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The *Ghats* in Dhaka's Monsoon-Fed Landscape

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Addressing Dhaka's severe lack of public space in a deltaic landscape, this article considers fluctuating pocket spaces overlooked in planning and policy. It focuses on ghats, liminal zones between land and water, and a common Asian cultural landscape element. It explores their role as vital yet undefined and informal hubs of community life. The article documents social practices in these small, flexible areas carved out within a larger context. Examining specific pockets along the Turag-Buriganga and Balu Rivers, and the Banani-Gulshan-Hatirjheel Lake area in Bangladesh, it reveals how local communities adapt to changing water levels and urban dynamics. Each of these areas represents different degrees of urbanization, showcasing unique responses to environmental challenges. Emphasizing festivals like mela taking place in the ghats and hydrological movements, the inquiry considers the cultural significance of the ghat water landscape. The article takes the innovative strategy of providing an atlas created for this project that presents a place's intricate story in a synoptic composition.

Keywords: Dhaka, ghat, atlas, liminal space, public space, festival







< Fig. 1 The traditional way of living with water in the "in-between," which flows and floods, is practiced by fishermen during the monsoon season on the eastern fringe of Dhaka, between the Balu River and Meradia Canal (Source: Salma Begum, 2021).

Introduction

In the Balu and Turag-Buriganga River deltas and the Banani-Gulshan-Hatirjheel Lake area - three north-south oriented water bodies that structure the city of Dhaka, Bangladesh - hyper-speculative urban development has consumed nearly all available land, leaving undeveloped only narrow flood-prone strips along river channels. These strips of shifting ground are liminal spaces, neglected due to fluctuating water levels and location, and dismissed by planners as non-places. Yet, they constitute the only remaining refuge for ecological diversity and a variety of social practices. Unchecked growth in the metropole has occurred without adequate creation of public spaces or preservation of ecological structures. Nested in patches of vegetation, thresholds between water and land such as *maidans* emerge, in which many lively, spontaneous social practices take place. These in-between spaces are an Asian cultural landscape element known as ghat.

Ghats bridge the gap between water and land. They come in many forms, sizes and materials. Culturally, they embody important values such as plurality, and in the delta they are associated with distinct cultural practices, religious symbolism and rituals. They also fulfill climate-specific needs (Begum 2023), such as providing access to houses via bamboo bridges, locally known as *baser sako*, which adapt to changing water levels.

This article departs from conventional notions of public space by highlighting the emerging "in-between" space of land and water through everyday social practices. It explores public space in a monsoon-fed landscape in the context of broader hydrological changes and human occupation. It takes the innovative strategy of providing an atlas created for this project that presents a place's intricate story in a synoptic composition, integrating various scales, text blocks, drawings and graphical techniques. The drawings in Figures 1 to 5 are part of the atlas. The resulting maps reveal pocket spaces and urban voids at three water systems in Dhaka, which interact with the monsoon and redefine these areas as integral to the urban fabric. Taking a multi-disciplinary approach to depicting the city's spatial and cultural dynamics, the article builds on the concept of "operative mapping" to observe seasonal changes and how people engage with these spaces, highlighting the diversity of *ghats*, their morphological changes due to fluctuating water levels, and the daily life adaptations informed by local ecological knowledge (LEK). The material presented is based on GIS data, archival and secondary material research, and fieldwork involving on-theground investigation focusing on interaction between Dhaka's rivers, other waterways, and the urban environment.

Water Culture and Public Space in Dhaka: Exploring the Varied Sociocultural Contexts of a River and a Lake

In environmental science, the movement of people, culture, ideas and communication is often described in terms of social connectivity, which can be understood through longitudinal, lateral and vertical frameworks (Kondolf and Pinto 2017). The Buriganag-Turag and Balu Rivers are crucial for longitudinal connectivity, serving as major transport routes for Dhaka and linking nearby small villages. These rivers feature numerous *ghats* that serve as landing stations, including the central water terminal of Sadarghat, the busiest passenger port developed during the colonial era, on the south bank of the Buriganga River. While Sadarghat has long been a key port of entry and activity, the smaller, in-

formal ghats along the Balu River maintain a traditional layout and are laterally connected with social events, everyday activities and seasonal fairs. People can regularly be seen washing and drying clothes, fishing, swimming and boating. There is a boat fair, where boats are dragged along the muddy slope of these informal ghats. During the monsoon season, bamboo bridges are extended in certain areas, illustrating the crucial role of ghats in vertical connectivity (Kondolf and Pinto 2017). These ghats provide informal access routes, forming culturally significant liminal spaces that are integral to Dhaka's urban reality. Informal ghats blur the boundaries between the landscape and Dhaka's dynamic sociocultural fabric.

In Varanasi, India, *ghats* function as a stepped interface between water and land, offering spaces for religious gatherings and the performance of ritual. In contrast, Dhaka's *ghats* are situated within dense urban environments. For example, the Banani T&T (Telegraph and Telephone) Ghat along Banani Lake offers a venue for social rituals and, due to the narrowness of the lake, fosters a sense of intimacy, creating a vibrant public space.

Ghats are associated with purification in both Muslim and Hindu religions. Muslims use *ghats* for ablution before each prayer. In the case of Hindu worshippers, bathing is the most common ritual and is still practiced throughout the country as part of *puja* (veneration) or a *mela* (festival), such as Ras Mela at Dublar Char, an offshore fishing island (Zakaria 2013), where thousands of devotees arrive in boats of all sizes for a two-day festival that includes Jatra play and devotional songs. Another significant festival site is Langalbandh, which takes place in Chaitra (a month in the Bengali calendar) every year in a 2 km stretch along the bank of the old Brahmaputra River, southeast of Dhaka (Siddiquix Haque and Haque 2006). These festivals combine a holy bath and a three-day long *mela*. Due to the massive crowds and the significance of the holy places, many bathing ghats have been built. In addition to Hindu rituals, the Bishwa litema, the second biggest Islamic congregation after the Hajj, attracts millions of Muslims annually from over 60 countries (Hossain 2017) to the Turag-Buriganag River. So, considering the boat races (Anisuzzaman, Khan, and Islam 2013; Hossain 2017), small-scale melas at Banani T&T Ghat, the seasonal boat fair at Balu River, annual religious celebrations of Eid and Durga Puja Mela in Jheel Park, Beraid Ghat at Balu River, the deity immersion in the Buriganag River and the weekly haat (open-air market), the ghat might be the most dynamic public place in deltaic Dhaka.

Framing Public Space in a Monsoon Terrain

Dhaka's hydrological landscape is a palimpsest, with rivers integral to the city's identity, "woven from water" (Cullen 2022). The city is cradled within the intricate delta of the Ganges-Brahmaputra-Meghna (GBM) basin, surrounded by river networks like the Turag, Buriganga, Balu, Shitalakshya and Dhaleshwary - tributaries and distributaries of the GBM system - interspersed with ponds, canals, lakes, ditches, natural depressions and irrigated canals forming an enmeshed net. Continual shifts in river courses create new imprints amid existing configurations, where rhythms and patterns emerge (Latour 2005). Monsoon rhythms, dry periods and festivals impose a cyclical pattern on Dhaka's urban and rural life, co-producing its spaces and rhythms (Cullen 2022). Consequently, the occupation of space, with its "economic activities changing throughout wetting and drying" (Jackson et al. 2022), influences social events, festivals, food and mood. The monsoon season,



Fig. 2 This collage depicts various activities within liminal spaces along different rivers in rural Dhaka, including dwelling in an alternative boathouse, fishing, gathering under a Banyan tree to enjoy folk songs and kite flying. Women are engaged in agricultural tasks like planting paddy and winnowing rice, while a bustling *haat-bazaar* scene adds vibrancy to the setting. Traditional architectural elements like bamboo platforms coexist with modern concrete steps serving as *ghats*. The scene culminates in festive celebrations like the Baisakh Fair and traditional Panta lish preparation, which take place alongside boat races, encapsulating the essence of culture in a monsoon-fed landscape (Source: Salma Begum, 2022).

with unfurling "Kal Baishakhi jhor" (Kal Baisakhi storms), which Barad (2007), as cited by Bremner (2022), calls the "iterative process of spacetime mattering" (Bremner 2022), transforms Dhaka into an interconnected water body, flooding streets and affecting daily life and ecology. This seasonal inundation is often perceived as a hazard but it is crucial for aquifer replenishment and biodiversity, making the monsoon Dhaka's water agency, with the city resembling an island (Ashraf 2012) bordered by monsoon-fed water routes.

Ghats, adaptable to changing monsoon conditions, play a crucial role in Dhaka's urban land-

scape by providing informal access routes and promoting vertical connectivity (Kondolf and Pinto 2017). These culturally significant emerging liminal spaces form a substantial part of Dhaka's urban reality, blurring the boundaries between the natural landscape and the city's sociocultural fabric. Unlike the larger, stepped *ghats* in Varanasi, Dhaka's *ghats* offer vibrant, communal spaces within narrow streams, blending the city's dynamic water environment with its cultural life.

These ambiguous spaces in Dhaka are "liminal spaces" (Howitt 2001), at the edge of ecosystems, where interaction and transformation



thrive. Constantly shifting between land and water, they blend varying wetness levels with local practices, festivals and seasonal adaptations. This creates a contextual matrix that challenges traditional notions of public space in a "rain terrain" (Mathur and Cunha 2014; fig. 2) with *ghats* as a key example.

Challenges

Rivers are part of Dhaka's economy and ecology. They are the dynamic spine structuring the city, yet they are experiencing severe challenges posed by human intervention. Common ongoing threats since the 1960s include illegal settlements on stilts, the filling of wetlands and land grabbing due to high land prices. Consequently, the city suffers from social-environmental challenges such as flooding, waterlogging (Hossain 2017) and a lack of public open space. Buriganga-Turag, a distributary of the Ganges that served as a lifeline for centuries, is now facing challenges from air pollution, water pollution and, since the 1980s, the illegal intrusion of land grabbers (Hossain 2017). The phenomenal growth of brick fields along the southwestern fringe of Turag-Buriganga, as well as other building material factories, produces air and water pollution (Hossain 2017). Herrero and Montero (2018) creatively frame the problem by questioning, "Is garbage the new mining?"

While Turag-Buriganga is the new hotspot of "garbage mining," the Hatirjheel-Banani-Gulshan integrated lake system is the new ecological and social axis that flows through Dhaka's densely urbanized and consolidated neighborhoods, imprinting wrinkles of sociocultural significance. This wetland, at present the most significant water retention and detention basin, historically was part of Begun Bari Khal, connected to the Buriganga through the Dhanmondi Lake, Katasur Canal, and Turag River to the west of the city and the Balu on the east - meaning this was the most extensive urban void connecting the city's two significant peripheral rivers (Habib 2006). During the Mughal era, the lost Pandu River blessed the same transect, making this area the second central business district with the Karwan Bazaar and European houses with gardens. Thus, the public space along this central corridor became prominent for the first time, with the emergence of the Karwan Bazaar reflecting the ghats' presence. However, in the 1970s this ecological balance began to erode with the disappearance of the canal and the advent of urbanization (Habib 2006). Before the reconstruction of the Hatiriheel Canal in 2013, the Begunbari Canal was almost completely filled in by 2006 and grabbed by informal settlers. This illegal encroachment significantly altered the area's fabric, as informal settlements increasingly took over the once ecologically rich and agriculturally productive land (Ahmed 2017). The most striking example is the Karail Baste area of Banani, between Dhaka's most expensive residential neighborhood and a sprawling informal settlement that houses around 200,000 people. Ghats along the Banani Lake in the Karail area feature a dynamic mix of social and economic actors, contributing to the lake's vibrancy and plurality.

The socio-economic context of people living adjacent to the areas along the confluence of Hatirjheel and Gulshan Lake is similar to that of Banani Lake. We see more vibrant urban nightlife, with the presence of men, women and children. From the afternoon on, the Jheelpark hosts people of diverse occupations and is appropriated by food vendors and hawkers. Every evening until 10:00 pm, this space becomes a place of *mela*, highlighting the presence of female hawkers quite different from the *mela* nature in the Balu River. Unlike the urban void within the city, the Balu River on the eastern fringe mirrors the traditional setting of a water-based civilization, with agricultural rituals, distinctive local beliefs and practices, and traditional ecological knowledge (TEK). Balu River, historically a cradle of the local haat system (a weekly open-air market), as evident from James Rennell's Bengal map from 1778 (Rahman, Zaman and Hafiz 2016) where it is marked as Nawarah Haat, continues to be the heart of the site in the transect along with the Beraid Ghat across from it. However, this landscape has undergone considerable transformation since the eighteenth century. A key inflection point was in 2018, when the Nawara area was filled in with sand, leading to the disappearance of natural wetlands and the emergence of new ghats. This trend proliferated southward, evidenced by the increased settlements around Fakirkhali Bazaar and the development of a substantial shipyard at Nolchota. Despite these alterations, certain areas like the Kayetpara transect have managed to retain their natural settings such as muddy slopes shaped solely by water fluctuations. Highlights of the cultural landscape include weekly haat bazaars, seasonal fairs and a Nauka Mela (boat fair) during the monsoon season. Along with the "boathouse" - a house on stilts which floats on the water during the monsoon season - the ghat ties the knot between water and human activities.

However, while the emerging practices are still compatible with hydrological living, in terms of planning and policies there are so far only general suggestions. The current Dhaka Structure Plan, 2016–2035 (RAJUK 2021), for example, mentions the need to preserve open space and create a green network to promote ecological balance and biodiversity. However, there is no such discourse on defining public space through a local lens nor the terminology crucial to coping with the public space and climate crises. Although ghats have provided a hinge between land and water, and for centuries have served as public space, that has not been recognized in Dhaka's discourse on urbanism. The colonial imprint could be one reason that public spaces, such as promenades, racecourses, and parks, have often been viewed through a colonial lens, focused on controlling water or domesticating nature rather than playing along. However, this research and paper suggest an alternative perspective; instead of a top-down approach to imposing plans in the name of development, a bottom-up approach involves observing the occupation or appropriation of space by inhabitants based on seasons, timing and daily needs, which could offer a contextual solution. Instead of looking at the city from a colonial perspective, the local lens might be an alternative way to deal with the public space crisis, where *ghats* might be the language of a monsoon-shaped country.

Ghats and Plurality in Making Public Space

Ghat spaces tucked within various creeks along the river emerge seasonally as pocket spaces (fig. 3). They change shape, size and height, and therefore are articulated in varying ways with their surroundings. Diverse rhythms and everyday practices (Begum 2021) in these pocket spaces allow for unique moments when plural-



 Fig. 3 Pockets along the Turag-Buriganga River, the Banani-Gulshan-Hatirjheel Lake area, and the Balu River in Dhaka, Bangladesh (Source: Salma Begum, 2024).



Fig. 4 Seasonal variation articulates pocket spaces during pre- and post-monsoon periods and undergoes gradual scale transitions through water expansion and recession along the Balu River. The seasonal activities of rice harvesting and husking occupy a space within this varying threshold, which becomes flooded with water during the monsoon season (Source: Salma Begum, 2021).

ism is enacted. *Ghats* invite, mediate and facilitate interactions and encounters between diverse communities in various temporalities and at various scales. Consider zooms from three transects (fig. 4) of different settings: the fully developed peri-urban Buriganga River area to the west, the centrally consolidated urban lakeside at Banani, and an eastern peri-urban area with emerging development along the Balu River. These three locations reveal variations in level of development, water-land relations, and the many practices that unfold in the *ghats*. The three transects also experience different seasonal variations in local climate.

Reading Urban Edge along the Turag-Buriganga

A stairway leads to a *tong*, a cozy tea stall hosting four to five people, while a small hut known as khupri is a resting area nearby. Opposite the tea stall, there is a vegetable garden, enclosed by bamboo fencing, where indigenous crops like red spinach are grown. A pottery display area nestled amid earth and lush vegetation lies toward the southern extension. Local children often use the ghat to fly kites (fig. 5). The ghat adapts to the changing environment as water levels fluctuate from 0.5 m to 3 m during the monsoon season. During periods of high water, new bamboo structures, such as platforms or bridges, often emerge. These structures facilitate transporting passengers between boats and land. At Palpara Ghat, the stairway becomes the new ghat when the lower riparian area is submerged. The ghats change their location and height as the water spreads and rises.



The Dense Urban Condition at Banani T&T (Telegraph and Telephone) Ghat

The second transect traverses a densely urbanized and consolidated area adjacent to an integrated lake, Banani-Gulshan-Hatirjheel. The T&T Ghat, affectionately known as Matir Rasta or Road of Soil, serves as a gateway to the Karail settlement, originally a village (Shafique 2021). Situated between the Bangladesh Water Development Board forest and Banani Lake, this liminal space hums with cultural festivities, particularly melas (fig. 6), which catalyze community interaction and celebration. These diverse folk fairs, varying in scale and character, are intricately connected with the movement of water. While daylong and weeklong folk fairs like Pohela Baisakh and Nabanna Utsab offer diverse experiences, daily melas along the water's edge last a few hours. From late afternoon to nightfall, the *melas* feature street vendors, whose wares include toys sold in colorful stalls and local foods like peyaju (fried lentil ball), singara (fried vegetables or a triangular meat wrap), and *am vorta* (smashed green mango with spices). Spaces transform instantly from empty pockets to bustling clusters of activity or "spectacles in a kinetic city" (Mehrotra 2021). T&T Ghat, a space "in-between," a system of thresholds (Borio 2023), is a crossroad of possibilities for making and remaking. T&T Ghat's ephemeral nature lends itself to new meanings. It could be considered a "third space" (Crawford 2008) – based on Soja (1996), following Lefebvre (1991) – shaping perceptions and interactions within the urban landscape.

At the crossroads of ecology and culture, the *ghat* represents the ability of humans to coexist with water, which is necessary, according to Greenway (2022), to co-produce riverine communities and river environments in a sustainable way. Taking an eco-social approach to "river culture" (Wantzen et al. 2016) involves understanding the value of cultural activities and adaptive nature in a way that is helpful for developing policies of



Fig. 5 Palpara Ghat, along the Buriganga-Turag River, evolved organically as a result of spontaneous adaptations made by inhabitants. The *ghat* accommodates urban farming on the left, a *tong* (tea stall) at a higher elevation to the right and a pottery sales area along the Turag–Buriganga River (Source: Salma Begum, 2021).

river management that ensure healthy cohabitation of humans and water. *Ghats*, with so much to offer as public space, reflect a sociocultural identity shaped by river-human dynamics, blurring boundaries between natural and artificial.

The *ghat* area is a vital nexus for the Karail neighborhood, epitomizing a unique spatial character and facilitating daily interactions and exchanges between residents in high-rise Gulshan and those in low-rise, vernacular Karail neighborhoods. Its cultural significance and *mela* activities create a dynamic environment of pocket urbanism, enhancing the urban landscape and shaping the identity of its inhabitants (Hall 2006). T&T Ghat, a public space and a place of encounter between high-income and low-income communities, with its fairs and festivals, embodies informality and temporality in the urban milieu.

Unveiling Voids in a Riparian Landscape along the Balu River

The Balu River, east of Dhaka, defines an ecologically very significant transect that reveals a landscape deeply intertwined with water dynamics. During the monsoon season, the 1.3-2 m floodplain becomes submerged, prompting sociocultural adaptation. With the interplay of becoming wet, then dry, and vice versa, gradients of wetness and vegetation create an interface where practices such as fishing, rice drying and winnowing, boat making and repair can thrive. The riparian buffer with its alluvial silts, supporting agriculture and orchards, conceals rural settlements (Begum 2021). Between linear forested land and water plains, both formal and informal ghats serve as public spaces, adapting to fluctuating water levels and hosting markets. The three primary bazaars are spaced at 2 km intervals along the Balu River. Kayetpara Bazaar and haats feature permanent and temporary small, colorful bamboo canopy structures (samiana), that "blend culture, religion and commerce. These social practices produce public space" (Low 2003).

Moreover, Kayetpara Ghat hosts boat-making workshops, transforming into a Nouka Mela boat fair during wet periods. The importance of boats in this fluid landscape is self-evident. Blue Papers Vol. 3 No. 2



^ Fig. 6 The mela is a unique, temporary, lively social event associated with many Bengali festivals and everyday life that occupies a liminal space (Source: Salma Begum, 2022).

They are means of transport, alternative dwellings (fig. 1) for fishers in the monsoon season and for nomadic Bede people throughout the year, and they facilitate commerce. Other pockets offer variations on these activities, including seasonal rice husking. The cultural landscape includes boat houses, rice farming and chatting spaces like *macha* (Ashraf 2014). This liminal space of *ghat* that is continually evolving because of water dynamics has aptly been termed "rain terrain" (Mathur and Cunha 2014) or "other ground" (Cunha 2019).

Despite their widespread use, ghats do not appear on the official map of the city. However, recognizing ghats as public spaces in urban contexts is crucial because of their cultural, social and environmental significance. Living with water in this way has been central to community life for centuries. Bringing diverse groups of people together promotes social cohesion and inclusivity. Their sustainable design and use of local materials like bamboo exemplifies both LEK and TEK. Future urbanism might learn valuable design and policy lessons from ghats. TEK is informed by centuries of learning: making ghats float on water requires an understanding of water dynamics, and in the case of a single bamboo bridge, precise knowledge of bamboo construction, including load-bearing capacity and the optimal placement for balance and stability. Social dynamics also affect how the ghat is accessed and used based on time and season. Construction requires communal involvement and coordination, which makes the community's bond more robust and the knowledge is passed down to generations. Cultural practices like these are also entangled with folk beliefs, which are readily apparent in South Asia, especially in Bengal, popularly known as Khanar Bachan (Khana's proverb/maxim). Khana is a woman figure from mythical stories from the first century BC (Mannan and Barua 2011), whose sayings are based on a deeper understanding of local ecology than held by technocrats. The phrases offer solutions for almost all levels of planning, including house orientation and construction.

Conclusion

By considering liminality and gradient space, it is possible to gain a new understanding of the idiosyncratic character of public space in Dhaka's shifting terrain. *Ghats*, influenced by hydrological and geomorphological processes, play an important role in the co-production of public spaces, as documented here, along with Dhaka's three major water bodies. The notion of "gradient spaces" acknowledges the blending of water, mud, dry ground, local practices, festivals and seasonal adaptations, and challenges conventional notions of ground and public space. These "gradient spaces," functioning as public spaces, are Dhaka's only remaining ecological "land" refuge. Perhaps this provides a foundation to expand future "soft" urbanism in ways that foster sustainable development and social cohesion.

Ghats should be recognized as public spaces in the riverine culture framework and included in the Dhaka Structure Plan to prevent urbanization from swallowing these spaces. Depending on the context, these spaces could be treated as a form of aquatic urbanization to preserve the area's only ecological refuges. Understanding the *ghat*'s cultural and ritual importance will help ensure an urbanism that aligns with local traditions and practices.

Policy Recommendations

- In urban policy and planning, *ghats* should be recognized and included as significant public spaces.
- Considerations of folkloric beliefs, cultural practices, the arcane lexicon of mythical tales, the latent meaning of rituals and the sacredness of everyday practices should play an important role in eco-cultural approaches.
- TEK, such as that involved in constructing raised and adjustable platforms, deserves respect and inclusion in urban policy and planning.

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