TOPIC 6: URBAN ECOLOGY AND CLIMATE

06.101 - PATHER PANCHALI: DIVERSITY AND INCLUSION IN DESIGNING SIDEWALKS IN DHAKA, BANGLADESH

Arundhuti Dey^a, Najmush Shaker^a, Nusrat Jahan Mim*

a Bangladesh University of Engineering and Technology
Dhaka-1000, Dhaka, Bangladesh; deyarundhuti8@gmail.com, najmush03@gmail.com
*Harvard Graduate School of Design
MA 02138, Cambridge, MA, United States.

Abstract

The rapid urbanization, accelerated mobilities, and burgeoning growth in the informal economy have generated an urgency in rethinking the sidewalks of Dhaka city as one of the most dynamic elements of urban street life. Sidewalks in Dhaka, being a non-privatized, taxfree urban space, have always provided many informal workers access to the city's growing economy. The temporal changes of activities on the sidewalks have not only enriched Dhaka's unique cultural life but also supported the co-existence of different economic classes in a competitive capitalist urban setting. However, to avoid increasing traffic congestions and to achieve a global city aesthetic, recent infrastructural city development interventions are focusing on transforming the sidewalks only as a street component for uninterrupted pedestrian movement. Such functionally linear thinking around sidewalks has resulted in wider roads, narrower sidewalks, evictions of street vendors and other service providers, and hence, economic and cultural marginalization of the city's significant portion of the informal workforce. This paper documents the stories (Pather Panchali means stories of the streets) from five dynamic sidewalks at five different areas of Dhaka city to make such marginalization spatially visible and provides alternative frameworks for the future development of diverse and inclusive sidewalks.

Keywords

Sidewalks, Transformation, Informal Workforce, Urban Street, Development.

1 Introduction

The infrastructure of the cities in the Indian sub-continent has developed centering a more pedestrian-oriented mobility pattern (Gehl and Gemzoe, 2003). These mobilities have always been accompanied by different cultural activities ranging from selling daily groceries to services like mobile phone balance recharge, shoe cleaning, hairdressing, umbrella repairing, etc. The colonization of the sub-continent and the beginning of the industrial revolution had initiated the idolization of the western philosophy of city planning (Robinson, 2002). In this era, "the phenomenon of universalization, while being an advancement of mankind at the same time constitutes a sort of subtle destruction, not only of traditional cultures, which might not be an irreparable wrong but also of what I shall call for the time being the creative nucleus of great civilization and great cultures" (Frampton, 1983:147). Much of the urban growth is

now taking place in the developing world rather than the developed world but still, theories of city planning remain rooted in the developed world (Roy, 2005). Cities in developing are still being built on the conceptualized model of the Western world. Dhaka city is not free from this phenomenon.

In the journey of four hundred years, Dhaka has transformed from a small trading town to a Megacity. The gradual development process of Dhaka as a traffic-congested and pedestrian-unfriendly city can be traced back to the time it started to become a car-oriented "modern" city. There is a stark difference between the urban fabric of old and new Dhaka, later of which has not yet been successful to accommodate its millions of people.

In context of cities like Dhaka, public spaces are an important urban feature and sidewalks are incredibly malleable public spaces, where informal workers, like street vendors, waste pickers, beggars, rickshaw pullers, CNG drivers get an access to participate in the city's economy (Country report by Bangladesh Bureau of Statistics, 2012). Hence, sidewalks (defined or undefined) in Dhaka are the places, where pedestrian mobilities have always been accompanied by a range of socio-economic activities. However, with the growth of Dhaka's traffic, the urgency of widening the streets by narrowing the sidewalks, gradually "criminalized" such socio-economic activities. Being inspired by the developed cities from the west, the recent design and developments of sidewalks in Dhaka express great negligence toward these social and cultural parameters that have always been an integral part of Dhaka's city life (Husain, Yasmin, and Islam. 2015)

This paper investigates such exclusions of social-cultural context from Dhaka's sidewalks. Based on a three months long fieldwork at 5 sidewalks at 5 different areas in Dhaka city this paper documents those scenarios/stories of the sidewalks that can hardly reach urban designer's table while making decisions around urban development. This paper argues that incorporating a more empathetic and localized approach to spatial planning at an urban level requires a thorough understanding of a specific region, locality and critical analysis of climatic and cultural sustainability.

2 Background

Sidewalks are physical as well as cultural legacies of a city. These places also act as inclusive public spaces in the context of urban settings. So, understanding these spaces requires an understanding of the city's heritage and context. The historical shreds of evidence help us to understand the relationship between these public spaces and society. Public spaces in this subcontinent has a long thread of evolution. A climate that facilitates barefoot walking and shadows of trees turned towards universal development followed by colonial rule and industrial development. As the western standards of development are now rethinking how to create a more humane and accessible city (Dear, 2002), it might be the time we review our growth to satisfy sustainability aspects.





Figure 1: Fresh fish selling, processing (left) and burgaining at a vegetable cart is going on (right) by the roadside.

Kahn (1995) writes that the paradigm of 'sustainable development' described in Agenda 21, rests on three conceptual pillars. These pillars are 'economic sustainability', 'social sustainability', and 'environmental sustainability'. Economic sustainability, by way of growth, development, and productivity, has guided conventional development in the past. While on the other hand 'Social sustainability' consists of notions like equity, empowerment, accessibility, participation, sharing, cultural identity, and institutional stability. It seeks to preserve the environment through economic growth and poverty alleviation. The theoretical framework proposed by Kahn suggests that economic, social and environmental sustainability should be integrated and interlinked. This suggestion of Kahn, as we already know, is applicable in every design sector. However, the political economy of urban development in a developing context of the Global South often devaluate such notion of integrating socioeconomic parameters into design decisions while following the codes of world-class city aesthetics (Ghertner, 2011).

For example, one of the important features of the public spaces, roads, and sidewalks in Asian countries are the street vendors (Bhowmik, 2005). This informal work sector is one of the key attributes of these spaces. Just as these public spaces are more vibrant with these informal workers, in a mutual way, this informal sector relies largely on these public spaces, especially the sidewalks. Evidences show that exclusionary practices by cities towards the urban informal workforce represent a no-win response to the policy challenge. Without recognizing and supporting the livelihoods of the urban informal workforce, cities cannot reduce poverty and inequality or reach their full productive potential. However, the borrowed notions of urban development from the West often side-lines this huge workforce and produce urban spatial design vocabularies that do not respond toward the city's economic dependency on the informal workforce (Kim, 2015). As a result, now and then, developing cities experience random evictions and forced displacements (Ahmed, Nusrat, and Jackson, 2015). Sidewalks of Dhaka city are not exceptions. While street vendors are an integral part of the Dhaka city's street culture, the new phase of urban development is gradually "getting rid" of this huge workforce. In the companion report on public space and informal livelihoods, Chen et al. (2018) summarizes Bromley's (2000) overview of common policy arguments for and against street vendors. Arguments against street vendors contend that they contribute to congestion, crime and grime, unsightliness, public health risk, tax evasion, substandard goods and services. But common negative perceptions of vendors ignore the many services that vendors do provide. Vendors play a variety of roles in urban systems that contribute to local economies, livability, equity, and safety.

The city of Dhaka has grown in a more or less spontaneous way over the span four hundred years history- the medieval trading town of Dhaka has extended from one square mile in 1600 AD to a large conurbation [Statistical Metropolitan area of Dhaka City, DSMA] of 522.34 square miles in 1991. Here in Dhaka, two dominant urban patterns are conspicuous within the successive stages of growth; they are the historical core or 'old Dhaka' and the later development towards the north, known as 'new Dhaka'. Besides, a few planned additions are also featured in this city. Nilufar (2010) identifies that four major spatial patterns are co-existent in Dhaka; they are indigenous and informal developments; colonial and planned interventions. "The 400 years' history of Dhaka shows that the city has grown and enlarged to a significant scale. It is evident that the basic idea comes from the indigenous structure of the medieval city, but the spatial enlargement gives a vision of the new world. In spite of a small amount of planning, the organic morphology dominates the global structure of the city." (Nilufar, 2010). Though the old Dhaka has grown within a more spontaneous way where the roads were mainly built in a pedestrian-oriented way and around the local businesses, in designing the new parts of the city, the local and cultural contexts were mostly overlooked.

In this paper, an attempt to draw an inclusive approach to managing sidewalk spaces that houses the livelihood activities and needs of the vendors has been made. The paper tries to bring attention to the locating and measuring activities such as sidewalk vending rather than just leaving it to a vague intuition. While there may be a debate whether to eradicate this sidewalk life or not, this research advocates on behalf of this social-spatial phenomena to be inclusive in designing sidewalks (Rahaman, K. R., Ohmori, N., & Harata, N. 2005; Bari, Haque, Nag, Hossain & Haque, 2018)





Figure 2: Mr. Kashem is providing mobile network balance transfer service to his customer (Left); Abul Bashar is having breakfast at a sidewalk restaurant only for 15 Taka (right).

3 Methods

The data and information about the cultural dimensions of the sidewalks in Dhaka presented in this paper are collected essentially in three ways- a) primary data collected from 3 months long ethnographic fieldwork, which include more than 25 interviews, and 10 focus group discussions, b) questionnaire survey and c) secondary data sources, which include peer-reviewed journals and conference papers, local and international newspapers published both in Bangla and English, studies conducted by various development agencies and NGOs, etc.

All three of our authors participated in the fieldwork at different levels. Interviews were taken in Bangla. As the authors are native speakers and live/d in Dhaka for at least 10 years, data

collection through interviewing the participants went comparatively smoother. The authors easily could achieve the trust of the participants and build a friendly relationship with them. Each interview was semi-structured and was recorded with the permission of the participants. Each interview lasted for 20-30 minutes. Later these interviews were transcribed and translated in English. FGDs involved 40-60 minutes discussions (mostly the consumers of products and services of the sidewalk vendors).

Around 78 vendors and 23 pedestrians participated in our questionnaire survey. The vendors were asked about their livelihood practices, daily income, business trajectories, profits, savings, family configuration, migration patterns, spatial limitations, exposure to pollution and nuisance, safety and security issues, gender discriminations, etc. Pedestrian interviews included questions around the economic background, migration pattern, location of households, locations of sidewalks they frequently use, dependency on street vendors for different services, shopping preferences, price negotiation patterns with the vendors, etc. Later the findings from this survey were translated into English, processed, and categorized for this paper.

4 Study Area

Dhaka, the capital of Bangladesh, has grown from a small trading town to one of the megacities of the world. The city is located in the central part of the country with having a 10 million population (TMP, 1998). The city's public sidewalks are less than a decade of age while a significant portion of the city is still lacking cohesive public sidewalk system (Bari, Haque, Nag, Hossain & Haque, 2018). The city contains approximately 3,000 km of road network of which only 400 km i.e. 13.33% have sidewalks (Rahman, 2010). The urbanites of the city are depending on foot for 60% of their daily trips (Rahaman, Ohmori, & Harata, 2005).

The survey was conducted on the 5 different sidewalks of 5 different areas of the cities with varied characteristics. These are Gulistan Area (Near the Baitul Mukarram National Mosque), Gawsia Market area, Nilkhet Area, Motijheel Area (Near the Ideal School and College) and Dhanmondi area (streets where the morning market takes place). The area around the Baitul Mukarram National Mosque is a transit area for daily commuters. Gawsia market is one of the prominent retail shopping area of Dhaka. Nilkhet is well known for its bookselling and printing shops. Dhanmondi is a mixed-use area with many residential buildings and many shopping areas.

5 Findings

In this section, we document the findings from our three months long fieldwork. Our data reveal a wide variety of ways how the street vendors and informal service providers along the sidewalks are doing their day to day business, what are the disruptions and disturbances that they face regularly, and what are the pedestrians' and local people's thoughts toward such engagement of the vendors on the sidewalk. From our survey in Dhaka's 5 most popular vendor-occupied sidewalks in 5 different areas, we documented hundreds of cases from the streets/ sidewalks. Later we categorized those cases in four broad themes: displacements, disruptions, quick-fixes, and mobilities to better depict the complex relationships between

people from different backgrounds and Dhaka's sidewalks and how linear design thinking around sidewalks fails to attain cultural sustainability in this context.

5.1 Displacements (of the vendors)

The urge of planning and developing sidewalks to provide uninterrupted walkability for the pedestrians often sideilnes the struggles of the street-side vendors and other service providers (Morshed, Adnan Zillur. "Why not a national footpath policy?" The Daily Star, September 30, 2019, Accessed March 1, 2020, https://www.thedailystar.net/opinion/the-grudging-urbanist/news/why-not-national-footpath-policy-1807042). These planning strategies involve frequent forced displacements of this informal workers. Due to several administrative, political and contextual reasons, the vendors have to frequently change their locations. Such random forced evictions make it difficult to create a permanent space identity for the vendors and service providers, which is important for their business trajectory.

Case 1: Mr. Jahangir (age 50), is a vendor who sells dates on the sidewalk in front of the Baitul Mukarram Mosque. He has migrated to Dhaka 8 years ago from a small village in Rajshahi (situated in the northern part of Bangladesh). For him, street vending was the only doable business, which his limited capital. He started selling nuts near the Stadium Market gate (close to the Mosque). Gradually, he managed to buy a cart and started selling dates in front of the Mosque. However, he is struggling almost every day to run his business without being temporally displaced by the VIP traffic. The Bangabhaban, the Presidential residence of Bangladesh being at proximity, the road adjacent to the sidewalk, where Mr. Jahangir works, is used by the notable VIPs, displacing Mr. Jahangir and many others from their regular business. Jahangir says,

"Karim Chacha (another vendor in the same sidewalk) told me that there was more space before in this sidewalk. In the last 10 years, this sidewalk was wrecked and rebuilt three times and each time the sidewalk became narrower and higher. Now you can see there is almost no space left to place a cart here without occupying some portion of the street. I have to move my cart at least twice a day when any VIP passes through this street. In this busy area finding another location to keep my cart, even for a few minutes, is extremely difficult. Other vendors on that side of the street (pointing toward the other side of the road) get angry if I go there as they lose customers."- Jahangir (male, 50)

Case 2: The scenario is no different for Ayesha Siddiqa (40), who sells bangles in front of Ideal School, Motijheel. She lives near the Railway, in a slum with her 10 years old son. Her husband left her when her son was only 3 years old. After that, she started her own business. She buys bangles from one of her friends and sells those in front of Ideal School. Ayesha has a regular customer base of guardians coming to drop or pick their children from Motijheel. She says,

"The School Guards always try to evict us from sitting in front of the school gate. My bangles attract women and teenage girls. Where else am I going to find such customers if it's not a school? I cannot rent a shop. I don't have enough money for that. Although the kids and their moms find it fun to shop from my basket, the guards don't let us sit here for a long time. They say that we ruin the beauty of this school entrance, we make the sidewalks dirty. One day one of the guards told us that he will call the police. After that day I did not appear here for 2 weeks. I tried to sit in front of the Central Government Girls School. But it's difficult to make new customers at a new place. Hence, I again came back here, knowing all the risks of getting

arrested. There is no space for us anywhere in the city, not even in the sidewalks..." -Ayesha (40, female)



Figure 3. Security personnel forcing a vendor to move out from his regular selling place (left), Mr. Faijullah lost his "chouki" (selling stand) during a raid, now selling products on a plastic sheet on the sidewalk near Nilkhet (Right).

These and many other stories like Ayesha and Jahangir help us to understand the spatial marginalization of the informal workers in the form of displacements. Although the recent sidewalk development interventions focus on uninterrupted pedestrian flows, they hardly consider the impacts of such "uninterruptedness" in the lives of thousands of people like Ayesha and Jahangir.

5.2 Disruptions (in the lives of pedestrians and local people)

Permanent and temporary displacements not only disrupt the normal working lives of the street-side vendors and service providers, but also hamper the day to day lives of the local people and pedestrians as well. From our interviews and questionnaire surveys, we came to know that a significant portion of the local neighbourhood directly or indirectly depend on the sidewalk services. For example, cutting hair at a significantly cheaper rate, getting fresh fruits, vegetables, even fishes whenever necessary, buying fancy ornaments at an extremely low price, etc. 90% of our pedestrian participants belong to low or lower-middle-income population and they mentioned to us how important these sidewalk functions are for them. Random displacements make it difficult for these people to locate services from the sidewalks on a regular basis. In most of the cases pedestrians let us know that even though for the vendors their walking spaces get narrowed, they enjoy the liveliness and colors that the vendors bring in an urban sidewalk. However, this culture of the sidewalks gets disrupted by outside forces in the form of dislocation and displacements. The following cases from the field depict the complex picture of such disruptions and point towards the economic marginalization of a certain class in the urban Dhaka.

Case 3: Shafiq is a 24 years old electrician. He works at an electrical equipment repairing shop in Fakirapul Bazaar. The owner of the shop sends him to the neighbouring or distant houses/ shops/ offices to fix electrical fixtures. Most of the cases, his employer does not pay him any

Proceeding of the 7th International Conference S.ARCH-2020 7-9 April 2020 I Tokyo, Japan

transportation cost. Hence, Shafiq walks to his job place every time. He used to have his hair done by a barber, who used to work on a sidewalk right opposite to the Ideal School in Motijheel. He says,

"...the barber only charged me 10 taka (0.12 USD) for a decent haircut. I used to take his service in every 15 days. He listened to me if I interrupted him and explained him how I wanted my hair done. He also provided a free shoulder massage. As all the vendors have been evicted from this street last month, I lost him. I should have taken his mobile phone number to know, where is he working now. Last week I went to a formal salon, and the cheapest cut cost me 100 taka and I didn't like the cut at all. The barber didn't even give me a scope to complain."-Shafiq, male, 24 years old

Case 4: Rubana is a 20 years old student from Home Economics College. She loves to read fictions, whenever she gets time. She belongs to a poor farmers' family, who live in Comilla. Rubana lives with 4 other girls in Azimpur, close to her college. She usually buys required books for her college from the Nilkhet old book markets. But her favourite fiction books can only be found on the sidewalk book sellers. She says,

"... I can buy an old, used book 'the collection of Misir Ali' by Humayun Ahmed (famous fiction writer in Bangladesh) for only 120 Taka from the Nilkhet sidewalk. But the same book will cost more that 400 Taka if I want to buy it from a bookshop inside the market. But the problem is every other week these booksellers get evicted by the traffic police as they block the road to some extent causing traffic congestion. But you can see how popular these roadside book sellers are. Poor students like us largely depends on their services."- Rubana, female, student, 20 years old.

These and many other cases from the pedestrians and local community people demonstrate the dependency of low-income people on sidewalk vendors. However, the voice from these consumers do not reach to the city authorities, who are extensively biased toward formalization of business entities to attain taxes. Hence, sidewalks designed from the city corporations never address the above-mentioned disruptions.

5.3 Quick Fixes (done by the vendors)

Despite being a significant part of the sidewalk life, sidewalk vendors are considered to be illegal and often become victims of harassments by law enforcing officials especially the police and extortionists. To survive in a situation with random displacement and disruptions the informal workforce from the sidewalks come up with some quick fixing techniques. In this section, we document two types of quick fixes- social and material, which help us to understand the complex socio-material relationships that develops spatially in a sidewalk but random get acknowledged by the authorities and designers.

As these informal workers do not have enough resources and infrastructure for resistance, so they opt for some *Jugaad* or frugal innovations in order to sustain. The *Jugaad* is part of the 'infrastructure deficit' (Sharma, 2009), a robust and cost-effective solution to rough roads and poverty. From the fieldwork, we have observed many types of survival techniques among the

vendors. Near the Baitul Mukarram Market Area we have interviewed some vendors who place their carts in front of the formal shops of the market. Some of them mentioned that the



Figure 4: A social connection develops between the formal shop employees and the street vendors.

Employees from the formal shop often help the vendors by looking after their products, when they need a bathroom break, or need to store their belongings during a sudden eviction. In Nilkhet we have found cases, where some of the vendors pay a certain amount of their daily income to the adjacent formal shops to attain permission to sell their stuffs in front of those shops. Another common survival technique is the mutual trust and exchange of favours among the vendors and within their social network. The exchange of favours vendors in their day-to-day life and helps them flourish despite intense competition. They get informed about raids by police or city official from their network and act in accordance. They often hide their carts or selling objects in other shops and stay in hideouts until the authorities are gone.

Case 5: Mostafizur, age 38, a bookseller in the Nilkhet area, expresses a common sentiment of the vendors,

"I've been on this street since I have moved to Dhaka city three years ago. I couldn't afford to own a shop with my little capital. This is my home. I spend more time here than in my own home. But many times, the police try to evict us, vendors, from our workplace. We get the news beforehand from our network and try to lay low on the raid days. Well, we need to survive, and the government continues to evict us, what else can we do?"

Mostafizur's case was an example of social quick fixes. Material quick fixes are not uncommon in this context as well. For instance, the locations that street vendors took up are usually influenced by attractiveness, accessibility, number of customers, competitors, allocation by municipalities and the original site where vendor businesses started (Onyango et al., 2012).

But due to sudden development programs of city and local authorities, they face difficulties in adjustment in the work environment. Sometimes environmental factors also cause them to modify the space around them. The common practice among the vendors is using shades for their carts or on their usual workspace on the sidewalks. This practice is due to the climatic condition of our country.

Case 6: Shabbir, a 29 years old vendor, generally sells plastic household material near a street in the Baitul Mukarram Mosque area. He generally sells from 8 a.m to 9 p.m. He receives more customers in the prayer times of the day and especially on *Jumma Bar* (Friday). He sits in front of a book shop. He generally hangs a plastic sheet hanging over the sidewalk he sits by. He says,

".....the weather is not always on our side. Sometimes it is scorching heat and sometimes it is raining all day. I use the shade to protect my products and also to protect myself from the heat and rain. I usually come in the morning, put on the shade over my space and start selling. When my business is done for the day, I wrap up the plastic shade and use it to cover the products. The shade is most helpful in the raining hour. Passers-by also come under the shades during raining."

The stories here unveil an overlooked aspect of the vending practice on the Dhaka's urban life, which the vendors create with the adopted frugal innovations. However, in many cases such quick fixes fail to help them as vendor-unfriendly sidewalks and regulations cost these vendors financially, sometimes they lose social support as well.



Figure 5: Sidewalk vendor using plastic sheets to cut the dripping water from the adjacent building.

5.4 Mobilities

Usually street vendors are portrayed as an obstruction toward free pedestrian movement on Dhaka's sidewalks (Rahaman, 2006). From our fieldwork, we collected stories from working

women, who argued that they feel safer on those sidewalks, which are occupied with vendors until late night. Past researches have suggested that the areas with lighting and human activities might enhance the feeling of safety (Boyce & Gutkowski, 1995; Nasar & Jones, 1997; Painter & Farrington, 2001; Ramsay & Newton, 1991).

The following case studies show the impact of the presence of the vendors on the mobility patterns of the women.

Case 7: Lata is a 27 years old garments worker. Her shift ends at 9:30 pm. She always walks back home with one of her co-workers. It usually takes an hour to walk to her home. One day her co-worker didn't come to the factory due to severe illness. Lata had to return home all by herself. She says,

"it was almost 10:30 pm. On my way back there was a comparatively desolate sidewalk, which we always tried to cross as fast as possible. That night I was alone, and I felt like someone was following me. I knew this area was not safe for girls. I started running and after crossing a few blocks, I took the street on my right. The sidewalks of that street were occupied with late night vendors. I was relieved, started walking, and didn't look back... "

Case 8: Maisha, a 25-year-old university student, is a usual customer of the Gawsia market. She generally buys her clothing and ornaments there. As her university is nearby as well as her dormitory, it is more convenient for her to come to this marketplace. She visits the market more on Fridays when her university is off. Friday being the general holiday here, the market crowd is double than usual. She also has a part-time job as a tutor in a nearby area in which she goes mostly in the evening.

"I am a student of Dhaka University and a regular user of this route. I generally buy clothes and ornaments from the sidewalk vendors. You will always get things cheaper from the roadside vendors than in the shops. It is more beneficial to me as I am just a student and have no steady income. Also, when I come back late from my tuitions at night, there are still some vendors in that area, working late. They kind of give me a sense of safety as the crime rates in the city are increasing. Though on Fridays, it is impossible to step into the market as there is a huge crowd. Also, evening hours are the busiest. This often causes so much traffic jam in the area! But I think everything comes with a bad and good side, don't they?"

Many other stories similar to the above stories demonstrate that safe and secure mobilities of the women pedestrians, who work till night, significantly depends on the presence of vendors and customers. However, how "criminalized" sidewalk vendors actually sometimes reduce crimes against women is rarely mentioned in the mainstream development discussions.

6 Discussions and Conclusion

In this paper, we have presented sidewalk vendors and service providers as a significant informal workforce of the sidewalks in Dhaka city. Then we described how Dhaka city's street culture has been produced and reproduced by its sidewalk activities, which can be traced back to its birth as a city. We have discussed how such deeply embedded cultural urban phenomenon started to become marginalized as globalization emerged. We have also discussed how globally recognized standards of urban development and aesthetics contradict with our own social and traditional values, hence, sometimes neglect location/context oriented cultural sustainability. Through our findings ranging from the struggles of a displaced

vendor to the urgency of free mobilities of women during nights, we have repeatedly argued that constructing sidewalks excluding all these socio-cultural values results in distress and marginalization of the economically vulnerable portions of the society. In this section we describe alternative frameworks for the future development of diverse and inclusive sidewalks.

First, to avoid any kind of social and economic marginalization in urban landscape we have to ensure the participation of every actor in a spatial network. We must ensure that voices from every layer of the society can reach the authority, who plays leading roles in city development. Spaces like sidewalks should not be considered otherwise. An urban designer should involve more actively with the subalterns and ensure their spontaneous participation in every phase of design decisions. A designer should be more open toward learning the subaltern cultural nuances, modes of innovations, and forms of resistance, in order to ensure social justice through designing urban spaces like sidewalks.

Second, designing a sidewalk should involve all its micro spatial systems and interrelations of the components that create those systems. For example, designing a sidewalk in front of a school should involve thorough cultural analysis of the spatial interrelations of students, school staffs, parents, security guards, street vendors, service providers, rickshaw pullers, pedestrians, bikers, canvassers, etc. Designing sidewalks only for the pedestrians will marginalize the agencies of the other social entities that engender a dynamics sidewalk context in front of a school in a Global South city.

Finally, we should keep in mind that in comparison to the other public open spaces, sidewalks have more intimate and regular interactions with the urban life in Dhaka's context. Michel de Certeau (1993) has described the city as a story that unfolds continuously as people move through space on different trajectories. Sidewalks are such spaces of movement. Our empirical observation helps us to better understand the importance of sidewalks through the lens of most "undesirable" users of these spaces. We call for inclusive designs that will incorporate heterogeneous socioeconomic factors in design discussion and produce more culturally sustainable sidewalks in Urban Bangladesh.

Acknowledgements

The organizer gratefully acknowledges the work done by Programme Committee and Lecturers of the International Conferences S.ARCH-2020 for efforts done for the success of this event.

References

- [1] AlSayyad, Nezar, and Ananya Roy, eds. Urban Informality: Transnational Perspectives from the Middle East, Latin America, and South Asia. Lexington Books, 2003.
- [2] Ahmed, Syed Ishtiaque, Nusrat Jahan Mim, and Steven J. Jackson. "Residual mobilities: infrastructural displacement and post-colonial computing in Bangladesh." In Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems, pp. 437-446. 2015.

Proceeding of the 7th International Conference S.ARCH-2020 7-9 April 2020 I Tokyo, Japan

- [3] Bari, Javed, Morshedul Haque Sunny, Sattyjit Kumar Nag, Shakhawat Hossain Tushar, and Md Touhidul Haque. "Development of Sidewalk Condition Index (SCI) of Dhanmondi R/A, Gulshan & Bashundhara R/A of Dhaka City." (2018)
- [4] Ben-Joseph, Eran. The code of the city: Standards and the hidden language of place making. The MIT Press, 2005.
- [5] Bhowmik, Sharit K. "Street vendors in Asia: A review." Economic and political weekly (2005): 2256-2264.
- [6] Brown, Alison Margaret Braithwaite. Contested space: street trading, public space, and livelihoods in developing cities. itdg Publishing, 2006.
- [7] Bromley, Ray. "Street vending and public policy: a global review." International Journal of Sociology and Social Policy (2000).
- [8] Boyce, Peter R., and J. M. Gutkowski. "The if, why and what of street lighting and street crime: A review." International Journal of Lighting Research and Technology 27, no. 2 (1995): 103-112.
- [9] Cox, Kevin R. "Globalisation, competition and the politics of local economic development." Urban studies 32, no. 2 (1995): 213-224.
- [10] Crossa, Veronica. "Resisting the entrepreneurial city: street vendors' struggle in Mexico City's historic center." International journal of urban and regional research 33, no. 1 (2009): 43-63.
- [11] de Certeau, M. (2000) 'Walking in the City', in G. Ward (ed.) The Certeau Reader. London: Blackwell.
- [12] de Certeau, M. (1984) The Practice of Everyday Life, trans. Steven Rendall. Berkeley: University of California Press.
- [13] de Certeau, M. (1987) 'Practices of Space', in M. Blonsky (ed.) On Signs. Oxford: Blackwell.
- [14] Frampton, Kenneth. "Critical regionalism." Perspecta: The Yale Architectural Journal 20 (1983): 147-162.
- [15] Gehl, Jan, and Lars Gemzøe. "Winning back public space." Sustainable Transport: Planning for Walking and Cycling in Urban Environments, Cambridge: Woodhead Publishing (2003): 97-106.
- [16] Ghertner, D. Asher. "Rule by aesthetics: World-class city making in Delhi." Worlding cities: Asian experiments and the art of being global (2011): 279-306.
- [17] Girardet, Herbert. The Gaia Atlas of Cities: new directions for sustainable urban living. UN-HABITAT, 1996.
- [18] Hossain, Shahadat. "Migration, urbanization and poverty in Dhaka, Bangladesh." Journal of the Asiatic Society of Bangladesh (Hum.) 58, no. 2 (2013): 369-382.

Proceeding of the 7th International Conference S.ARCH-2020 7-9 April 2020 I Tokyo, Japan

- [19] Husain, Shaiara, Shanjida Yasmin, and MD Shahidul Islam. "Assessment of the socioeconomic aspects of street vendors in dhaka city: Evidence from Bangladesh." Asian Social Science 11, no. 26 (2015): 1.
- [20] Jacobs, Jane. The death and life of great American cities. Vintage, 2016.
- [21] Kim, Annette Miae. Sidewalk city: remapping public space in Ho Chi Minh City. University of Chicago Press, 2015.
- [22] Kahn, M. 1995. Concepts, definitions, and key issues in sustainable development: the outlook for the future. Proceedings of the 1995 International Sustainable Development Research Conference, Manchester, England, Mar. 27]28, 1995, Keynote Paper, 2-13.
- [23] King, Anthony D. Colonial urban development: Culture, social power and environment. Routledge, 2012.
- [24] Lynch, Kevin. The image of the city. Vol. 11. MIT press, 1960.
- [25] Dear, Michael. "Los Angeles and the Chicago School: invitation to a debate." City & Community 1, no. 1 (2002): 5-32.
- [26] Nasar, Jack L., and Kym M. Jones. "Landscapes of fear and stress." Environment and behavior 29, no. 3 (1997): 291-323
- [27] Nilufar, P.F. Urban Morphology of Dhaka City: Spatial Dynamics of Growing City and the Urban Core. In Proceedings of International Seminar Proceedings on the Celebration of 400 Years of the Capital Dhaka, Asiatic Society, Dhaka, Bangladesh, 17–19 February 2010.
- [28] Nilufar, F. "Hidden morphological order in an organic city." Protibesh 9 (2004): 34-41.
- [29] Onyango, Eria Olowo. Manhood on the margins: Failing to be a man in post-conflict Northern Uganda. MICROCON research working paper 68. Brighton: Institute of Development Studies, MICROCON, 2012.
- [30] Painter, Kate A., and David P. Farrington. "The financial benefits of improved street lighting, based on crime reduction." Transactions of the Illuminating Engineering Society 33, no. 1 (2001): 3-10
- [31] Ramsay, Malcolm, and Rosemary Newton. "The effect of better street lighting on crime and fear: A review." (1991).
- [32] Rahaman, Khan Rubayet. "Design and safety of pedestrian facilities in Dhaka city, Bangladesh." PhD diss., 東京大学, 2006
- [33] Rahaman, Khan Rubayet, Nobuaki Ohmori, and Noboru Harata. "Evaluation of the roadside walkway environment of Dhaka city." In Proceeding of the Eastern Asia Society for Transportation Studies, vol. 5, pp. 1751-1766. 2005.
- [34] Roy, Ananya. "Urban informality." In The Oxford handbook of urban planning. 2004.

Proceeding of the 7th International Conference S.ARCH-2020 7-9 April 2020 I Tokyo, Japan

- [35] Robinson, Jennifer. "Global and world cities: a view from off the map." International journal of urban and regional research 26, no. 3 (2002): 531-554.
- [36] Sharma, Shalendra D. China and India in the Age of Globalization. Cambridge University Press, 2009.
- [37] Skinner, Caroline, Sarah Orleans Reed, and Jenna Harvey. "Supporting Informal Livelihoods in Public Space." (2018).
- [38] Traffic Management Plan 1998, Dhaka City Corporation, Dhaka.