

Landscape Urbanism as a Strategy for Integrating a Historical Site: Shishu Park and Suhrawardy Udyan, Dhaka

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Abstract— Landscape urbanism is a phenomenon which primarily deals with urban open spaces, build structures and urban fabrics. Development of urban fabric reflects a city's character and network pattern within the city. Dhaka is the capital city and one of the oldest human settlements in Bangladesh. According to its primordial development, it was focused on landscape urbanism. By the course of time and the demographic expansion, the characteristics of the urban fabric and the use of open space had changed. One of its core open space is still remaining as a divided organ. One is active as an amusement park (Shishu Park) and other as a public gathering space with liberation war complex (Suhrawardy udyan). This urban open space, specially Shishu Park has witnessed many historical, political and cultural acts alongside with the other part. But for lack of proper integrated design and management, its appearance is now limited. This paper concludes with figuring out the history of the site (Shishu Park), its impact on urban life and the immersing scope of the site with its surrounding to make a harmony with the urban fabric. A typological investigation is used to disclose the qualitative value due to its historical honor.

Index Terms— Landscape urbanism; Urban fabric; Public open space; Historical value; Landscape architecture; Urban life.

I. INTRODUCTION

Urban open space and the built environment are the physical evidence of human settlement and cultural progression. Cultural conflict and contestation draws material evidence on the built environment and shows the public spaces and its spatial relations are a cultural occurrence of this conflict [1]. Public spaces considered as a key element in urban life for their physical, historical, political and social value [2]. Public open spaces of Dhaka are good examples of this phenomenon. Retrospection of the old Dhaka demarks landscape urbanism, where the city was developed surrounded with open public space and prioritizes urban landscape from the historic time [3]. In present days landscape is an emerging model for urbanism [4]. "Suhrawardy udyan" including "Shishu Park" was one of the centers which directly played an important role for urbanization in Dhaka city. Now it is a cultural and historical treasure that seek to revive its own identity. Historically "Shishu park" with "Suhrawardy udyan" was blended with

city landscape like a single platform, but due to city demand, public expectation and course of time the use of it has changed and divided into two parts. Unfortunately, lack of proper management and operating system it's one part which is now known as "Shishu park" (an amusement park for children) is totally isolated from the urban fabric. While the participation of citizens can strengthen a sustainable design's outcome [5], but here participation is reduced by many aspects. This place witnessed many historical evidence, cultural progression and political movements of the nation. So infants coming from all around the country to this amusement park remain unfamiliar about the sites glory.

Even another part of the open space "Suhrawardy udyan" is while active as a public space with liberation war museum, this part remains unconcerned about history. Fencing and unwanted boundary condition of Shishu park, blocking the visitor's eye to the surrounding. Invigoration of the space can make people and children rethink about the sites history. Indeed children are the backbone of a nation and they are the true conveyor of a nation's glory. So the sites immersing with the surrounding is necessary while the place is surrounded by many historical spaces, important public built forms and buildings. As a result, children can get a message while visiting the place. It is not only from the present condition but also from the historical viewpoint. Our aim of this research is to,

- Disclose the historical development of Dhaka city and the site ("Shishu Park").
- Investigating the present condition, context and usages of the space with the surroundings.
- Exploring the opportunities to make the space uniform within the cityscape with some Architectural design proposals.

All this research effort is to figuring the morphology of the "Shishu Park" from its historical evidence and rethink of its design and submerging policies to the urban landscape.

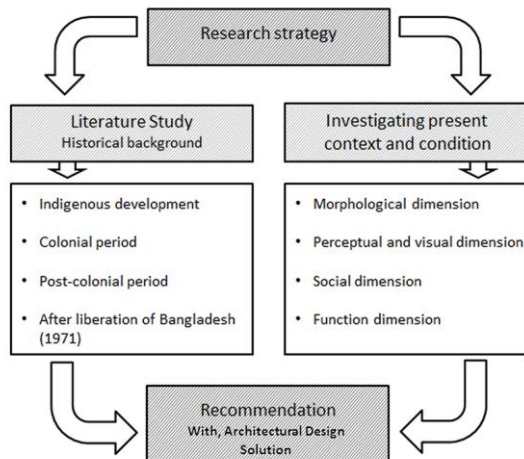


Fig.1. Research structure



Fig.2. Chronological development of built structure and open spaces in Dhaka (source: Habib, K, 2010, Ref no. 6).

II. RESEARCH METHODOLOGY

This study was mainly concentrated to investigate the evolution of “Shishu park” site according to its historical merit and cultural background. Present contextual dimension and scope of future redevelopment with some design proposals, are also a big concern of this paper. To understand a space’s identity and importance to its city fabric, it is essential to investigate its historical development, present behavior and future scopes to serve in human society. Our study is oriented by analyzing the site’s historic background, to find out chronological development, use of the site throughout the time period. Find out the morphology, space–built form relationships, importance for city orientation, perceptual and visual condition, social impact, functional quality of the site. Finally evolving some architectural strategies to enhance the site’s uniformity in the urban tissue and make a harmony. Fig.1 shows the complete research structure of this paper.

III. HISTORICAL BACKGROUND

A. Indigenous Development

From history, two major characteristics were found in Dhaka city development [6]. One is characterized as a compact and densely settlement with narrow and organic street pattern and another is open spaces which were active with public gatherings. Open spaces were meeting places for people while they were the center of political power, economic progression, religious patronages and cultural activities. Some of the open spaces were dedicated for the

ruling class and present “Shishu park” and “Suhrawardy udyan” were then known as “Bagh-e-Badshahi” under the Mughal emperors. It means the garden of the king. Fig.2 shows the chronological development of Dhaka city and the open spaces over the time period [6]. Fig.3 shows some collected images of that particular times character of the site [6]. This deliberate creation of open spaces made a significant impact on city life and shows the physical importance for expansion of a city. From Fig.2 attributes of Dhaka city can be drawn. It first started its settlement near the bank of Buriganga river with producing some open spaces far from the city for recreational purpose. Later participation and socialization of city people, the open spaces became the center of the city.



Fig.3. “Bagh-e-Badshahi” in the Mughal period (source: The British Library London, Photographer: Johnston and Hoffmann, Habib, K, 2010, Ref no. 6)



Fig.4. Racecourse in colonial period (source: the British Library London, Habib, K., 2010, Ref no. 6)

B. Colonial Period

It started in 1757 when the British gained military control over Bengal. They showed some rational and intellectual urbanization process [7]. Firstly they laid colonial settlement at worthy spaces and introduced local elite and existing institution to rule rather than imposing European authority [6]. At this time Mughal’s Bagh-e-Badshahi appointed as “racecourse”, and abruptly became the center of recreation. It was the climacteric of old organic Dhaka with the new extension of the city designed for elites. Fig.4 shows some collected pictures of that time period. Racecourse away from the old urban core at the northwards became a ruling urban gathering space [8]. It became a focus of the political gathering of elites with a huge recreational facility and cultural activities. It also acted as a kernel to spread out the city towards the north with a core open space (Fig.2). Urbanization at that time grew rapidly and the space was the focal point of old and new settlement.

C. Post-Colonial Period

In 1947 British left the Indian Subcontinent into two different states, India and Pakistan. And Pakistan had its East and West part with a three thousand kilometer distance. At that time the site was in Pakistan’s east part and it was

reconstructed, modified by the government as well as the public assertion. Due to socio-cultural diversion, political disagreement and economic discrimination a tensed political relation grew within the two wings after the partition. Like, in 1952 Pakistani rulers declared only Urdu as a national language where above 60% of peoples native language was Bengali. So clash raised and suddenly the site became one of the important public gatherings to protest against disparity and oppression. After a lot struggle, sacrificing thousands, Bangla was given equal status as Urdu. This movement was the first attempt towards the liberation of Bangladesh and stood till 1971 [9]. The site also witnesses many historical political movements alongside the memorable public gathering at 7th March 1971, when Father of the nation, Sheikh Mujibur Rahman solicit for liberation. At 16th December after a starving 9 months war, Pakistani army surrender to Bangladeshi Mukti Bahini at the “Shishu park” and “Suhrawardy udyan” site and from then Bangladesh draw its identity as an independent nation. Fig.5 represents some historical evidence of that time period like public gathering in an integrated space, political speech of Sheikh Mujibur Rahman, surrender of Pakistani army [10]. The site is engaged emotionally with the history of the nation from them.



Fig.5. Historical political movements in post-colonial period.
(Source: the British Library London, Bangabondu Museum of Bangladesh Dhaka, Mamoon 2000, Ref no. 10)

D. After Liberation of Bangladesh

After liberation urbanization faced challenges and open spaces were controlled adversely. It was the first challenge to develop infrastructure for settlement due to public demand within the fragile nation. The racecourse, where the father of the nation delivered his historical speech divided into two parts “Suhrawardy udyan” (102 acres) and “Shishu park” (32 acres). The amusement park (Shishu Park) has become one of the most noticeable space within the city during the course of time but still, it rises a moment of conflict due to its historical importance [8]. In 1996 a museum with a freedom monument was planned at “Suhrawardy udyan” and now it is one of the most public gathering space at the heart of the city. But shocking is that the children as well as adults who are visiting

the amusement park, they remained unconcern about the historical, political as well as cultural importance of the integrated site. As an amusement park, it flourished its identity well, but it’s important in the history was immeasurable. Lack of proper foresight and also incognizant with its territories this place is losing its original identity. Isolation from the neighboring may create its own territory but is unable to share its glory. Fig.6 shows present boundary condition of it, where we found unplanned fencing and messy transient infrastructures during survey period.



Fig.6. Present boundary condition of Shishu Park (pictures were taken during research period, 2016)

IV. PRESENT CONDITION

A. Morphological Condition

For determining urban form and space and signify urban spatial pattern, there are two types of urban open space system interpretation. One is where building defines space and other is where buildings are objected in spaces. This kind of figure-ground diagrams specifies the relationship man-made structure within space, their connectivity with surrounding and also spatial relationship. Fig.7 shows the figure-ground diagram of present spatial characteristics of our studying site. It reveals that it is the focal urban open space with a densely built manmade structure. Urbanization of this area is not well design oriented rather than it developed by needs. Irregular rode patterns disrobe the history.

From the prehistoric time, this space was dedicated to the elite class in their generation. At Mughal’s time, it was devoted to king’s pleasure garden, at colonial period it was racecourse ground for the elites. Some infiltration can found at the post-colonial period but still, it was for the public. In present, the space is highly concentrated with some important public buildings, such as national museum, public library, national radio center, fine arts institute, graveyard of national poet Kazi Nazrul Islam some other memorials. There is also a center of cultural activity with an open space (Ramna park) which sharing its edge with the site. Ramna park is well known for arranging the Bengali new year festival and some other national momentum and celebration. Significantly the site acts as a core of all public activities in cultural, political

and social activities in present time. Fig.8 shows the land use pattern surrounding the site [11]. Where settlement for the high class in the society is found beside the research zone according to history. Fig.9 shows the present building features. Most of the buildings are educational, governmental public building. Significance and importance of the sight are inestimable for its historical value as well as the present importance of its surrounding.

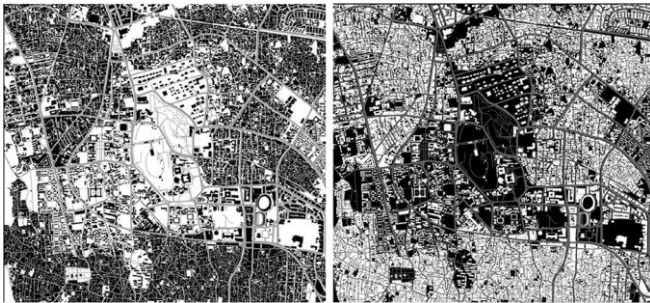


Fig.7. Figure-ground diagram in Shishu Park area (Drawn from satellite image,2016)

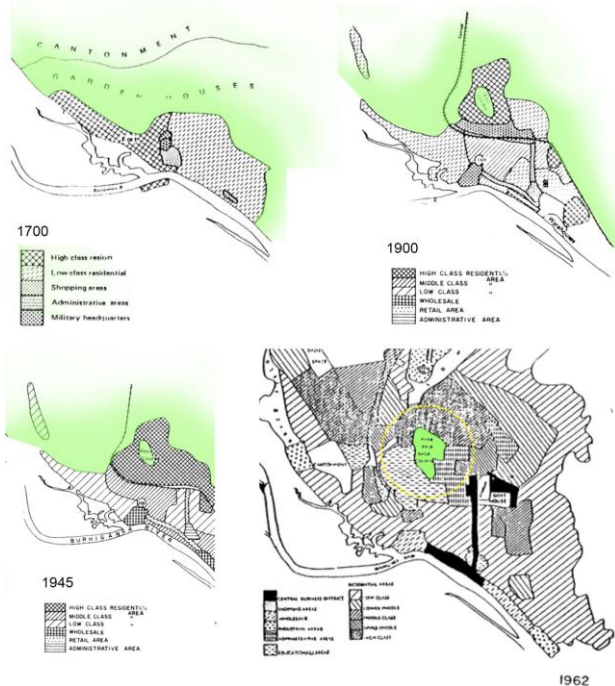


Fig.8. Land-use pattern through history. (source: Nilufar, F., 2010, Ref no. 11).

About 80% of Dhaka’s settlement developed by the organic way. The site is at the connecting point of old and new settlements. Streets are mostly organic pattern beside the site. One of the important features is the node point where two major roads (Kazi Nazrul Islam Avenue and Moulana Bhasani road) is crossed and it is known as “Shahbag Square”, at the north-west side of the site. It is one of the busiest, weighty and most used crossings in Dhaka city. Presently it also a voice raising platform against any Inhuman activities. And the roads are like veins for the city due to their importance for holding momentous open space, public

buildings and memorials. Fig.10 shows the road network development throughout the history from pre-Mughal to post-colonial period [11].

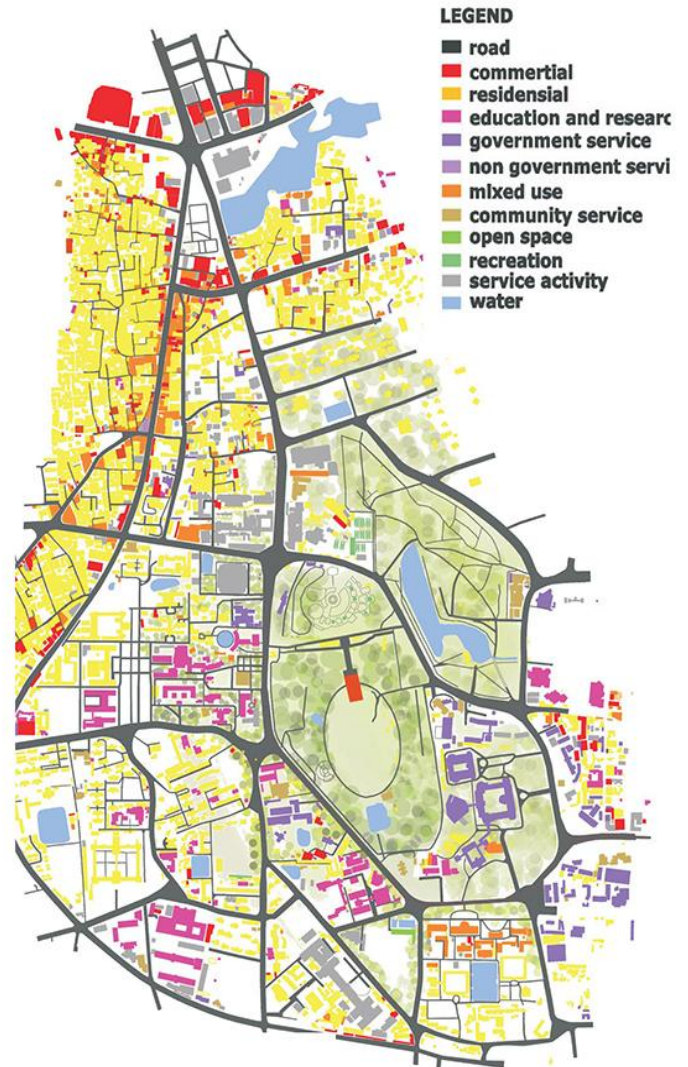


Fig.9. Building usages in present time (source: Dhaka City Corporation)

These figures reveal that the site was the core point in every generation and played a vital role for city establishment. Fig.11 shows the important buildings, spaces and memorials surrounded beside the roadside near the site and their three-dimensional pictures. It reveals the importance of the road as well as the site. Bold fencing physically and visually disconnecting the site (Fig.6) with its surrounding. And at present, there is no network with the surrounding to the site.

B. Perceptual and Visual Condition

Awareness and appreciation of environmental perception is an essential feature of the urban design. For figuring environmental perception vision, hearing, smell and touch, these four phenomenal play inextricably. Position and orientation of space with its activities make a sense of a built form. Shishu Park is totally isolated from the surrounding.

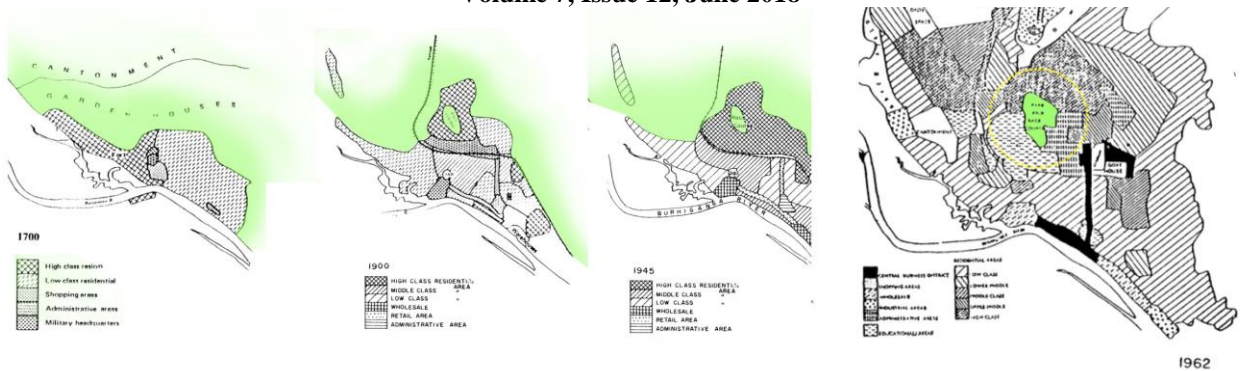


Fig.10. Road pattern beside the site (source: Nilufar, F., 2010, Ref no. 11).

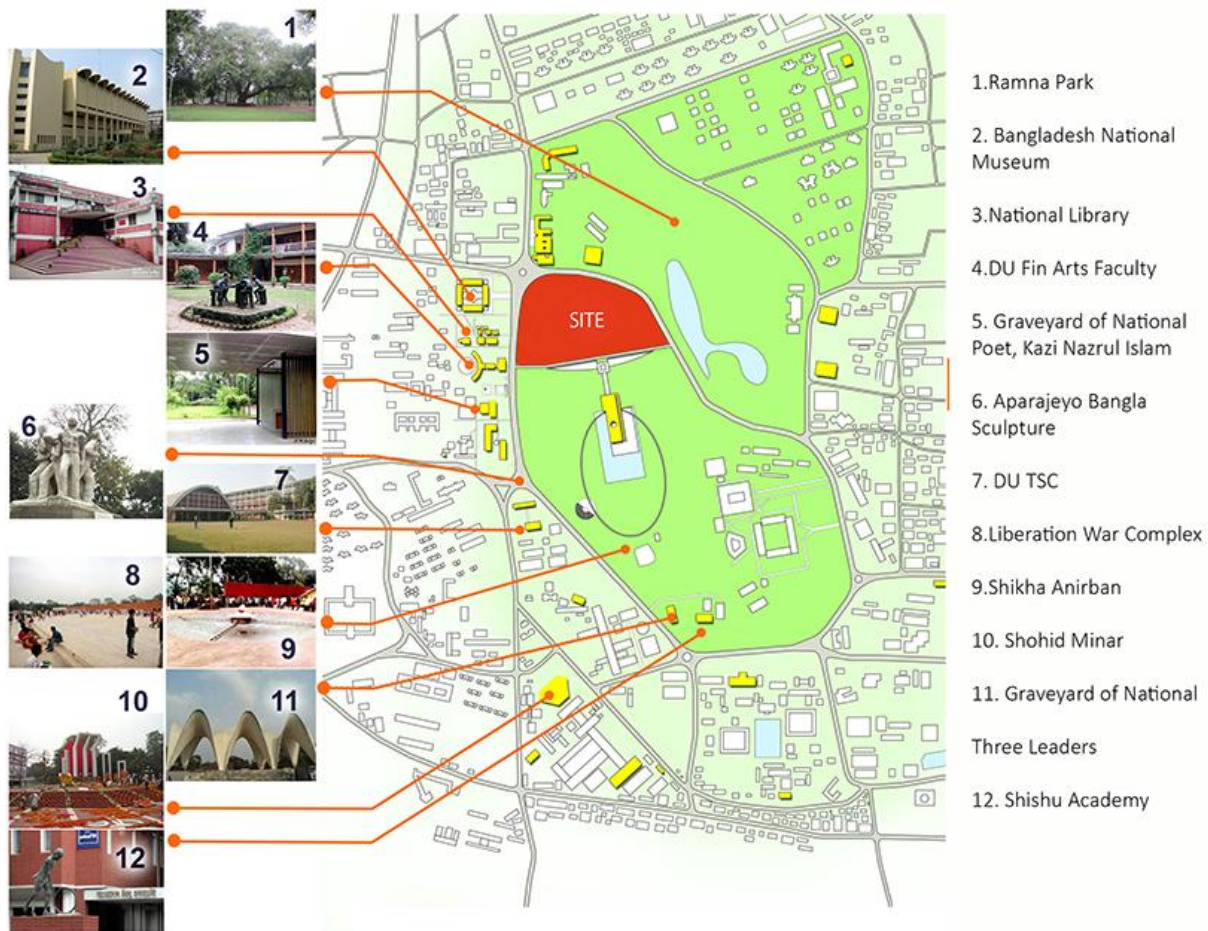


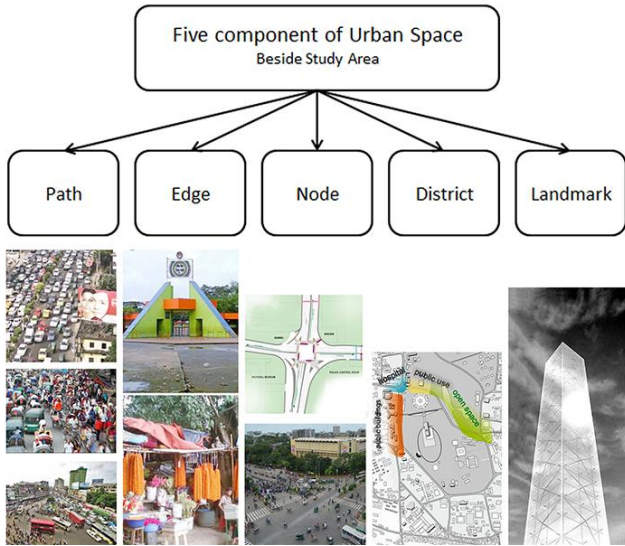
Fig.11. Important buildings, spaces and monuments (pictures were taken in 2016 and linked with spatial drawing during research).

In course of time and its usage pattern it is quite successful but in case of historical and urban importance, it is questionable. There is no network developed within its surrounding while it is only focused for amusement facilities. When in terms of hearing smelling and touching consideration it is far behind from the urban taste. Lynch [12] argued environmental images required three attributes. Identity, structure and meaning. Shishu Park gained its identity by its activities but it remained unconcerned about its historical flavor. The gesture presents only present condition. In case of the structure which deals with the spatial relationship with neighboring bodies, the study space makes silence. It is important to provide a message, to the observer about its

presence and emotional feelings. This site had a brief history to tell to its observer, but it is missing in present condition. The history is latent under present activities. Fig.12 shows the five important characteristics of urban space analysis procedure. It shows the busy and vibrant pathways beside the site, which declares the importance of it, in the urban fabric. Edges of the site are not so well planned, that's why there is a weak visual and physical relationship drawn to the site from the surrounding. The node beside it "Shahbagh square" is a quite busy and identified in urban life while the districts surrounding it is public space and public built forms. Landmarks are quite important in city history. Many landmarks (Fig.11) are quite common in this zone which makes the site altogether important and meaningful to urban

tissue. With its own history alongside its surroundings, it tells a brief history of its journey to present day. But present condition of the site creates an obstacle to its observer during their thought process. It creates scope to rethink about the site.

Fig.12. Path, edge, node, district



t and landmarks surrounding the site (developed during research period).

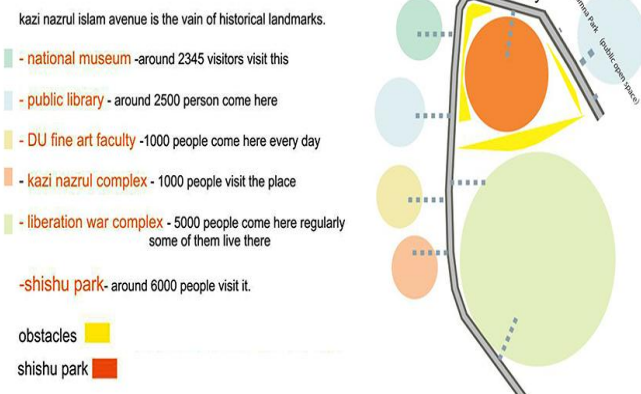


Fig.13. Social connectivity with surroundings (source: Wikipedia 2016, diagram developed during research).

C. Social Dimension

Relation between space and society makes significance in urban design. Without social content, it's very hard to conceive a space. A space is a backdrop of social activities of people. According to Dear and Wolch [13] built environment and urban landscape impacts on human activities and it influences settlement and various social activities. The dialog between people and space is quite important both in the physical and visual sense. Fig.13 shows a conceptual social relationship diagram of the site with the surrounding. But physically they are disconnected. It shows the number of people visiting per day with its surrounding. It's about 15,000 people are visiting here, but for physical and visual discontinuity they can't test the charm. At the same time, 6,000 are unconcerned with the public buildings, spaces and memorials when they are visiting the amusement park.

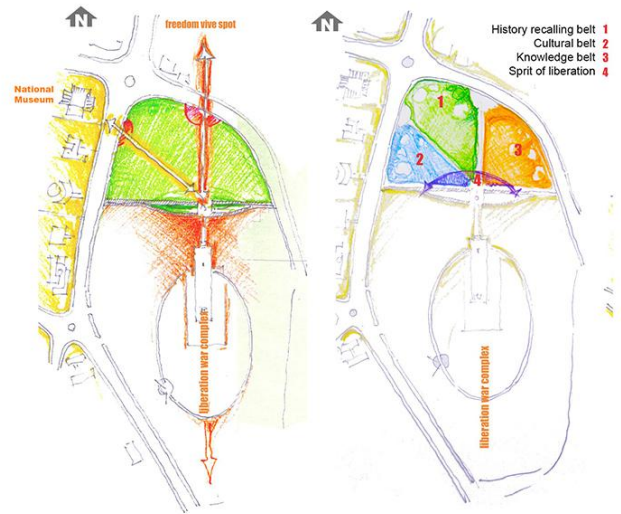


Fig.14. (a) Axis pattern, (b) Zoning ideas (conceptual drawing, illustrated during research work).

Worth of the site is priceless in the terms of history but it remains silent in present context and condition. As a children realm it is working quite successfully, where children's get an opportunity for recreation with a safe environment but in course of influence to the society, its one attributes are totally ignored. Territorial historic fabric is totally missing in this particular region. Culture of the nation is restricted to enter by cutting physical and visual continuity. Original identity of the site is now absent and the impacts on the public as well as children are restricted from history, culture and uniqueness. Presence of historical evidence is far away from present context. To design a social impact on child mind, it is missing both aesthetically and physically.

D. Functional Condition

Potentiality and present usages, these two are the important phenomenon in urban context. Functional behavior determines a spaces importance to the environment. Grants to the social community is a functional achievement of a space. In this circumstance, Shishu Park has its own identity in the society as an amusement park. Many visitors (mostly children) are visiting daily and gathering some good memories of entertainment. But the message from history it quite differs from the present functional character. Most of the buildings and space adjoining it is public (Fig.9). Movement and activities of people of this zone have made it a public realm. Street life is quite busy with huge visitors at public spaces and citizens for daily activities. Beside that occasion such as the celebration of public days (independence day, mothers language day, victory day, new year celebration, religion festivals etc.), this zone is the core space for all public gathering. Lack of open space in the city is another reason for making this zone as a unique space. This zone has the biggest open spaces with public structures in the city. History of the zone is the other reason of attraction of people and of course the location in the cityscape. Despite that Activities of Shishu Park is restricted only for children and it doesn't sing with its

surrounding with the same tone. Isolation by boundaries this place is like a fort which is alien to the outsider. It's single activity oriented design restrict the harmony of a huge public space dynamism.

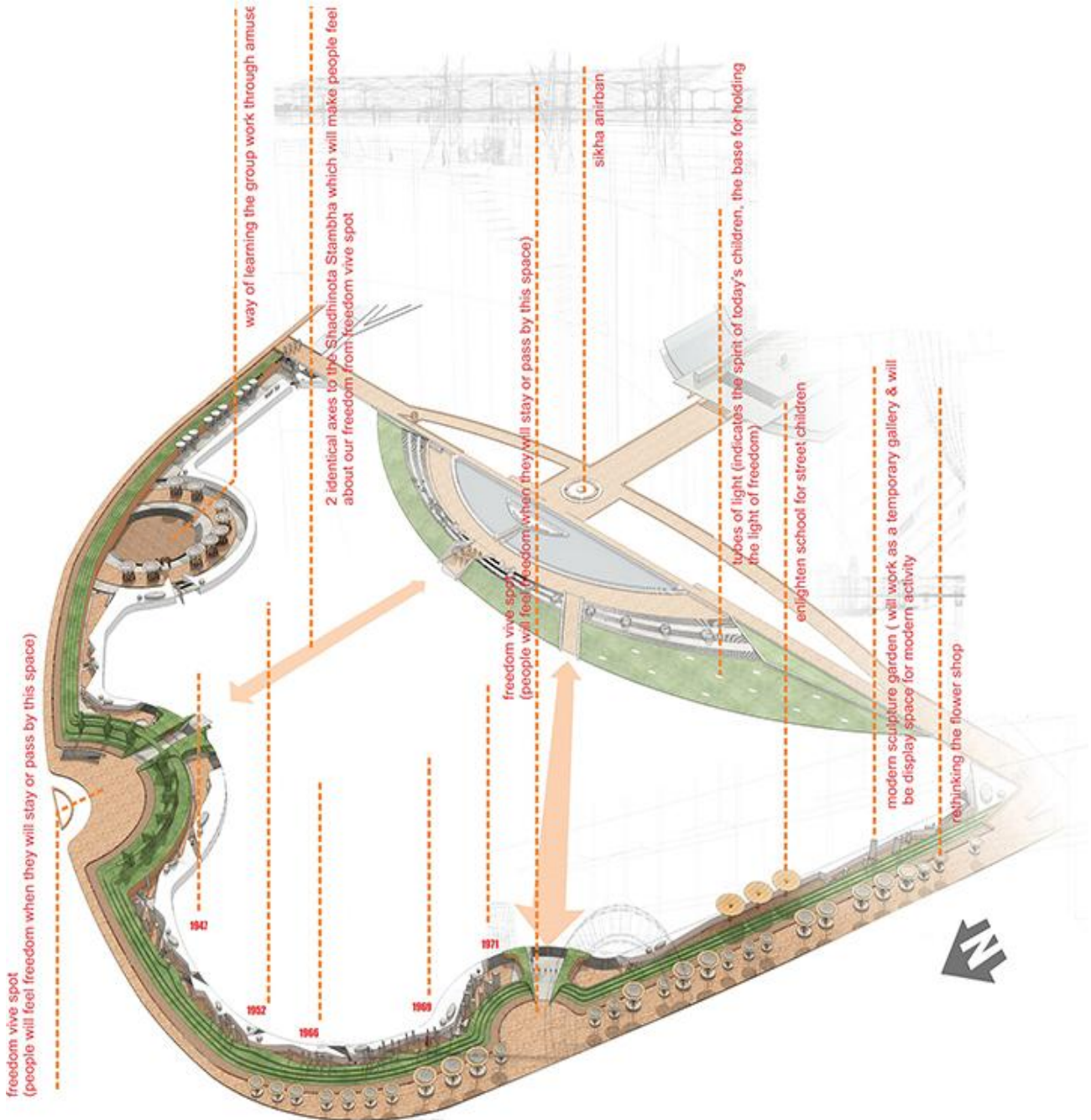


Fig.15. Axonometric view of the proposed design (conceptual drawing, illustrated during research work).

V. ARCHITECTURAL STRATEGY WITH PROPOSED DESIGN SOLUTIONS

Landscape urbanism relies on two synchronizations. Concept and contextual strategy, and on the other hand planning strategy to integrate the built form within the urban fabric [14]. In consideration of these issues, Shishu park seeks to reconsider its planning and activities to submerge it to its neighborhood. Proper planning and development can change its presence to the cityscape.

A. Concept, Context and Planning Strategy

While recreating a new development to urban tissue, it is essential to weigh the present circumstance. Shishu park is well known as an amusement park for children but at the same time, it also bears the history of a nation, which is now missing for its present ascent. Considering present condition with historical gravity, maintaining children domain with historical recall can be a good example for this site. At the same time, it is needy to integrate the space to the surrounding.



Fig.16. Splitted axonometric view of the Museum for children (conceptual drawing, illustrated during research work).

B. Architectural Elements in Design Proposal

To develop a language in city syntax, both in architectural and urbanism essence, point and line are the key design tools [15]. It grows from urban fabric and makes a meaningful integration to the context. Fig.14(a) is a proposal of making some bold connectivity with the surroundings to the space. One line starts from Liberation war complex, crossed the

space and connects to one of the main busy road (Moulana Bhasani road) to create a stoppage (like bus stand, parking), so people can make a dialog with it when visiting or even when they are just passing out. Another line has considered from the National museum to the Liberation war complex. These two lines intersect on a point, which is presently known as Shikha anirban (endless light). It represents the endless light of the liberated nation and a major design element in Liberation war complex. It is the focal point of the Liberation war complex. So it's a proposed network pattern, where aim is to create relation with surrounding elements.

C. Hierarchy of Zoning

For graduation of space, there should be a clear transition from public space to this children domain. Greenery is a soft element which divides the space without disturbing the characters. Fig.15 is a axonometric view of proposed design. Here green boundaries is to blur the space with the surrounding. Choosing step characters rather than perpendicular one is for the better gradient of space. peripheral spaces are designed for children recreation and take a charm of culture and history. The lines divide the space into three parts with a central focusing one. Fig.14(b) shows the characteristics of it. Integrated amenities are equally important and these three zones relate to its surroundings. The focus is to reviving history and culture, at the same time keeping children realm for its present identity. The center of the three zones creates a new relation to the Liberation war complex. The Zones are History recalling belt (which accommodates a series of space experience of the history of nation), Cultural belt (making space to give message about nation's culture to the observer), Knowledge belt (a space where occupants will inspire to know new items, know themselves and express themselves) and the last central one of that three zones is, Sprit of liberation (a museum for children, visually connected with present Liberation war complex and submerge the sites) (Fig.16). All the zones are to create a network with the amenities. Fig.16 shows proposed design consideration of the museum in a splitted form.

D. Landscape Architecture

To merge internal and external world, linking public and private space, landscape architecture perform as an important element rather than any solid elements. Fig.(15) and Fig.(16) represent the marriage between outer environment to the inner court. Child phycology is also a great consideration for this design proposal. Kids like to hide themselves and make their own domain, at the same time they also like to ride to the top anything to discover the outer world. Here peripheral stepped green boundary integrated with sunken spaces and museum under artificial green hill are to make them adventurist. Green infrastructure assures the physical and psychological benefits [16]. Depressed historical, cultural and amusement belts at periphery are to make them feel as their own domain. Here level is submerged according to children height, for cutting the vision from inside and to focus on designed elements.

Table 1: Description of proposed design zones

| Zones | Adjacent space | Designed space | Specification |
|------------------------|--|--|--|
| Boundary | North: Moulana Bhasani road South: Liberation War Complex East: Moulana Bhasani road West: Kazi Nazrul Islam road | Stepped green boundary Gateways Waterbody | For proper graduation with surroundings, enhance the importance of greeneries Northern gate: to make a stoppage at road side, Western gate: To make a dialog with public buildings (National Museum) Make the soul refresh and to create visual relationship with “Liberation War Complex” |
| History recalling belt | National Museum National Library Shahbag Square | Ancient time 1947 1952 1966 1969 1971 | To make visitor known to historical glory with terracotta Let visitors know about the birth of India and Pakistan with statues Remembering the “Fight for mother tongue” Remembering the “Six Clue” Remembering the “Democratic Indwelling” Remembering the struggle for the liberation and the birth of Bangladesh |
| Cultural belt | Ramna Park | Amusement spaces | This place is for recreation facilities, like ridding, hiking, hiding, running and with performing platform. Here all the things is designed for group works to make children collaborative |
| Knowledge belt | Graveyard of National poet Kazi Nazrul Islam DU Fine Arts Faculty | Statues Exhibition wall | To know the historical figures For displaying information, such as newspapers, magazines etc. |
| Sprit of liberation | Liberation War Complex | Museum with library and exhibition facilities | For let children know about history, culture and context briefly. This is specialized museum for children, so it can be more meaningful to children rather than conventional museum |
| Central green space | Surrounded by new designed elements | Open space | Fluid access for children to make decisions to visit anywhere |

Water body between the Liberation war complex and Shishu park makes them visually connected while cutting the physical communication to keep the space for children. The leftover flat land is for enlarging their thought process and make them flexible in the fluid space.

E. New Identity

Creative and innovative environment makes a society more educated and corresponded. Connecting the vertex with the surrounding makes a new matrix in a new society. This amusement park, networking with historical evidence and present context and activity can rewrite the value of the site. Table 1 is a short descriptive design proposal with present context. Integration with urban structures and nature it will bring a new meaning to the urban landscape.

VI. CONCLUSION

Landscape and urban structures are elements to create harmony with the urban tapestry and illustration of a rhythmic pattern. A testing ground is a genre to explore research investigation by using landscape urbanism. A proliferation of historical evidence and accounting present situation of the amusement park, following aspects have come out from the research work.

- From the time of development of the city, this space act as an integrated part with its surrounding and had a vast

historical value through the journey of time on urban life. It had witnessed many memorable historic evidence including independence of Bangladesh. Like the speech of father of the nation (1971,7th March), surrender of Pakistani Army (1971, 16th December) which are the pride of the nation.

- Presently this place is well known as “Shishu park” (amusement park) and well established for its purpose. But the historical evidence is totally missing and the integrated relation with its surrounding is fully disappeared when it is surrounded by many historical spaces, public buildings and memorials.

- Lack of connection with history as well as present urban fabric, it creates a scope to rethink it. Some architectural design concepts and strategies have developed during the study time and shown in research documentation (breaking boundaries, introduce new Architectural elements and develop new identity). It’s a great scope to illustrate the site whiten the urban landscape respecting past and present.

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