোচনা করতে মোবাইল ফোন কতটা গুরুত্বপূর্ণ? 62 How important is the mobile phone for discussing family matters with these persons??	1 খুব গুরুত্বপূর্ণ Very important	2 গুরুত্বপূর্ণ Important	3 কিছুটা গুরুত্বপূর্ণ Partly important	4 কম গুরুত্বপূর্ণ Little important	5 একেবারেই গুরুত্বপূর্ণ না Not important at all	98 DK	99 NA		
4.29 যদি কোন পরিস্থিতিতে আপনি খুবই আবেগ প্রবন হন, তবে এই আবেগ প্রকাশের বা অন্যকারও সাথে শেয়ার করার ক্ষেত্রে মোবাইল ফোনের কি কোন ভূমিকা আছে? 63 If you think of a situation where you experience strong emotions, is the mobile phone important in expressing or sharing these emotions?	1 খুব গুরুত্বপূর্ণ Very important	2 গুরুত্বপূর্ণ Important	3 কিছুটা গুরুত্বপূর্ণ Partly important	4 কম গুরুত্বপূর্ণ Little important	5 একেবারেই গুরুত্বপূর্ণ না Not important at all/not used for that	98 DK	99 NA		
4.30 যদি আপনি আপনার হতাশা এবং খারাপ লাগার সময় মানসিক ভাবে সাহায্য পান, কার কাছ থেকে আপনি সাধারণত এটা পেয়ে থাকেন? 66 If you get emotional help in times of despair and depression, from whom do you usually get this?	1 গ্রামে পরিবারের অন্যান্য সদস্যদের কাছ থেকে family members in the village	2 গ্রামের বন্ধু, আত্মীয়-স্বজনদের কাছ থেকে friends, relatives in the village	3 গ্রামের অন্যান্য মানুষদের কাছ থেকে other people in the village	4 ঢাকায় পরিবারের অন্যান্য সদস্যদের কাছ থেকে family members in Dhaka	5 ঢাকার বন্ধু, আত্মীয়-স্বজনদের কাছ থেকে friends, relatives in Dhaka	6 ঢাকার অন্যান্য মানুষদের কাছ থেকে other people in Dhaka	7 অন্য জায়গার অন্য মানুষদের কাছ থেকে other people elsewhere	98 DK	99 NA
4.31 আবেগের ক্ষেত্রে এইসব মানুষদের কাছ থেকে মানসিক সাহায্য পাওয়া জন্য মোবাইল ফোন কতটা গুরুত্বপূর্ণ? 62 How important is the mobile phone for getting emotional help from these persons??	1 খুব গুরুত্বপূর্ণ Very important	2 গুরুত্বপূর্ণ Important	3 কিছুটা গুরুত্বপূর্ণ Partly important	4 কম গুরুত্বপূর্ণ Little important	5 একেবারেই গুরুত্বপূর্ণ না Not important at all	98 DK	99 NA		

4.32 আপনি কি কখনও মোবাইল ফোনের কারণে গভীর/কঠিন পারিবারিক দ্বন্দ্বের মধ্যে পড়েছেন?	1 হ্যাঁ, ২০ বারের বেশি yes, more than 20 times	2 হ্যাঁ, ১০-২০ বার yes, 10-20 times	3 হ্যাঁ, ৫-১০ বার yes, 5-10 times	4 হ্যাঁ, ৫ বারের কম yes, less than 5 times	5 না, কখনই না never	98 DK	99 NA
67 Did you ever experience intensive/strong conflicts in the family, where the mobile phone was a cause/reason?							
4.33 আপনি কি কখনও গভীর/কঠিন পারিবারিক দ্বন্দ্বের মধ্যে পরেছেন যেখানে মোবাইল ফোন এই দ্বন্দ্বের সমাধান করতে সাহায্য করেছে?	1 হ্যাঁ, ২০ বারের বেশি yes, more than 20 times	2 হ্যাঁ, ১০-২০ বার yes, 10-20 times	3 হ্যাঁ, ৫-১০ বার yes, 5-10 times	4 হ্যাঁ, ৫ বারের কম yes, less than 5 times	5 না, কখনই না never	98 DK	99 NA
68 Did you ever experience intensive/strong conflicts in the family, where the mobile phone helped in solving the conflict?							
4.34 পরিবারিক দ্বন্দ্বের সমাধানের ক্ষেত্রে মোবাইল কিভাবে সাহায্য করে?	1 দ্বন্দ্বের সময় সাথে সাথে ফোন করে সাহায্য অথবা পরামর্শ চাওয়ার মাধ্যমে through calling for help or advice immediately in the situation of conflict			3 অন্য ভাবে other ways:		98 DK	99 NA
How did the mobile phone help in solving the family conflict?	2 কাউকে ফোন করে বিষয়টা নিয়ে আলোচনার মাধ্যমে, যেমন- বন্ধু অথবা পরিবারের কেউ someone to discuss the matter, e.g. family or friends						
4.36 আপনি কি কখনও মোবাইল ফোনের কারণে হয়রানি অথবা বৈষম্যের শিকার হয়েছেন?	1 হ্যাঁ, ২০ বারের বেশি yes, more than 20 times	2 হ্যাঁ, ১০-২০ বার yes, 10-20 times	3 হ্যাঁ, ৫-১০ বার yes, 5-10 times	4 হ্যাঁ, ৫ বারের কম yes, less than 5 times	5 না, কখনই না never	98 DK	99 NA
69 Have you ever been victim of harassment or discrimination involving the mobile phone?							
4.37 মোবাইল ফোনের মাধ্যমে হয়রানি হওয়ার ধরণটা কি রকম ছিল?	1 অনাকাঙ্ক্ষিত ফোনকল unwanted calls	2 আমার নাম্বার অন্য কাউকে দেওয়া হয়েছিল my number given to other people	3 আমার অনাকাঙ্ক্ষিত ছবি তোলা হয়েছিল unwanted pictures taken of me	4 অন্য কোন সমস্যা Other		98 DK	99 NA
70 What was the nature of the harassment by/through mobile phone?							
4.38 মোবাইল ফোন কি কখনও উন্নত চিকিৎসা অথবা স্বাস্থ্যপরীক্ষায় সাহায্য করেছে?	1 হ্যাঁ, ২০ বারের বেশি yes, more than 20 times	2 হ্যাঁ, ১০-২০ বার yes, 10-20 times	3 হ্যাঁ, ৫-১০ বার yes, 5-10 times	4 হ্যাঁ, ৫ বারের কম yes, less than 5 times	5 না, কখনই না never	98 DK	99 NA
72 Has the mobile phone ever been helpful for you to get improved medical treatment or healthcare?							
4.39 দয়া করে বলবেন কি যখন আপনি দিনের বেলা আপনার বাসার কাছাকাছি এলাকায় একা চলাফেরা করেন তখন আপনি কতটা নিরাপদ মনে করেন?	1 খুব নিরাপদ Very safe	2 নিরাপদ safe	3 খুব বেশি নিরাপদ না Not very safe	4 অনিরাপদ unsafe	5 খুবই অনিরাপদ Very unsafe	98 DK	99 NA
73 Please indicate how safe you feel walking alone in the area near your home in the daytime.							
4.40 আপনি আপনার এলাকায় একা দিনের বেলা চলা ফেরা করার সময় যদি মোবাইল ফোন সাথে রাখেন তাহলে কি আপনি নিরাপদ মনে করেন?	1 খুব বেশি Very much	2 বেশি much	3 মোটামুটি somehow	4 একটু A little	5 না, একেবারেই না No, not at all	98 DK	99 NA
74 Does carrying a mobile phone with you make you feel safer when you walk alone in the area near your home in the daytime?							
4.41 দয়া করে বলবেন কি যখন আপনি রাতের বেলা অন্ধকারে আপনার বাসার কাছাকাছি এলাকায় একা চলাফেরা করেন তখন আপনি কতটা নিরাপদ মনে করেন?	1 খুব নিরাপদ Very safe	2 নিরাপদ safe	3 খুব বেশি নিরাপদ না Not very safe	4 অনিরাপদ unsafe	5 খুবই অনিরাপদ Very unsafe	98 DK	99 NA
75 Please indicate how safe you feel walking alone in the area near your home in the darkness.							
4.42 আপনি আপনার এলাকায় একা অন্ধকারে চলাফেরা করার সময় যদি মোবাইল সাথে রাখেন তাহলে কি আপনি নিরাপদ মনে করেন?	1 খুব বেশি Very much	2 বেশি much	3 মোটামুটি somehow	4 একটু A little	5 না, একেবারেই না No, not at all	98 DK	99 NA
76 Does carrying a mobile phone with you make you feel safer when you walk alone in the area near your home in the darkness?							
4.43 আপনি যদি আপনার বাসা থেকে অনেক দূরে যান, তখন মোবাইল সাথে নিয়ে গেলে কি আপনি নিরাপদ অনুভব করেন?	1 খুব বেশি Very much	2 বেশি much	3 মোটামুটি somehow	4 একটু A little	5 না, একেবারেই না No, not at all	98 DK	99 NA
77 If you are moving further away from your home, does carrying a mobile phone make you feel more safe?							
4.44 আপনার স্বাস্থ্য কেমন যাচ্ছে?	1 চমৎকার Excellent	2 ভাল good	3 মোটামুটি So so	4 fair	5 খারাপ Poor	98 DK	99 NA
78 1 in general, how do you rate your health?							
4.45 আপনি কি মনে করেন মোবাইলের সব ফাংশন গুলো ব্যবহার করতে আপনি সক্ষম?	1 হ্যাঁ, পুরোপুরি Yes, totally	2 হ্যাঁ, কিন্তু কিছু অংশ Yes but only partly	3 যথেষ্ট না Not sufficiently	4 বেশির ভাগ সময়ই আমার সাহায্য লাগে I need always help		98 DK	99 NA
80 Do you feel sufficiently capable to use a mobile phones functions?							
4.46 আপনি অথবা আপনার পরিবারের সদস্যরা কি শিক্ষার ক্ষেত্রে মোবাইল ফোন ব্যবহার করেন?	1 বাড়ির কাজ নিয়ে আলোচনা করা Discussing homework	2 পড়ার ক্ষেত্রে সাহায্য পাওয়ায় Getting help in learning	3 দূর-শিক্ষনে Distant education	4 অন্যান্য others	5 না no	98 DK	99 NA
82 Do you or members of your household use the mobile phone for educational purposes (mark appropriate)?							
4.50 সত্য ঘটনা যেমন শাহবাগের ঘটনা বিষয়ে, সর্বশেষ পরিস্থিতি ও তথ্য আপনি কিভাবে পেয়ে থাকেন? [PLEASE MARK EVERYTHING THAT APPLIES]	1 ব্যক্তিগত ভাবে কথা বলে personal talks	2 রেডিও radio	3 টিভি TV	4 সংবাদপত্র Newspaper		98 DK	99 NA
100 Regarding actual events like at Shabbagh, how do you get information and updates on the current situation?							
4.53 শহরের কেমন জায়গায় আপনার বাড়ি/ বাসাটি অবস্থিত?	1 ভালো একটা জায়গায়, আমাদের সুবিধা হয় Very favourable, gives us lot of advantages	2 অনুকূল favourable	3 মোটামুটি average	4 একটু প্রতিকূল Little unfavourable	5 সুবিধাজনক না, আমাদের অসুবিধা হয় Very unfavourable, gives us many disadvantages	98 DK	99 NA
94 How is your home located within the city?							

4.54 ঢাকায় আপনার বাসা থেকে কার্য ক্ষেত্রের দূরত্ব কত?	1 <৫মিনিট <i>Less than 5 min</i>	2 ৫-১০মিনিট <i>5-10 minutes</i>	3 ১০-৩০মিনিট <i>10-30 minutes</i>	4 ৩০-৬০মিনিট <i>30-60 minutes</i>	5 >৬০মিনিট <i>>60 minutes</i>	98 DK	99 NA
<i>95 What is the distance between your home and your workplace?</i>							
4.56 গ্রামের সাথে নিজেকে যুক্ত ভাবার ক্ষেত্রে মোবাইল ফোন কেমন উপকারী?	1 খুব বেশি <i>very much</i>	2 বেশি <i>much</i>	3 কিছুটা <i>some</i>	4 একটু <i>little</i>	5 একেবারেই না <i>not at all</i>	98 DK	99 NA
<i>102 How helpful is the mobile phone for feeling connected with the village?</i>							
4.57 গ্রামের জীবনের সাথে নিজেকে সংযুক্ত ভাবার ক্ষেত্রে মোবাইল ফোন ব্যক্তিগতভাবে আপনার কাছে কতটুকু গুরুত্বপূর্ণ?	1 খুব গুরুত্বপূর্ণ <i>very important</i>	2 গুরুত্বপূর্ণ <i>important</i>	3 কিছুটা <i>some</i>	4 একটু <i>little</i>	5 একেবারেই না <i>not at all</i>	98 DK	99 NA
<i>103 How important is it for you personally to feel connected to the life in the village?</i>							
4.67 ৫ বছর আগের তুলনায় এখন কি আরও বেশি মানুষ গ্রাম থেকে শহরে চলে আসছে?	1 হ্যাঁ, অনেক বেশি <i>Many more</i>	2 হ্যাঁ, কিন্তু কিছু বেশি <i>more</i>	3 একই <i>About same</i>	4 একটু কম <i>less</i>	5 অনেক কম <i>Much less</i>	98 DN	99 NA
<i>122 Are more people migrating from the village to the city than 5 years ago?</i>							

4.67a আপনার বাড়ি গ্রামে অবস্থিত কিন্তু আপনি এখন ঢাকার একটা আলাদা জায়গায় বাস করছেন। সুতরাং, আপনি একই সঙ্গে বিভিন্ন জায়গার সাথে যুক্ত হয়ে বাস করছেন; যেমন, গ্রামে আপনার বাড়ি, পাড়া, গ্রাম, থানা, জেলা, দেশ, এছাড়াও ঢাকায় আপনার এলাকা, পাড়া, এবং আপনার বাসা। <i>Your bari is located in the village, but right now you stay here in Dhaka in a different neighbourhood. So you belong to different units at the same time, your para, gram upazela, country, also the area in Dhaka, the neighbourhood and your basa.</i>							
এখন, এই সকল জায়গার জন্য দয়া করে বলবেন যে আপনি সকল জায়গার সাথে নিজেকে কত খানি যুক্ত মনে করেন। <i>Now, please tell me for all those places & units, how much you feel attached to all those units, for each one.</i>	1 একে বারেই না <i>Not at all</i>	2 একটু খানি <i>A little</i>	3 মোটামুটি <i>middle</i>	4 অনেকখানি <i>strong</i>	5 খুব বেশীই অনেকখানি <i>Very strong</i>	98 DN	99 NA
1 আপনার বাড়ি <i>Your house</i>	1	2	3	4	5	98 DN	99 NA
2 আপনার পাড়া <i>Your para</i>	1	2	3	4	5	98 DN	99 NA
3 আপনার গ্রাম <i>Your village</i>	1	2	3	4	5	98 DN	99 NA
4 আপনার থানা <i>Your Thana</i>	1	2	3	4	5	98 DN	99 NA
5 আপনার জেলা <i>Your Zila</i>	1	2	3	4	5	98 DN	99 NA
6 আপনার দেশ বাংলাদেশ <i>Your country Bangladesh</i>	1	2	3	4	5	98 DN	99 NA
7 ঢাকা <i>Dhaka</i>	1	2	3	4	5	98 DN	99 NA
8 ঢাকায় আপনার এলাকা <i>Your quarter in Dhaka</i>	1	2	3	4	5	98 DN	99 NA
9 ঢাকায় আপনার পাড়া <i>Your neighbourhood in Dhaka</i>	1	2	3	4	5	98 DN	99 NA
10 ঢাকায় আপনার বাসা <i>Your house in Dhaka</i>	1	2	3	4	5	98 DN	99 NA
4.68 শহরে চলে আসার পর, আপনার গ্রামের প্রতি অনুভূতি/নিজেকে গ্রামেরই একজন মনে করার অনুভবটা কেমন বদলে গিয়েছে? <i>123 Since your migration, how did the feeling of belonging/attachment to your village change?</i>	1 আরও অনেক বেশি সংযুক্ত অনুভব করি <i>Feeling Much more attached</i>	2 আরও সংযুক্ত অনুভব করি <i>Feeling more attached</i>	3 একইরকম <i>About same</i>	4 কম সংযুক্ত অনুভব করি <i>Feeling less attached</i>	5 অনেক কম সংযুক্ত অনুভব করি <i>Feeling much less attached</i>	98 DN	99 NA
4.69 গ্রামের সাথে যুক্ত এবং গ্রামেরই একজন হিসেবে গ্রামের প্রতি অনুভূতি থাকার বিষয়ে নিম্নোক্ত বিষয়গুলো কতখানি গুরুত্বপূর্ণ: <i>124 Regarding your feeling of belonging and attachment to the village - how important are</i>	1 খুব গুরুত্বপূর্ণ <i>Very important</i>	2 গুরুত্বপূর্ণ <i>Important</i>	3 কিছুটা গুরুত্বপূর্ণ <i>Partly important</i>	4 একটু গুরুত্বপূর্ণ <i>Little important</i>	5 একেবারেই গুরুত্বপূর্ণ না <i>Not important at all</i>		
1... গ্রাম পরিদর্শন করা visits (your visits in the village)	1	2	3	4	5	98 DK	99 NA
2... যারা গ্রাম ঘুরে এসেছে তাদের কাছ থেকে গল্প শোনা stories by other people visiting the village	1	2	3	4	5	98 DK	99 NA
3... ফোন করা phone calls	1	2	3	4	5	98 DK	99 NA
4... সেখানে এটি পরিবার থাকা... having a family there	1	2	3	4	5	98 DK	99 NA
5... নিজের জমি থাকা having own land	1	2	3	4	5	98 DK	99 NA
6... গ্রামের বন্ধুরা এবং আত্মীয় স্বজনরা... friends and relatives	1	2	3	4	5	98 DK	99 NA
7... গ্রামবাসী... the village community	1	2	3	4	5	98 DK	99 NA
8... স্থির এবং প্রশান্ত গ্রামজীবন... calm and relaxed village life	1	2	3	4	5	98 DK	99 NA
9... ভাল বাতাস, কম যানবাহন... good air quality, less traffic	1	2	3	4	5	98 DK	99 NA

4.47 আপনি অথবা আপনার পরিবারের সদস্যরা কি মোবাইল ফোন ব্যবহার করে নিম্নোক্ত বিষয়ের উপর তথ্য পেয়ে থাকেন? <i>Do or did you or members of your household use the mobile phone for getting information on...</i>	1 প্রতিদিন <i>Every day</i>	2 কমপক্ষে সপ্তাহে একদিন <i>at least once every week</i>	3 কমপক্ষে মাসে একদিন <i>at least once every month</i>	4 মাসে একদিনের কম <i>less than once a month</i>	5 কখনই না <i>never</i>	98 DK	99 NA
1...কৃষিবিষয়ক ... agricultural issues	1	2	3	4	5	98	99
2...স্বাস্থ্যবিষয়ক... health related issues	1	2	3	4	5	98	99
3...ব্যবসার সুযোগের ক্ষেত্রগুলোতে ... business opportunities	1	2	3	4	5	98	99
4...জিনিসপত্রের দামের ক্ষেত্রে ...price information	1	2	3	4	5	98	99
5 চাকরি... job or employment	1	2	3	4	5	98	99
6 পারিবার এবং বন্ধুদের ভালর জন্য... family and friends wellbeing	1	2	3	4	5	98	99
7 ঢাকায় বসবাসের ব্যবস্থা সম্পর্কে তথ্য... housing information in Dhaka	1	2	3	4	5	98	99
8 অতি জরুরি ব্যাপারগুলো যেমন- হরতাল... urgent things e.g. hartal	1	2	3	4	5	98	99
9 রাজনৈতিক বিষয়ক... political issues	1	2	3	4	5	98	99
10 একা একা গান শোনা... listening to music alone	1	2	3	4	5	98	99
11 মোবাইলে একা একা সিনেমা দেখা... watching movies on the mobile phone alone	1	2	3	4	5	98	99
12 মোবাইলে অন্যদের সাথে সিনেমা দেখা... watching movies on the mobile phone with others	1	2	3	4	5	98	99
14 জায়গায় উপস্থিত না থেকে ব্যবসা/খামার চালানো... managing business/farm when being not at the place	1	2	3	4	5	98	99
15 নতুন ধরনের জীবনযাপনের ইচ্ছা... desires for new lifestyle	1	2	3	4	5	98	99
16 মানসিক সাহায্য পাওয়া... getting emotional support	1	2	3	4	5	98	99
4.48 আপনার জীবনে নিম্নোক্ত বিষয়ের উপর তথ্যগুলো কতটা গুরুত্বপূর্ণ? <i>How important are these informations for your life?</i>	1 খুব গুরুত্বপূর্ণ <i>Very important</i>	2 গুরুত্বপূর্ণ <i>Important</i>	3 কিছুটা গুরুত্বপূর্ণ <i>Partly important</i>	4 কম গুরুত্বপূর্ণ <i>Little important</i>	5 একেবারেই গুরুত্বপূর্ণ না <i>Not important at all</i>	98 DK	99 NA
1...কৃষিবিষয়ক ... agricultural issues	1	2	3	4	5	98	99
2...স্বাস্থ্যবিষয়ক... health related issues	1	2	3	4	5	98	99
3...ব্যবসার সুযোগের ক্ষেত্রগুলোতে ... business opportunities	1	2	3	4	5	98	99
4...জিনিসপত্রের দামের ক্ষেত্রে ...price information	1	2	3	4	5	98	99
5 চাকরি ... job or employment	1	2	3	4	5	98	99
6 পরিবার এবং বন্ধুদের ভালর জন্য ... family and friends wellbeing	1	2	3	4	5	98	99
7 ঢাকায় বসবাসের ব্যবস্থা সম্পর্কে তথ্য ... housing information in Dhaka	1	2	3	4	5	98	99
8 অতি জরুরি ব্যাপারগুলো যেমন- হরতাল ... urgent things e.g. hartal	1	2	3	4	5	98	99
9 রাজনৈতিক বিষয়ক ... political issues	1	2	3	4	5	98	99
10 একা একা গান শোনা ... listening to music alone	1	2	3	4	5	98	99
11 একা একা সিনেমা দেখা ... watching movies alone	1	2	3	4	5	98	99
12 অন্যদের সাথে সিনেমা দেখা ... watching movies with others	1	2	3	4	5	98	99
14 জায়গায় উপস্থিত না থেকে ব্যবসা/খামার চালানো ... managing business/farm when being not at the place	1	2	3	4	5	98	99
15 নতুন ধরনের জীবনযাপনের ইচ্ছা ... desires for new lifestyle	1	2	3	4	5	98	99
16 মানসিক সাহায্য পাওয়া ... getting emotional support	1	2	3	4	5	98	99
4.59 আপনি কি সবসময় আপনার সাথে একটি মোবাইল ফোন বহন করেন? <i>115 Do you always carry a mobile phone with you?</i>	1 সবসময় <i>always</i>	2 খুবঘনঘন <i>Vey often</i>	3 মঝঝমঝ <i>Sometimes</i>	4 শুধুমাত্র বিশেষ উপলক্ষে, যখন আমার দরকার হয় <i>Only occasionally, when I need it</i>	5 কখনই না, এটা বাসায় থাকে/অন্যদের সাথে থাকে <i>Never, it stays at home or with other people</i>	98 DK	99 NA
4.60 এমন কোন জায়গা আছে কি যেখানে আপনি আপনার মোবাইল নিবেন না? <i>116 Are there places where you would not take your mobile phone?</i>	1 না <i>no</i>	হ্যাঁ, তাহলে দয়া করে একটা উদাহরণ দিন <i>Yes, please specify</i>			98 DK	99 NA	
4.61 নিচের কোনটি আপনার জন্য প্রযোজ্য? <i>117 What of the following does apply to you personally?</i>	1 হ্যাঁ, অবশ্যই <i>Yes, very much</i>	2 হ্যাঁ, একটু <i>Yes, a little</i>	3 মঝঝমঝ <i>Partly yes, partly no</i>	4 না, তেমন না <i>Not, not really</i>	5 না, একেবারেই না <i>Not, not at all</i>	98 DK	99 NA
1 মোবাইল ফোন দিয়ে আমি সব জায়গায় স্বাধীনভাবে চলাফেরা করতে পারি <i>With a mobile phone, I can move around more freely.</i>	1	2	3	4	5	98	99
2 মোবাইল ফোন দিয়ে আমি স্বাধীনভাবে যে কোন মানুষের সাথে কথা বলতে পারি <i>With the mobile phone, I have more freedom to talk to anyone I like</i>	1	2	3	4	5	98	99
3 মোবাইল ফোনের মাধ্যমে আমি মনখুলে কথা বলার লোক পছন্দ/বাছাই করতে পারি <i>With the mobile phone, I can chose the people I talk to more freely</i>	1	2	3	4	5	98	99
4 ...মোবাইল ফোন দিয়ে আমি আমার ব্যক্তিগত ব্যাপারগুলো নিয়ে কথা বলতে পারি যেগুলো নিয়ে আমি সরাসরি গিয়েও কথা বলি <i>With the mobile phone, I can talk about any private issues that I also talk about in personal contact</i>	1	2	3	4	5	98	99

(continued from last page)	1 হ্যাঁ, অবশ্যই Yes, very much	2 হ্যাঁ, একটু Yes, a little	3 মাঝামাঝি Partly yes, partly no	4 না, তেমন না Not, not really	5 না, একেবারেই না Not, not at all	98 DK	99 NA
5 মোবাইল ফোন দিয়ে আমি আমার বন্ধুদের সাথে যে কোন সময় কথা বলতে পারি With the mobile phone, I can talk to my friends at any time of the day	1	2	3	4	5	98	99
6 মোবাইল ফোন দিয়ে রাতের বেলাতেও কথা বলতে পারি I use the mobile phone also to talk during the night	1	2	3	4	5	98	99
4.62 এই নিম্নলিখিত বিষয়গুলোর সাথে আপনি সাধারণভাবে কতটা একমত অথবা দ্বিমত পোষণ করেন? 117 And in general, how much do you agree or disagree on the following statements?	1 প্রচণ্ডভাবে একমত Strongly agree	2 একটু একমত Agree a little	3 মাঝামাঝি Partly yes, partly no	4 একটু দ্বিমত Disagree a little	5 তীব্রভাবে দ্বিমত Strongly disagree	98	99
1... মহিলাদের তাদের নিজের মোবাইল থাকা উচিত women should have their own mobile phone	1	2	3	4	5	98	99
2... অবিবাহিত মহিলা/মেয়েদের মোবাইল থাকা উচিত unmarried women/girls should have their own mobile phone	1	2	3	4	5	98	99
3 মোবাইল ফোন দিয়ে পুরুষেরা মহিলাদের (স্ত্রী ও কন্যা) অবস্থান ও গতিবিধি আরও বেশি নিয়ন্ত্রণ করতে পারে With the mobile phone, men have more control over the whereabouts of women (wives, daughters)	1	2	3	4	5	98	99
4 মোবাইল ফোন দিয়ে পরিবার তার সন্তানদের(বিশেষভাবে কন্যা সন্তান) অবস্থান ও গতিবিধি আরও বেশি নিয়ন্ত্রণ করতে পারে With the mobile phone, families have more control over the whereabouts of their children, especially daughters	1	2	3	4	5	98	99
5... মহিলাদের তাদের সাথে মোবাইল থাকলে নিরাপদ ভাবে তারা নিজেরাই চলাফেরা করতে পারে having a mobile phone with them, women can move around safely on their own	1	2	3	4	5	98	99
6... বাচ্চাদের মোবাইল ফোন থাকলে বাচ্চাদের কে বাবা মায়ের প্রতি অসম্মানী করে তোলে having a mobile phone makes children disrespect their parents	1	2	3	4	5	98	99
4.63 আপনার কি মোবাইল রোমান্স করার অভিজ্ঞতা আছে, বিভিন্ন ব্যক্তি আপনাকে বারে বারে ফোন করেছে এমন? 118 Have you ever experienced "mobile romancing", being called repeatedly by different other persons?	1 হ্যাঁ, ২০ বারের বেশি yes, more than 20 times	2 হ্যাঁ, ১০-২০ বার yes, 10-20 times	3 হ্যাঁ, ৫-১০ বার yes, 5-10 times	4 হ্যাঁ, ৫ বারের কম yes, less than 5 times	5 না, কখনই না never	98	99
4.64 আপনি কি মোবাইল রোমান্সিং করেছেন কাউকে ফোন করে? 120 Have you ever practiced "mobile romancing" yourself, calling someone?	1 হ্যাঁ, ২০ বারের বেশি yes, more than 20 times	2 হ্যাঁ, ১০-২০ বার yes, 10-20 times	3 হ্যাঁ, ৫-১০ বার yes, 5-10 times	4 হ্যাঁ, ৫ বারের কম yes, less than 5 times	5 না, কখনই না never	98	99
4.65 সব মিলিয়ে আপনার মোবাইল রোমান্সিং অভিজ্ঞতাকে কোন অবস্থানে ফেলবেন ... 119 How would you rate your experiences with "mobile romancing" overall?	1 ইতিবাচক positive	2 আকর্ষণীয়, নতুনকিছু Interesting, something new	3 নিরপেক্ষ neutral	4 আমি অস্বস্তি বোধ করেছি I felt embarrassed	5 আমি হুমকির সম্মুখীন হয়েছি I felt threatened	98	99
4.66 আপনার কি এমন কোন ব্যক্তির সাথে পরিচয় আছে যার সাথে আপনি কখনও সরাসরি গিয়ে দেখা করেননি, কিন্তু তার সম্বন্ধে আপনি মোবাইলেই জানতে পারেন? 121 Did you ever meet someone you never met before in person, but got to know over the phone?	1 হ্যাঁ, ২০ বারের বেশি yes, more than 20 times	2 হ্যাঁ, ১০-২০ বার yes, 10-20 times	3 হ্যাঁ, ৫-১০ বার yes, 5-10 times	4 হ্যাঁ, ৫ বারের কম yes, less than 5 times	5 না, কখনই না never	98	99
4.58 আপনি কত ঘন ঘন নিম্নলিখিত মাধ্যম গুলো ব্যবহার করেন? 110 How frequently do you use the following media?	1 প্রত্যেক দিন Every day	2 কতপক্ষে সপ্তাহে একদিন at least once every week	3 কতপক্ষে মাসে একদিন at least once every month	4 মাসে একবারের কম less than once a month	5 কখনই না never	98	99
1 টিভি ... TV	1	2	3	4	5	98	99
2 রেডিও ... Radio	1	2	3	4	5	98	99
3 সংবাদপত্র... Newspaper	1	2	3	4	5	98	99
4 মোবাইল ফোন কলস ... Mobile Phone Calls	1	2	3	4	5	98	99
5 টুইটার কম্পিউটারে... Twitter on Computer	1	2	3	4	5	98	99
6 টুইটার মোবাইল ফোনে... Twitter on Mobile Phone	1	2	3	4	5	98	99
7 কম্পিউটারে ফেইসবুক... Facebook on Computer	1	2	3	4	5	98	99
8 মোবাইল ফোনে ফেইসবুক ... Facebook on Mobile Phone	1	2	3	4	5	98	99
9 ইমেইল ... email	1	2	3	4	5	98	99
10 ব্লগিং ... blogging	1	2	3	4	5	98	99
11 ... ব্লগ পড়ার মাধ্যমে reading blogs	1	2	3	4	5	98	99
12 অন্যান্য ইন্টারনেটের সাইটগুলো পরিদর্শন করে... visiting other internet sites	1	2	3	4	5	98	99
13 ইন্টারনেট থেকে গান এবং অন্যান্য জিনিস ডাউনলোড করতে downloading music and other things from the internet	1	2	3	4	5	98	99

Thank you very, very much for your valuable time and support in our research work!

“Dear, how much is the importance of mobile phone or how good it is in keeping the relationship between the families is only known to those who use it and whose sons and daughters live outside.”

(Tahmina, villager in Rangpur, Bangladesh)

“Now, with this, everyone will get benefit according to their mode of communication. Those who are highly educated, they are using it for many purposes like office, and so on. Those who are businessmen, they are using it for business purpose. Those who belong to lower class, they use it for talking to their friends and relatives.”

(Ahmad, villager in Rangpur, Bangladesh)

Translocal
Social
Constellations
and
Mediated
Communication
in Bangladesh

HARALD STERLY
University of Cologne

In just a decade, between 2005 and 2015, mobile phone usage has become virtually ubiquitous in Bangladesh, reaching almost every village and corner of the country. Especially for the millions of migrant workers, this has led to an unprecedented level of connectivity, sometimes dramatically changing the lives of migrants and their relatives and friends at places of origin. This study investigates how the advent of this mediated form of communication interacts with changes in the translocal practices and social structure of rural-to-urban migrants and their rural household members. The conceptual framework is based on position-practice relations, affordances and structuration theory. With a mixed-methods approach, the mediatization of communication is traced through changing practices, and the influences on social relations and the way how space and places are constituted: the simultaneity, translocality and individuality that mobile communication affords, is altering both local and translocal practices. Notable processes are the “quotidianization” of hence occasional and exceptional inter- and transactions over distance, and a re-regionalization of communicative practices - changes where interactions regularly “take place”. With these and other shifts, the mediatization of communication leads to considerable changes in the spatio-temporal fabric of migrants' local and translocal social space in Bangladesh.