Mapping radical communities for a new dialogue

Louisa Valeska Scherer
Habitat Forum Berlin | Institute of Urbanism and Urban Studies, TU Dresden

Sadia Sharmin
Habitat Forum Berlin | Department of Architecture in Military Institute of Science and Technology, Dhaka

Abstract
It is no secret that the major burdens of imbalanced urbanization are carried by marginalized communities, as experienced in Bangladesh. Fragmented development interventions initiated by NGOs or the state in the last decade have had only partial impacts on the housing and livelihoods of these social groups. To find new strategies for the right to housing, the Habitat Forum Berlin team focuses on the production and re-evaluation of space within the complex socio-political fabric of self-organized settlements. In our long-term action research in Dhaka’s largest unauthorized settlement, Karail basti, we follow an interdisciplinary approach to understand the settlement’s social-physical structure and identify forms of resistance within the community. Mapping is an important tool for us to initiate participation and generate new dialogue. In the article, we reflect on our interdisciplinary methodologies, especially those that contribute to the counter-mappings that guide our process of collective knowledge-production.

Keywords
Self-organized settlements, re-evaluation of space, interdisciplinary approach, counter-mapping, collective knowledge-production
The story of self-organisation

The launch arrives at Sadarghat at six in the morning. Mujahid helps his new bride Mousumi to fold the mat, which they used for sitting on the deck. Taking the hand of his bride in one hand and the luggage in the other, Mujahid steps in the terminal platform. They will walk till Sadarghat Victoria Park to catch the ‘Azimy Glory’ bus to reach Mohakhali. For the rest of the way, they can take a rickshaw to enter Karail where Mujahid has rented a room. Although Karail is getting expensive nowadays, Mujahid is fortunate to find an acquaintance from his village, who has agreed to let him a room for 2000 taka monthly rent. Mujahid’s new employer lives in Gulshan and has three cars, from which Mujahid will drive the white Toyota Allion from next Sunday. After settling down, Mousumi might also look for a job in any of the NGO schools in Karail. If both of them work, it would be easier to save some money. With these random thoughts about the future, Mujahid asks Mousumi to walk faster. They need to hurry to get a seat because soon the bus will be full with all these people who are walking beside them.’ (Based on field notes taken during October-December 2016 in Karail basti, Dhaka)

How many people like Mujahid and Mousumi arrive in Dhaka city each day, each month, and each year for a job or to start a new life after losing everything in seasonal floods? Many statistics reflect on this movement. The World Bank claims that every year at least 400,000 people move to this capital of Bangladesh (Kabir & Parolin, 2012). The centralized development strategy run by the state and the private sector constantly stimulates internal migration while cities produce job opportunities and dreams of a better life. On arrival, a large fraction of the migrants from rural Bangladesh move to Dhaka city’s unauthorized settlements for shelter. The statistics from different bodies demonstrate a significant incongruity concerning these marginalized populations. For example, a census conducted by the Bangladesh Bureau of Statistics (BBS) in 2014 found 1.06 million people living in 3,399 informal settlements of Dhaka city, whereas UNICEF describes the number as 4 million and 5,000 respectively. It is no secret that the fragmented development interventions initiated by the state or NGOs in the last decade have had only partial impacts on the housing and livelihoods of these social groups. Mainstream development practices are governed through the unequal distribution of resources, which ultimately disregard the ‘right to the city’ for the disadvantaged communities. In such circumstances, people have little option other than to self-organize their living spaces, infrastructures, and basic services to survive. However, with a predetermined concept of informality, the hegemonic system rejects the dynamics of these settlements, which eventually shrinks the possibilities to generate alternative perspectives on the architectural, philosophical, and political question of human habitats. According to the manifesto of the 21st century’s own settlement form by Habitat Forum Berlin (2016), ‘Self-organized settlements are no longer the manifestations of missing development” in the Global South, but a planetary phenomenon. They boost collective modes of deliberation and production, thus generating social value.’

In the Bengali language, the self-organized habitats are called ‘basti’, meaning settlement. However, they are increasingly called ‘slums’- a term the Habitat Forum Berlin (HFB) team disputes. The politics of social exclusion depend on such expressions and their powerful
implications within the development discourse. As Elisa T. Bertuzzo writes (2016, p. 111), the term ‘slum’ ‘evokes images of poverty, depraved surroundings and precarious living conditions that overshadow the good or at least open-to-improve aspects of dwelling and living in such settlements.’ She adds, ‘It does not differentiate: it suggests that the poorer or most exploited social groups worldwide have just one form of housing, the one way of life. However, in Dhaka alone, changing topography or evolutionary conditions - whether a settlement is compact or scattered, whether it is located in an old or a relatively new neighbourhood, on private or public land - have yielded such diverse social and spatial forms that every basti is essentially an isolated case.’

One such particular case is Karail basti- the ‘home and hope’ to around 120,000 urban people and seasonal migrants from the countryside (see figure 01). Situated at the centre of the city and surrounded by affluent neighbourhoods like Gulshan and Banani, this is Dhaka’s largest self-organized settlement and spreads over 190,000 square meters. Over the past thirty years, this settlement has gone through a continuous transformation while resisting the incessant forces of eviction. Despite the 2008 High Court order\(^1\) requiring the administration to provide for resettlement before evicting residents, development-induced evictions have taken place several times in Karail. In April 2012, an unexpected and violent bulldozer operation made 4000 inhabitants homeless because a road had to be broadened (Shiree & DSK, 2012). So-called development projects also threaten the future of the settlement. Despite UN-Habitat’s recommendation for cities to get out of the mind-set of considering informal settlements illegal and degraded, the state has planned to establish a software technology park by displacing the residents from their current affordable housing (Bangladesh Hi-Tech Park Authority, 2014). Due to the High Court order, the project’s future remains undetermined. Although the final verdict is still pending, the inhabitants of Karail fear that the wheels are in motion to make the project happen by any means.

\(^1\) Without prior rehabilitation or resettlement, constitutes a violation of the right to life, including the right to shelter, guaranteed by Articles 31 and 32 of the Constitution, read with Article 15. Constitution, Articles 15, 31 and 32; Government Land and Properties (Recovery of Possession) Ordinance 1970.
As members of HFB, we have been undertaking individual and combined research in Karail since 2012. Questioning the established concept of informality, we aim to shape new perspectives on how spatial research and analysis can be practically applied toward equity, resistance, and liveability. While analysing the housing crisis in the context of Dhaka and the failures of initiatives from the state and NGOs, we recognized the lack of knowledge of the socio-spatial dynamics of informal settlements and the production of space in our progressively transforming built environment. Conventional development proposals and policymaking are largely done with an absence of empathy toward self-organized settlements like Karail. As a result, cookie-cutter high-rises, peripheral resettlements and back-to-village programs are developed, which have proven to be catastrophic in Bangladesh (Hussain et al., 2015). Dominant definitions of informal settlements not only disregard the rights and contributions of the dwellers, but also devalue the opportunities to generate in-depth research on affordable housing and inclusive planning.

Following an interdisciplinary approach to take action in the neighbourhood, we have been exploring means of collaboration with inhabitants, community-based organisation leaders, and housing advocacy platforms (e.g. Coalition for the Urban Poor, Bangladesh Legal Aid and Services Trust). We share these experiences to initiate further discussions on rethinking prevalent development perceptions and exploring alternative approaches against top-down planning practices.

**Habitat Form Berlin: Searching for Alternative Approaches**

Habitat Forum Berlin (HFB) is a non-profit organisation working towards a critical housing and urban politics – a politics that considers and realizes human beings’ dignity first. HFB is to be understood as a platform for continued and practical exchange of ideas and know-how. It unites researchers from various disciplines such as art, architecture, urban planning, sociology and geography.

Active in Karail since 2010, the HFB team’s investigations into socio-physical structure have been guided by questioning established characterizations: How do people shape self-organized spaces? How do they use the limited space and organize daily life? How does the growing community arrange their various infrastructure systems? What are the residents’ thoughts and requirements for appropriate accommodation? Are there potentialities for integrating this settlement into formal planning processes?

We both studied architecture and urban planning, and met in 2016 through this socio-physical mapping in Karail. Our research continues to contribute to HFB’s long-term study. Sadia’s research concentrates on the spatial dynamics in Karail and interdisciplinary means of collaboration for collective knowledge-production while Louisa analyses the multifunctional uses of space in Karail, its creative potential and how it could be visualized.

Being trained as architects, we both shared similar queries and confusions while approaching a self-organized settlement like Karail. We (Louisa, a foreigner in Dhaka, and Sadia, a local in Dhaka) both become outsiders in Karail, and over the last four years, this
settlement has linked us to collaborate and learn from each other. Although our work process differs, we share a parallel interest in mapping as a tool for thinking together.

**Exploring Tools: Mapping**

Harley (1992) and Wood (2010), two of the most prominent authors in critical cartography, argue a map and its creator (re) produce social structures and power relations. Through selection of what is depicted and what is not, the mapmaker decides whether specific content is worthy of consideration. On any official map of Dhaka, there is a blank void where Karail’s dense building structures should be represented. The void on the map establishes the authority’s stance on Karail as unworthy to be shown, fostering the settlement’s ongoing exclusion from official urban planning processes.

In exploring means for an effective exchange with the inhabitants, we learned about the social maps of Karail. Community-based organisations regularly create these maps visualising demographic and spatial details in collaboration with NGOs. For deciding infrastructure development actions in the settlement, they organize participatory mapping sessions to gather related information, such as which road to repair; which households need sanitary latrines; where to add a drinking water line. These community-produced social maps give insights to the social dynamics of the community and provide a counterstatement to the data given by the authority, which leads us to elaborate on the possibilities of mapping within our long-term study in Karail.

Mapping can be described through multiple perspectives. We use mapping as a multi-purpose tool to work and sketch on-site for recording empirical measurements. Here, the result is comparable to a raw draft, which usually can only be read by the field researcher herself. We also use mapping as a means of participation to involve Karail residents in the research process, thereby uncovering much-hidden information of the neighbourhood, and illustrating residents’ conceptions of housing and habitats. As described by Iconoclasistas (Argentina) in their Manual of Collective Mapping (2018, p. 09): ‘Mapping should be part of a wider process, (…) a boost for collective participation, a challenge to hegemonic areas, the driving force for creation and imagination, a deep analysis of key issues (…). In this way, mapping does not lead to transformations by itself. Mapping is connected to an organisational process by way of collaborative work in graphic and visual platforms.’ Maps visualize, combine, and evaluate diverse quantitative and qualitative data, making information accessible and readable for non-academics. This creates further opportunities to integrate results into planning processes. Therefore, we consider mapping, not as an ‘end product’ but a ‘beginning’, which takes us to the next stage of discussion and decision-making.

The map, however, is a form of representation that in public discourse receives little attention. Recent research in critical cartography recognizes maps as complex instruments rather than mere representations of the earth’s surface, uniting theoretical criticism with practice. On the one hand, it questions the common spatial concepts proclaimed in the traditional cartography of the global north. On the other, it actively opposes this dominant

Counter-maps acknowledge the voice of marginalized groups in advocating their interests. Critical cartography as practice makes marginalized communities visible and initiates opportunities to recognize their spatial production against dominant hegemonic planning practices. We investigate to what extent techniques such as counter-mapping and participatory mapping can serve as tools for the visualization and analysis of spatial practices, and forms of resistance.

Notes from Sadia

In the context of the socio-physical mapping project of HFB, I first entered Karail basti in 2016, intending to collect anthropological and sociological knowledge on self-organized production of space. For me, discovering mapping as a tool for collective thinking has been a journey of trial and error for the last four years. How can I narrate this process without evoking glimpses of Karail? In an attempt at reflection, I recall three moments: tracing walking-rhythms in the street; observing the interior of Akhi’s house (Akhi is a community leader in Karail); a participatory mapping session in a community library space.

An Afternoon Walk

‘On my way to Akhi’s house, I find myself in the middle of a family fight on the street! The curious neighbours have made a small crowd for which I have to slow down a bit. In the nearby tea shop, men are sipping tea, smoking cigarettes, while watching a live cricket match between Bangladesh and Pakistan. A chorus of scream comes out when Sakib Al Hasan misses a catch. I pause to see the score on the TV screen placed on a wooden shelf attached to the tin wall of the shop. In the first floor wooden veranda, a woman is drying her wet sari. Small pots of blooming Nayantara2 are hanging from the rope. Suddenly, a street dog barks at me. I ignore him and keep walking. Turning left, I come across a narrow street. It smells, probably because of the leakage in the underground sewerage pipe. I cross the road consciously to save my white salwar3 from the mud water. At my regular pace, I turn right. Within a minute, I enter a feast! A long table shaded with colourful shamiana4 blocks the road with blue plastic chairs on both sides. I count the chairs; 30 people can eat at a time. Ceramic plates and glasses are placed neatly on the white polyester tablecloth. In one corner, I see a temporary installation of a kitchen sink and plastic water drum, to wash hands. On the side of the road, the local cook Milon Mia is stirring the mutton biryani in a big aluminium pot placed on a makeshift brick stove. The aroma of the spices and butter fills the space while flames from the stove heat the surrounding air. A small boy adorned with a red turban seems to be the main attraction of the event. The feast is arranged to celebrate his circumcision. A group of teenage boys are playing popular Hindi songs on their phones and taking the best advantage of the rented loudspeaker. I turn back to take a shortcut to reach the Banyan tree road. Under the tree, a van cum vegetable shop is full of fresh eggplants, papayas, tomatoes, and bitter

2 Nayantara: Catharanthus roseus, commonly known as bright eyes, a species of a flowering plant.
3 Salwar: Traditional Bengali trouser.
4 Shamiana: A ceremonial tent, commonly used for outdoor parties, weddings, feasts, etc.
gourds. Sitting on the adjacent wooden bench, two men are idly playing cards and chewing betel leaves. At the end of the road, in a corner, one man is selling freshly cut guava mixed with spices. Children surround him with five-taka, ten-taka notes to buy the spicy guavas. Crossing the corner, I arrive at a tea shop. One woman is pouring hot tea in the cup with an orange cat in her lap. I know why Akhi calls her ‘biral beti’ (cat-lady); always busy with her cats. Opposite the shop, a red cotton drape is hanging from a door lintel. I move the curtain and enter Akhi’s house.” (Based on field notes taken during October-December 2016 in Karail basti, Dhaka)

This particular fieldnote reminds me of how overwhelming the first few weeks were to catch a rhythm in processing the numerous details of spatial dynamics in Karail streets. The regular movements, observations, and interactions with people were slowly restructuring my views on space and everyday life. The experiences I was gathering in Karail, were more than my imagined picture which surely was partially influenced by the mainstream portrayals of self-organized settlements. In the process of documenting these moments, I questioned myself about the possibility of creating a comprehensible narrative explaining the fluidity of space, the creative improvisations, the nature of temporariness, the continuous transformation, and the forms of resistance that exist in Karail. Is it possible to grasp the potentials when we are biased with one-directional commentary on places like Karail?

Meanwhile, new thoughts came in the scenario. “You are not from an NGO? Why are you here? What are you learning?” Karail people asked me frequently. The verbal explanations seemed not articulated enough. Their curiosity, confusions, and queries made me realize the necessity of sharing collected knowledge not only in words but in an alternative way that might engage them in the process. Therefore, in the course of absorbing these intangible experiences of time and space, I was also in search of means of connecting these fragments of everyday life and visualizing stories against the dominant narrative. Absence of boundaries distinguishes everyday life with an ambiguous spatial differentiation (Felski, 2000), which made me wonder for months: How to start? And from where? It was hence a spontaneous decision to invest time and attention, whether being a silent observer, a listener, a person in conversation, or a stranger in the street (see figure 02).

**Figure 2**

Karail street and market area. **Source:** Sadia Sharmin
Ordinary Stories

‘Akhi’s small room is full of objects: a bed, a big red Walton refrigerator, a showcase filled with crockery, a metal shelf to keep the cooked food and regular kitchen utensils, one blue plastic drum for storing water, a homemade water purifier, one big bucket for rice storage. On top of the showcase, the flat LED television monitor is always turned-on; the channels keep changing in regular interval. Netted bags of onion and garlic are hanging from the spikes on the plastered brick wall. I am sitting on the bed, having my first cup of tea in the morning. The space between the bed and the showcase was a performance stage a few moments ago. Alamin (Akhi’s son) and his friend Sajal showed me the dance they are going to perform at a school program next week. The neat cement-finished floor is now preparation space for Akhi to make this season’s olive pickle. She is sitting on a piri® and grinding garam masala with shil nora®. The boiled green olives are put in a pink plastic mesh strainer; garlic and dried chillies are in a stainless steel plate. The only door of this room is always open except at night during sleeping. Akhi is talking to Mousumi (Akhi’s tenant) while putting her finely grained masala in a recycled glass jar of Nescafe. Mousumi is drying clothes in the courtyard. Suddenly, two women appear at the door addressing Akhi. Both are Akhi’s colleagues in the UPPR7 project and neighbours. They are supposed to have a meeting on a survey in Karail. They enter the room and sit on the bed. I know one of them; Ashik Noor from the Banyan tree road. The meeting goes on, and Akhi continues her pickle preparation. In-between their conversation, Ashik Noor asks Akhi, ‘Need a hand?’ Without waiting for a reply, she spreads the plastic sheet (that Akhi uses to cover the bed during meals) on the bed and takes the boti® from the floor to cut garlic. The other woman sits on the floor and grinds the rest of the masala when Akhi goes out to order tea for all of us. When she is back, I would be ready for my second cup.’ (Based on field notes taken during October-December 2016 in Karail basti, Dhaka)

This note portrays a fragment from a casual November morning at Akhi’s house in 2016. The HFB team rented a room there for three months, creating the opportunity for me to observe their daily life thoroughly. Akhi’s house is a collective residence like almost every other house compound in Karail. There are eleven rooms. Ten families occupy ten of those, and share lavatories and a narrow courtyard along with the cooking, washing, and bathing area in the compound. Akhi uses one room as the office of ‘Sundarban Somobay Somiti’, one of many micro-credit organisations in Karail basti. She and her husband Humayun founded the somiti along with some friends from the community. Akhi, who came to Karail in 1999 as the young bride of Humayun, has made this ‘house’ a ‘home’ over the last eighteen years. This semi-pucca® house has taken its shape year by year, starting with just a few rooms supported by bamboo walls in 2002. It seemed logical to start from Akhi’s house to gather knowledge on women’s everyday life in Karail. Being trained as an architect, no doubt I began by studying the physical structure, the multipurpose use of space and furniture, the

---

5 Piri: A small wooden seat, especially used in Bengali houses while cooking and working in the floor.
6 Shil Nora: A traditional stone grinder for spices widely used in Bengali kitchens; however, it has been increasingly being replaced with modern appliances.
7 UPPR: The Urban Partnerships for Poverty Reduction (2008-2015) was an urban poverty reduction programme in Bangladesh. It was supported by UKaid, UNDP, the Government of Bangladesh (GOB) and the beneficiary communities.
8 Boti: A local cutting instrument used in the kitchen to cut fruits, vegetables, fish, meat, etc.
9 Semi-pucca (semi-permanent): This term is applied to define the physical condition of a house where walls are made partially of bricks, floors are cemented and roofs of corrugated iron sheets.
spatial transformation that occurred with changes of activities and time. However, these spatial analyses only made sense when blended with the narratives from Akhi (house owner), Nazma (Akhi’s friend who works at the somiti as a cashier), or Mousumi (Akhi’s tenant). The distinct relationships and power dynamics among these users of the same house compound and the narratives of these ‘ordinary’ women revealed not only the stories of struggle, exploitation, self-organisation, and resistance, but also courage, hope, and aspiration.

Aiming to engage them (the residents at Akhi’s house compound) in the process of documentation, I started to map their everyday life. The resulting maps incorporated the inhabitants’ memories, letters, and thoughts on Karail alongside the fluid spatial boundaries of their living spaces and the nature of their synchronized collaboration in the shared spaces (see figure 03). In the mapping process, I explored means of storytelling which emerged as a continuous, participatory, engaged, and experiential practice. Along with my HFB

Figure 3
Ordinary stories – Mapping everyday life in Karail.
Source: Sadia Sharmin
teammates, I organized an exhibition-cum-discussion session in Karail in December 2016 to share our collective involvement in the community. It was not the ‘outcome’ on which we focused but the ‘process’ itself, that helped us realize how mundane details of everyday life shape our spaces, and how mapping can engage a group of people in participation. Being aware of the consequences of the top-down approach, I believe in working with the community rather than working for the community. This participatory mapping practice allowed me to explore the scope and the means of work within the community and move forward.

**Fridays in Karail**

‘It has been raining since morning. The heavy raindrops on the tin roof create a rhythmic sound-effect which makes us talk louder to each other. To start today’s session, we are waiting for Rakib, Imran, and Urmi. Thanks to Mala that we found this room. Although the rent is high (8000 BDT/month), it is bigger than the previous space. It is comfortable now to have a session with twenty participants. The bookshelves are on the end wall of this rectangular room, and three small carpets cover the cement floor for sitting. Opposite the bookshelves, the only brick wall of the room was blank a few days ago. Now, the painting of Rabindranath Tagore and posters of Jahanara Imam and Shafi Imam Rumi make this rough wall bright. Since the last three sessions, we are working on the future map of Karail and trying to visualize our thoughts and aspirations. Riyaad and Lamia are now discussing the lakeside vegetation on the map while Mania is finalising the details of the market shops. Liza is organising the books in their handmade wooden shelf; Nusrat and Hasan are playing chess. Sonia is writing the names of today’s participants in our mapping logbook; I am happy that she is overcoming her nervousness to express ideas through drawing, and getting better in arguments as well. Today, we want to start colouring the map if the drawings are complete. Outside, it’s drizzling now. Before it starts to rain heavily again, I hope everybody will arrive, and we can start the session soon.’ (Based on field notes taken during October 2019 in Karail basti, Dhaka)

‘Shaheed Rumi Memorial Library considers itself as a politically conscious social organization’ – said Rafsanul Ahsan Sazzad, the founder of the library during a conversation between us in 2019. Officially, the library started its journey in Karail basti with a team of five members in October 2014. An idea of collective reading and discussions on life and society with the children and youth of Karail, made Sazzad instigate this platform. Although they use the term library for this space, carrying a collective ideology against the hegemonic system and believing in the power of resistance from the grassroots, the group expands its activities and actions beyond reading. They represent strength against the authoritarian perspective and challenge the limitations of informality. A space like this is rare even in the alleged formal systematic neighbourhoods of Dhaka.

In December 2018, I joined them, intending to study their organizational framework. While documenting their involvement within the community, I realized the necessity of a

---

10 Jahanara Imam (1929 – 1994) was a Bangladeshi writer and political activist, who is known for her efforts to bring those accused of committing war crimes in the Bangladesh Liberation War to trial. In her memoir about the war, *Ekatorer Dinguli*, Rumi (her son) was portrayed as the premier character.

11 Shafi Imam Rumi (1951 – 1971) was a guerrilla fighter of the Bangladesh Liberation War, son of Jahanara Imam.
fair exchange of knowledge and information for an effective collaboration between two parties. We started the project ‘Dhaka Memory’ in June 2019, aiming to explore drawing as a means of storytelling. Every Friday in the library, these participatory drawing sessions allowed us to brainstorm collectively and realize the power of visuals. The unique drawing styles and creative input from the children made the initiative a success when the majority of the participants stopped saying ‘I cannot draw.’

The three-month-long (June-September 2019) spontaneously opened the door toward the next step. To generate discussion on informality, self-organisation, and resistance against the dominant strategy, we now look into the practice of mapping as a means to visualize individual and combined knowledge of our territories. Since October 2019, we have been producing maps through participatory mapping workshops to identify essential concerns of everyday life experience in the settlement (see figure 04). Being inhabitants of Karail, the participants’ contribution in mapping reveals much-hidden information of the neighbourhood. Visualisation of this collective knowledge allows us to examine various issues in Karail, e.g. which streets are not safe for the young girls and why; which shop is popular among people and why; how spaces for gardening are distributed among people; why different clusters are named after local influential people, and how they are involved in maintaining the power structure of the settlement. Mapping is a process that allows us to think together. Producing critical maps on Karail has made us aware of the settlement’s socio-political dynamics which constantly stimulate the productions and changes of space; moreover, through these interactions, the youth are starting conversations on liveable habitats and gathering ideas about the future of the settlement. Through workshops, we have been producing aspiration maps. One such map is Karail 2029, that illustrates the desires of Karail inhabitants (predominantly the second generation of the settlement). This map portrays ideas and proposals from the participants such as farming along the lakeside, the possibilities of urban food production, community green space and recreational zones. Reopening of the boat station is one of the prime proposals from the participants, which had been closed by the city authority since 2016, restricting the inhabitants’ mobility.

Figure 4
Participatory mapping sessions with the youth and children of the community. Source: Sadia Sharmin
Notes from Louisa

Since 2012, I am moving through Karail with open eyes, nose, ears and mouth. I observe and record new structures, traces, fragments, snippets, movements, new or familiar smells, noises, and recurring words. In a certain street, a group of children sings a song called 'Ay, bideshi kaaoa!' (Hey, foreigner crow!) again and again anytime they can figure me out approaching. During my fieldwork, I walk up and down this street regularly. Arriving there, I even expect their laughing calls. From Nadia, my translator I know that these are not well-meant, rather rude lines of text. Still, it feels like a returning game. At the beginning of my studies of architecture and urbanism at university, I considered mapping as an act of measuring and drawing physical structures supposed to be recorded on paper. Later I probably would add atmosphere and details. Mapping and researching in Karail taught me the significance of moving on-site with an open mind as well as getting acquainted with the surroundings, its residents, its rhythms, its sounds, walk through it, listen, smell, sit and wait. This is when the mapping process begins.

In the context of the fieldwork for my current PhD project at TU Dresden in cooperation with HFB, I identified three focus areas to study the use of Karail’s space in detail and to explore the potentials of mapping methods. After getting acquainted with the area, I start to sketch and measure the built environment in cooperation with the neighbours. I supplemented sketches with demographic data: how many people live in the 5 to 20 m² room in the corrugated iron hut? How much rent do they pay? Karail's homes are significantly smaller than those on the opposite side of the lake surrounding the settlement’s peninsula yet it is no secret that Karail’s residents pay higher rents per square meter than their wealthy neighbours in Gulshan and Banani. Assembling an initial rawly-drawn map with the data, I add further details such as the ground structure and surfaces. Water pipes, breaks in the ground to the canal below, ledges, pots, trees, foundations, metal anchors, thresholds as well as moveable items like chairs, textiles and dogs find their space on the map. Everything has a meaning here, every crack tells a long story. If I ask Akhi which objects in her household have a special meaning for her, she doesn't understand the question at first, and then explains to me that she saved and struggled for every single object, every piece of furniture and that she associates a story and specific memories with it. With the help of mapping methods, I explore ways to combine this intangible spatial knowledge with tangible data like the built environment. Conducting interviews and repeated observations, spending time in the courtyards and tea stalls in the street I learn how people in Karail use and organize the available space. Karail’s building structure is very dense, open spaces are scarce. Almost every space is used commonly and in various kinds of ways and often simultaneously.

Street spaces are not only transitory spaces but also spaces to meet and exchange news. Many retail store owners use the area in front of their shops as sales areas; attractively draping their goods or offering seating on colourful plastic stools or wooden chairs. Anyone who wants to order a new salwar kameez is offered one of these mobile seats to take time to inspect various fabrics the tailor spreads out on the neat floor of the tailor’s shop. Not only

---

12 Salwar Kameez: Traditional Bengali female cloths.
customers find a place on these chairs. Owners of neighbouring shops, neighbours as well as friends come by for a chat or tea.

Turning from a shopping street into a side street, one reaches housing compounds. Each family or household lives here in one room among several huts made of corrugated iron or brick, which form an inner courtyard. Within a socio-physical mapping project in 2012, we measured and sketched 15 such compounds spread throughout the settlement of Karail. We asked the family members about their daily life and activities in their housing environment. Neighbours within the same compound share their courtyard with attached kitchen and bathing area in common. Based on the mappings we could roughly evaluate how much space each person is renting as a private space of a room in a hut and how much common space they can use, mainly the courtyard. Thus, they use on average more than twice as much common space as the private room they rent in a hut. By sharing multifunctional common spaces, residents of Karail very practically extend the limited margin of space available to them.

Over the last few years of settlement growth, these courtyards have become smaller and smaller to make space for more rooms to rent out. Yet they continue to incorporate multifunctional uses (see figure 05). Women and children spend their main time here during the day. Women cut vegetables, meat, fish and onions sitting on the threshold of their room. On a thick board made of stone, they chop chilli, ginger and garlic. The kitchenette with a gas stove, shared by all families of the homestead, is the heart of the courtyard. The housewives coordinate who gets the opportunity to cook and when. A water pump has become an integral part of many courtyards since 2013, each connected to an underground freshwater reservoir. Its water is used for showering, brushing teeth, cooking, washing and rinsing. When a neighbour brushes their teeth at the pump in the yard in the morning, he or she can exchange news with neighbours at the same time. It just happens by the way. Residents try to use even small corners of the yard to grow vegetables. The children explore the courtyard and seem to know all climbing possibilities. As a child, you will easily find a playmate anytime among the many neighbouring children. When a neighbour goes shopping for food, another one keeps an eye on the playing children.

Even the bed takes on multifunctional uses. In almost every room of a household, often not larger than eight square meters, there is a bed made of wood. In many cases it takes up half of the room’s space. At night, the whole family sleeps here. A plastic sheet laid out for protection transforms it into a dining table during the day. Guests are welcomed here for tea and food and the children do their schoolwork in the afternoon. Under the bed are stored treasures, spices and other objects in plastic containers. Akhi told me that it is important to raise the bed with one brick under each foot, to be protected from rats, rainwater, mice, and insects. The bed represents a raised platform, an additional level in the room that offers shelter.

---

13 As female residents spend specifically more time at home and in the courtyard than males, spending a significant amount of time during the day at tea stalls and in the street, we added 7m2 to the calculation for male persons.
These three spatial examples—street space, courtyard and bed within the private space—illustrate the multifunctional and changing use of space in Karail throughout the day. Transitory areas such as the street become flexibly used spaces to meet, to exchange news, to linger. At festivities such as weddings, the same space hosts events and collective experiences. By combining activities, using the same space for different activities and sharing it in common, inhabitants widen their scope of action. As part of my research, I try to develop adequate ways of visualising such multifunctional uses as well as Karail's rapid development. In 2017, when more than 7000 houses were burnt in a massive fire, we documented the boundaries of the fire as well as the process of reconstruction. Karail's community representatives and external supporters reacted to the risks of the narrow and dense structures by enlarging the width of streets and spaces between buildings. Some owners took the opportunity to buy neighbouring plots of land to build larger housing units on them. Others tried to rebuild the structures with permanent building materials. Together with other members of HFB, we documented those reconstruction processes to understand community tactics and reactions in handling an unexpected hazard.

**The Process continues**

The multifaceted housing crisis and the negligence of urban administrations leave the marginalized communities no other choice than to self-organize their living spaces in the city. Dhaka’s Karail Basti is just one, though a prominent and much-discussed example of self-organized settlement. The inhabitants here have been fighting for their basic rights as citizens of the city for more than two decades.

We entered Karail intending to explore the definition of contextual spatial parameters and develop site-specific integrated solutions. In the course of our long-term study in Karail,

---

**Figure 5**

Distribution system of electricity (left); Sketches on-site (middle);
Multiple uses of the courtyard (right)

*All sources: Louisa Scherer*
we have used mapping as a technique to elaborate alternative ways to combine and visualize research data, experiences and stories from the community. For us, mapping is a process that opens new possibilities for evaluating space. For the community, mapping is a practical tool to get an overview of existing infrastructures and their condition and to decide on this background how further funds could be used.

The maps resulting from our work oppose predominant representations of Karail and contribute to the research approaches of critical cartography. Critical mapping practice helps reveal the invisible and intangible knowledge of the community needed to challenge prevailing housing discourse. The maps visualize the rapid changes of the settlement structure, the fluidity of spatial boundaries, and the ways inhabitants deal with dense spaces through multifunctional usages. These reflections are crucial for examining the failures of conventional design and planning proposals for affordable housing and resettlement projects. Participatory mapping workshops also open opportunities for the residents to reflect on their thoughts about liveable habitats, and the future of Karail. Inhabitants’ contributions in the mapping process depict not only the existing situations but also the scope of improvisations in terms of future development. Thus, critical maps generate opportunities for collective knowledge-production against a top-down decision-making process.

Surely it is not enough to merely present and visualize findings and spatial practices. Maps and the knowledge they communicate must be recognized, processed, and applied by policy makers. Planners and decision-makers need to consider the spatial solutions developed by self-organized settlers while designing housing, settlements or cities. However, new practices can only arise when we begin to question the dominant discourses and start to fill the gap of knowledge about self-organization. Acknowledging the forms of resistance and potentials in self-organized settlements requires an approach free from predetermined concepts. In this scenario, strong and persuasive maps can draw attention to the spatial production of marginalized groups. Moreover, mapping as a practice opens possibilities to learn and work with these communities, which eventually generate new dialogue. Therefore, counter-mapping on the intersection between theory and activism can be used as a tool to create visibility of marginalization, and as a starting point for further action. Mapping helps to analyse the fluidity of space in self-organized settlements against common norms of spatial standards. Results can be used for planning processes for housing and settlements, which do not only offer safe and appropriate affordable housing but working opportunities, flexible spaces to meet and streets full of life and children, who know their area and sing songs making fun of passers-by.

**Funding Details**

The development of this work was part of the workshop “Radical Housing Encounters: translocal conversations on knowledge and praxis” which was supported by an International Workshop Award from the Antipode Foundation.
References


