

Khelaghor
Play Spaces Re-thought



Inspiring Excellence

Seminar II

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1.1 Project Brief

Play is an essential right and a vital element of the life of every child. It is an unavoidable element for the child's overall development and has a direct impact on physical, mental and social wellbeing. Through the play process, a child transforms from childhood to a healthy adult with the required skills such as reasoning, motorized, psychological, health, education, communication and creativity to be a future citizen of a nation. More than 2 million children live in Dhaka city, the capital of Bangladesh. It is one of the fastest growing cities in the world but lacks children's play and recreation facilities. Due to land scarcity, outdoor recreational spaces such as parks and playgrounds are being invaded upon by different profitable land uses like housing, industries, commercial and utility services. As a consequence, open space for children has shrunk significantly and resulted in one of the lowest ratios of open space to population in the world. As a result, the children of Dhaka city are deprived of outdoor play and recreation provision which affects their overall physical and mental development.

1.5 Project Introduction

Play is fundamental to all domains of physical, intellectual, social and emotional wellbeing of children (Hart, 2002). Play is a basic human drive and is fundamental

to children's overall development and through the play, a child lives a full life as it promotes physical fitness, enhances social interaction and improves self esteem (Goss, 2006; Hossain, 2004; Bartlett, 1999). The central role of children's play is learning through motor skills, communication skills, problem solving, creativity, logical thinking, aesthetic and emotional development (Hughes, 1990; Hart, 2002; Bartlett, 1999; Chawla, 2002a; Barnett, 1990; Beard and Ragheb, 1980; Mergen, 1975). Most children choose to play passionately with the world around them through exploration, manipulation, physical exuberance, experimentation encouraged by diverse and stimulating environment (Bartlett, 1999).

Not so very long ago, Dhaka had an image of a city of greenery and water bodies, but within the last few decades Dhaka has turned into one of the most polluted and crowded cities in the world (Biswas, 2002). Rapid urbanization, congestion, pollution, traffic jams and unplanned development and a rapidly increasing population have made

Dhaka a concrete jungle with inadequate room for outdoor play and recreation facilities (Ahmed and Sohail, 2005).

1.6 Project Statement

A recent study has shown that children aging from 8-10 years spend up to 8 hours in front of a screen. Countries such as India, China, Japan and many more have already declared such phenomena as internet addiction disorder. As a result of such event, many of them are finding it hard to distinguish between reality and fantasy. And as a remedy seeking for behavior and speech therapies. Researchers have indicated that children choose electronic devices in order to replace loneliness. In context of Dhaka, the rapidly growing apartment culture has taken away those spaces for social collaboration for children. Which may be a key factor behind their loneliness. Maybe a time has come to rethink and reinvent those lost spaces in order to provide a healthier life.

1.7 Project Rationale

1959 Master Plan of Dhaka City: A total area of 4 acres per 1,000 people was proposed according to the Dhaka Master Plan 1959. Of these 2 acres were recommended in the form of park and 2 acres for open space. The Master Plan (1959) recommended 1,184 acres of open

spaces of which 291 acres were shown as existingspace and 893 as proposed open spaces.

A study conducted by Nabi (1978) suggested the following space requirement and sizesof open spaces for outdoor recreation of Dhaka city:

Table 1.1: Recommended area and size of open spaces for Dhaka city

Open Space	Area	Area/1,000 population	Size (Standard)	Size (Maximum)	Size (Minimum)
Play lot	50 sq.ft./child	0.5 acres	5,000 sq.ft.	-	2,500 sq.ft.
Play ground	100 sq.ft./child (6-14 years age)	1.5 acres	3 acres	5 acres	2 acres
Play field	600 sq.ft./person (15+)	1.5 acres	10 acres	20 acres	-
Local Park	300 sq.ft./person	2 acres	-	50 acres	5 acres
City Park	-	0.5 acres	100 acres	-	30 acres

(Source: Nabi, 1978)

Considering the existing provision of parks and public playgrounds in cities of Bangladesh which remains at 1.3 acres and 0.5 acres per 1,000 persons, Hamid (2001).

Dhaka Metropolitan Building Construction Rules, 2008: Any guidelines or policy

Realted to children’s play space is non-existent in this important building construction rules as all buildings in Dhaka city have to adhere

to these guidelines. It is important to state that the majority of residential buildings in Dhaka city is for multiple occupancy; apartment building. Regarding community space, there is a guideline to keep four percent of the residential building area where the floor area of the building is more than 3,000 sq. metres. Regarding the open space, it is mentioned that residential plots with more than 1,300 sq. metres plot size should keep at least 10% percent of the plot area as open space (Bangladesh Gazette, 2008).

Private Sector Residential Land Development Rules 2004: This Rule gives general Guidelines for the private real state agencies about the children's play areas. It says that in order to make the environment of the private residential areas healthy and entertaining, space should be allocated on the basis of population. But this document lacks the specific space allocation per family/children; as a result there is no controlling mechanism for the planning approval authority to keep the provision of space (Bangladesh Gazette, 2004).

Provision for play and recreation is not a priority for most municipalities in Bangladesh(Kabir, 2004). In the context of developing countries, where there are high levels of poverty and a desperate need for other basic services and amenities like health, education and housing,

investment in play may appear to be a misuse of resources. In a poor neighborhood, children's needs for play are high on their list of concerns and for their development (Bartlett *et al.*, 1999). Many policy makers do not feel that play is critical for children's development so it is seen as a low priority in the context of real hardships of urban life in many developing countries (Bartlett, 1999). The present condition of Dhaka city indicates that its community facilities are severely inadequate with respect to its total population of 12,623,000 in the Dhaka Metropolitan Development Plan Area/RAJUK Area (Islam and Shafi, 2008).

1.8 Aims and Objectives

- Try to understand children's needs for outdoor play and recreation provision of
- Re think and re define the existing play and recreation facilities provided by the concerned authority
- Create awareness regarding decreasing trend in the provision of areas of outdoor play and recreation facilities in Dhaka city;
- create accessibility of outdoor play and recreational facilities
- plan of children's outdoor play and recreational facilities is related to child

development, child rights, city planning and social development in the existing scenario in different levels.

2 Literature Review

2.4 Interaction and how do they take place?

Socio-cultural interactions are referred as the meetings of people of a community in a certain time, at a certain place and occasion. Possible interactions were religious festivals, family programs etc. whatever the types were, the main thing was the interaction and communication among the people. in the past, in Dhaka, it was especially referred for its nature of festivals and how it was observed. (Touhid and mallik)

But nowadays, apartment buildings in most cases are shelter of nuclear family with husband, wife and children. a recent study has shown that on an average their family is between 4-6 (sultana and lipi,1999)

The apartment living in upper floors of apartments is often reluctant to send their children down for playing due to lack of control over them. so the children living in high-rise buildings remain isolated and suffer from unbalanced socio-physiological development.

“something happens because something happens.

Nothing happens because nothing happens.”

- jangehl

in the book “life between buildings” the writer says

Children would rather stay in and watch television because it is so dull outside. old people do not find it entertaining to sit on the benches because there is almost nothing to see. and when there are few children playing, few people sitting on benches and a few walking by, it is not very interesting to look outside the window. there is not much to see.

In the book “death and life of great American cities”, the author talks about the role of streets and sidewalks as a space for playing in children’s lives.

Lively sidewalks have positive aspects for city children’s play too and these are at least as important as safety and protection.

Children in cities need a variety of places in which to play and to learn. they need among other things. opportunities for all kinds of sports and exercise and physical skills. more opportunities, more easily obtained than they now enjoy most cases. however at the

same time, they need unspecialized play that sidewalks serve and that lively sidewalks can serve splendidly.

the wonderful convenience of city sidewalks is an important asset to children too. children are at the mercy of convenience than anyone else. except for the aged. a great part of children's outdoor play, specially after they start school, they also find a certain amount of organized activities which occurs in incidental times. and must be switched it. a lot of outdoor life of children adds up from bits. it happens in a small leftover interval after lunch, it happens after school while maybe wondering what to do and who will show up.

2.5 Definition of Terms

Children: Children are defined as infant and children of all ages, up to their 18th

birthday (BHIS, 2005; Bartlett *et al.*, 1999).

Play: A widely accepted definition of play in England is that play is a set of behaviours freely chosen, personally directed, and intrinsically motivated

following the children's own ideas and interests in their own way, and for their own reasons (Wilson, 2009; DCMS, 2004). The word play describes a range of physical or mental leisure activities that are undertaken purely for enjoyment or amusement and can be undertaken by individuals or groups of children spontaneously or as part of a planned activity (UNICEF, 2004).

Recreation: Recreation is any pursuit other than those associated with work which a person undertakes freely for the purposes of relaxation during leisure time. Recreation includes games, sports, camping, dancing, picnics, discussion groups, drama, music, craft, arts, and other activities of personal choice. Recreation consists of active participation, or quiet relaxation, listening, or watching and can be organized or unorganized and can be enjoyed alone or in a

group, can be passive or active (Siddiqui, 1990; Biswas, 2002; Kabir, 2004).

Parks can offer a wide range of recreation activities ranging from sedentary to vigorous physical activities (Floyed *et al.*, 2008b).

Leisure: Leisure behaviour comprises a wide variety of activities like to be close to nature, to get away from responsibilities of everyday life, watching TV, spending time on a hobby, taking a nap, socializing, visiting friends, playing games, walking or hiking, partying, gossiping, spending time in a quiet place, shopping etc. (Crandall, 1980). Leisure plays a dynamic role in the lives of individuals and the primary leisure time activities are psychological, educational, social, relaxation, physiological and aesthetic (Beard and Ragheb, 1980).

Sports: Play activities with some principles and accessories and generally supervised by adults (Child, 1983).

Play facilities: Playground, park, amusement park, stadium etc. where people play different types of games or have arrangements for outdoor recreation.

Play accessories: Goal posts, nets, sand, cricket pitch etc. Play accessories means necessary arrangements to create the proper play environment. Play accessories are required to play games properly.

Play tools: Cricket bat, ball, racket, skipping rope, toy car etc. Play tools are the necessary equipment to play with.

Play provisions: Play provisions cover the play facilities, accessories, play tools together with different play opportunities.

2.6 Benefits of Playing

The benefits of play in children's development have been described by a number of child researchers and development psychologists over the last two decades, which are described in next section.

Physiological: Play is a means to develop physical fitness, stay healthy, control weight, and otherwise promotes overall wellbeing of the child and enhances survival capacity (Beard and Ragheb, 1980). Play is a biological drive and as important to our health as sleep and nutrition (Brown and Vaughan, 2009). Regular physical activity through play builds healthy bones, muscles and joints; helps control body weight; helps reduce fat and blood pressure, and most importantly the emerging problems of child obesity (Woolley, 2006). The US Department of Health and Human Services mentioned that *The consequence of physical inactivity impact nearly all aspect of human health from obesity and overweight to type 2 diabetes, loss of muscle strength ad joint function, depression and anxiety, colon cancer and cardiovascular diseases(Floyd et al., 2008a) (Cuttset al., 2009; Woolley, 2006; UNICEF, 2004).*

Psychological: Through play, psychological benefits such as a sense of freedom,

enjoyment, involvement and intellectual challenges are met (L'Abte 2009 Beard and Ragheb, 1980).

- **Cognitive development:** Many researchers have now proved that a child

thought processes, both convergent and divergent, are very strongly influenced

by playful activities and interactions. Play relates directly to the problem solving

ability of a child as play provides a child with the specific skills to solve a variety

of problems posed in life's other circumstances.(Brown and Vaughan, 2009; Barnett, 1990; UNICEF, n.d.; Vandenberg, 1980).

- **Motor skills:** Through active play children learn to use their bodies and develop their gross and fine motor skills (Moore and Wong, 1997). Bartlett (1999) noted that the data from research in the neuro-psychology and psychopharmacology indicate that distinct changes in the brain occurred due to healthy play and social behavior.
- **Intellectual development:** The intellectual stimulation acquired through play helps children to learn about themselves and their

surroundings and provides opportunities for initiative, interaction, creativity and socialization in the formal education system (Brown and Vaughan, 2009). Through play children achieve intellectual developments by working out answers e.g. speed, quantity, concepts, big/little, abstract ideas etc. (Play Ireland, n. d.)

- **Environmental education:** Natural outdoor play environment offers

opportunities for children to learn the importance of the environment.

Children

explore cause and effect and gradually build a knowledge base through play that

cannot be taught through structural learning settings (Strife and Downey, 2009;

Beard and Ragheb, 1980: IPA World, n.d.; Crandall, 1980). A number of studies

found that there is a positive correlation between symbolic play and learning

language during the early stage of language acquisition in both normal and

language impaired children (Barnett, 1990).

- **Competence and self-assurance:** children through their manipulation

of objects children begin to understand the properties of different substances, quantity, number and size, the principle of cause and effect. Through play, children acquire a sense of competence and self-assurance necessary for tackling new challenges (Bartlett *et al.*, 1999).

- **Creativity:** Play is a vehicle for the development of creativity and flexibility that

are invaluable qualities in human development. Through play, a child acquires creative development by making things, symbols and imagination (Brown and Vaughan, 2009).

- **Altruism:** Play environment gives a right scenario to learn to help others to

achieve a common goal (Crandall, 1980).

Social: Play with other children promotes an understanding of social roles and

responsibilities which contribute to social interaction and communication, the opportunity to meet friends and the enjoyment of good fellowship (Bartlett *et al.*, 1999; Hughes, 1990; Beard and Ragheb, 1980; Mergen, 1975; Strife and Downey, 2009). Play gives the opportunity to mix with other people and to talk to new and varied people and to build friendships with new people. It also helps children to understand others' views and needs and provides practice in resolving conflict, agreeing on rules and learning from others (Bartlett and *et al.*, 1999). Play is a way of socializing process by which children learn to play as an adult and acquire essential characteristics and ability to solve problems (Brown and Vaulghan 2009; Mergen, 1975).

2.7 Constrains

A number of factors that give the lives of children very few opportunities for free play are as follows:

- **Safety:** Children's safety is one of the major issues for parents when their

children leave the house alone and many children are no longer free to roam

their neighbourhoods or even their own yards unless accompanied by adults

(White and Stoecklin, 1998).

Although it is found from research in the United States that every year accident rates for the children in their homes are far higher than in the

playgrounds (Hart, 2002). Fear of litigation is one of the leading worries among

the play providers. As a result, there is a tendency to minimize risk of injury at the

expense of the more fundamental objective of the playground. The effect is to

stop children from enjoying a healthy range of play opportunities. This limits their

enjoyment and leads to potential damaging consequences for children's development (Free Play Network, n.d.).

- **Changing structure of a family life pattern:** This may have a negative effect on the children's opportunities for free play. Children's lives have become more structured and scheduled by adults. Many parents have put excessive effort into academic pursuits and lessons over outdoor play. As a result, children do

not have time for ftthe house in front of the television or computer (White and Stoecklin, 1998).

- **Changing play pattern:** Due to the loss of indigenous games and modes of

recreation such as children's cultural groups, boat riding, kite flying and the rapid urbanization, children are more interested in acquiring more western tastes and values, neglecting their own traditional means of recreation. The change in the play materials and tools to specific play commodity.

- **Lack of parents' support for children's play:** Lack of parents' understanding about the importance of children's play is one of the hiding factors for children's play. laziness affects the participation of children in outdoor play and recreation particularly where children needs parents support to take advantage of these facilities (Hart, 2002). The current prevailing perception among parents is that academic success is the best path for children's future in increasingly competitive world (White and Stoecklin, 1998; IPA World, n.d.). Same concerns were also raised by Riggio (2002) suggesting that even children in wealthier communities are often bound to live in a world rigidly organized by adults with little opportunity for playing and socializing freely with their peers. Therefore, young citizens usually lack

opportunities for expressing their special needs and aspirations. Also parents' office-hours which are usually up to late evening is creating hindrance for taking children out for play or recreation. Despite the fact that children are the major consumers of recreation services, the role of children in the purchase of public recreation services has been virtually ignored (Howard and Madrigal, 1990).

- **Technology:** Play is trivialized by parents and capitalized on by the corporate world which invents expensive systems of toys and electronic technology. This man-made, commercialized environment restricted children from natural, stimulating environment and provided a pre-programmed play where children have to follow the play instructions designed by adults overlooking the children's desire for free and instinctive play (Hart, 1992). Television, computers and computer games keep children glued to screens for hours which discourages critical thinking, and diminishes a child's interest in learning to read. (IPA World, n.d.; Lobo and Olson, 2000)
- **Poor design:** It is found that many playgrounds suffer from poor design and scope for play of a narrow age group, mainly

adolescents, as the safety-proofmeasures mean the removal of the most enjoyable play equipment from theplaygrounds, making them unattractive and less enjoyable for the children. Theolder people and parents also need recreational facilities; therefore co-locatingthose with playgrounds make them economical and more appealing andattractive for parents of younger children as well as for older people. They arealso sometimes boring for parents as they do not find any activity or interest in these playgrounds and parks (Goffin and Ward, 2006).

- **Inadequate education and training of play and recreation professionals:**

Children would benefit from an increase in knowledge of play by architects, landscape and interior designers, planners, teachers, coaches, and recreationalists (IPA World, n.d.).

3 Site Analysis



Site: Hajipara

Density

The overall density of R/A have changed with the change in building form. The density changed to almost 450 persons (30 families/bighaie, 150 persons/bigha X3= 450 persons/acre) per acre to 10 person per acre. This density affects not only on the services and amenities but also on the overall housing situation. The Assumed Density during design period was 1.73 plots per acre (Appr.10 persons per acre assuming 5 persons per household) which grew after the rise in land

value due to rapid urbanization in 1971. The density was 164 persons per acre in 2001, which increased to 650 person per acre in the recent days (BBS, 2001).

Building type

Besides the commercialization of residential plots, the whole of area has been virtually surrounded by shopping malls, hospitals, clinics, restaurants and offices. Huge number of nonresidential building infrastructures is noticeable at Dhanmondi and also presented in Table 4.3. Most houses built on these plots in early 80s, were low-rise 3 to 4 story's with maximum utilization of floor spaces. Plot sizes at Dhanmondi vary from 350 to 1400m². It was common that most houses are occupied 50% of land keeping rest spaces free for open space like green or garden and also separate garage. Now land coverage varies from 70% to 80% even more in practice. In Dhanmondi, flats were mostly used for rental accommodation as a source of income generation, multiple dwelling and limited floor space with two or three rooms with other facilities like toilet, kitchen with few provision of parking. Due to lack of concern of authorities, building height restrictions are not honored. Out of the 256 studied buildings, 37 buildings within the area have found constructed in violation of the law which restricts more than six storey. High rates of transformation in the building stock are occurring as

extensions, modifications, alterations and high-rise (6 to 20 storey) construction are taking place by formal and informal private developers.

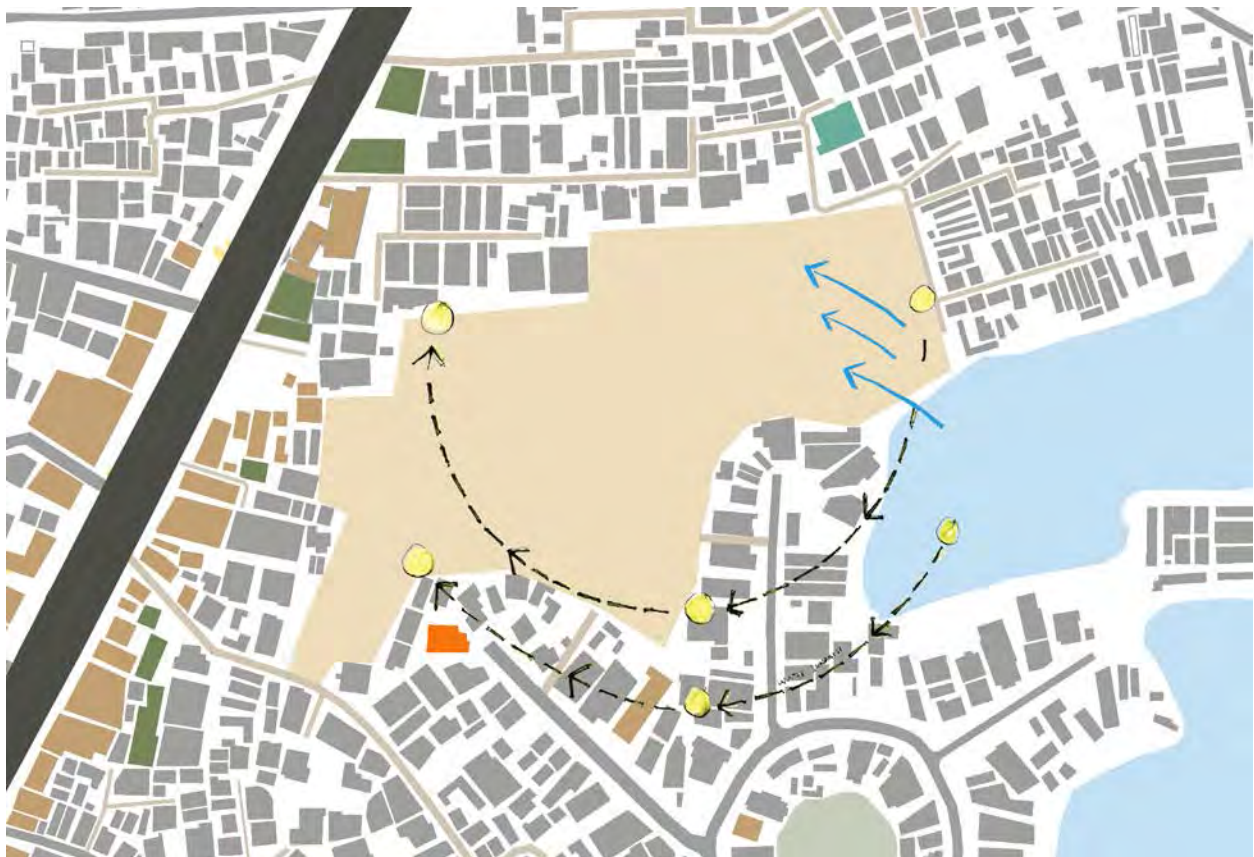
Land use

The area was primarily designed as a residential area and still considered by the authority as residential. But after its development and during the post liberation period the land use pattern of the area faced a major change from residential to commercial uses. 'In 1984, 70% of the plot were residential use with around 30% of the area already transformed in non residential and combined land uses (Hoek-Smit, 1998). Recent functional changes tend to result in commercial developments. The functions of many buildings along the major streets are changing from residential to commercial, institutional and manufacturing activities. Quaint independent houses have been turned to high rise apartments. Multi-storied apartments are presently used in different functions.

Family Composition

The surveyed families living in the real-estate apartments in Dhanmondi are mainly single families. Joint families are rarely seen in these apartments. These families are generally of three to four members comprising mainly husband, wife and children. One or two

household maids are common in most of these families. Twenty three out of forty families contain four to five members. Second highest category constitutes two to three members. Very few have more than five members. Most of these families have children living with them, and about fifteen percent of families have no children living with them. Twenty Four out of forty families have two or less than two children and only one has more than five children which is about three percent. Very few families have married children living with them. Most of the children either are not married or leave separately. Same goes for the number of relatives living in the family where only one fourth of the families have relatives living with them.



4 Case Study

Aldo van Eyck and the City as Playground

In 1947, the architect Aldo van Eyck built his first playground in Amsterdam, on the Bertelmanplein. Many hundreds more followed, in a spatial experiment that has (positively) marked the childhood of an entire generation. Though largely disappeared, defunct and forgotten today, these playgrounds represent one of the most emblematic of architectural interventions in a pivotal time: the shift from the top down organization of space by modernist functionalist architects, towards a bottom up architecture that literally aimed to give space to the imagination.

Immediately after the Second World War, Dutch cities were in a state of dereliction. The housing stock was falling dramatically short in both quantitative and qualitative terms. Combined with a dysfunctional infrastructure, it presented planners with the situation of an outright emergency. On top of that, this ravaged urban context was soon to be confronted with the birth peak of the postwar baby boom, whereas almost no space for children was available, neither inside nor outside the house. At that time, some playgrounds existed in the city, but almost all of them were of a

private nature and based on membership of the fortunate few. Van Eyck's playgrounds, initially build on temporarily unused plots of land, can be seen as an emergency measure, but they had a significance far beyond that of a creative solution in a time of need.





5 Program Generation



Children's Outdoor Bill of Rights

with recent concerns about youth detachment from outdoor activities, lack of physical exercise, increased health risk, the California Roundtable on Recreation, parks and tourism has adopted the California Children's Outdoor Bill of rights. It is a fundamental list of experience that every child in California would benefit from experiencing. **Before entering high school.**



Children oriented activity in Bangladesh



British Council and Bangladesh Shishu Academy launch 'Story Time' **dailyobserver**



nationwide reader development programme titled 'Story Time' This year, the programme bears the tagline **'Porte Porte Boro Hoi'.**

The BRAC Play Lab project



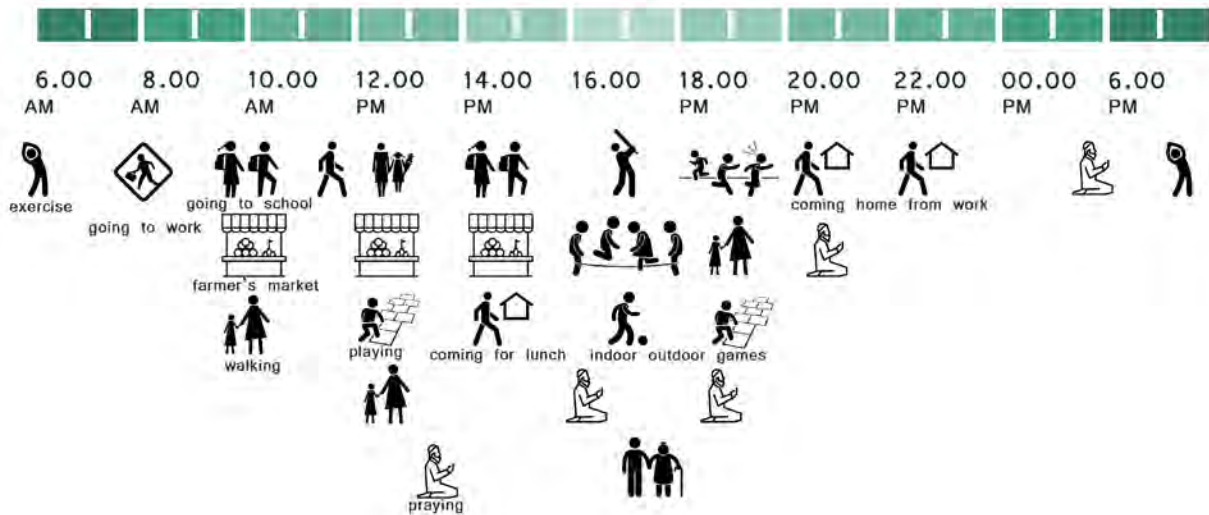
developing and piloting an affordable, high quality, play based early childhood

programme for **3-5 year-old children.**

4 places you can go for a stroll in Unaka **The Daily Star**



Children playing in Gushan Lake Park. Photo: Anisul Hossain

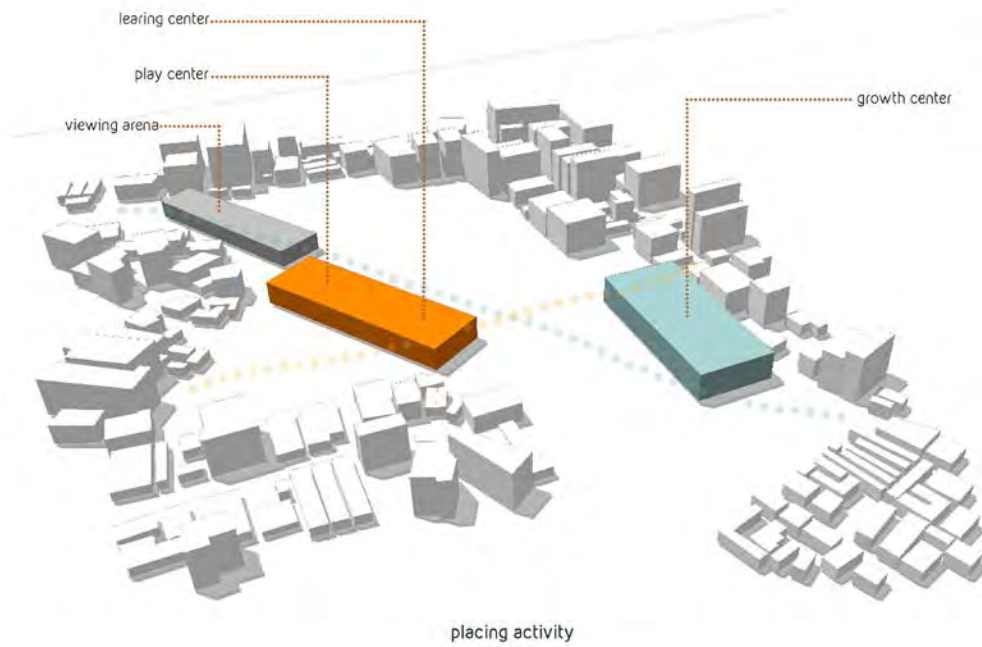
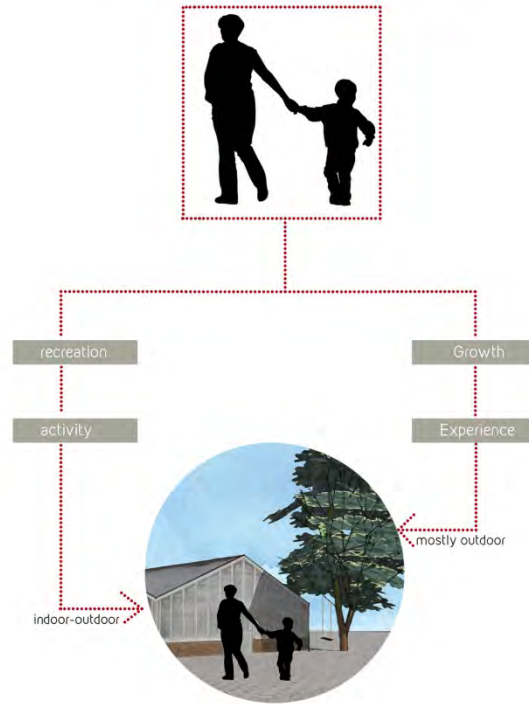


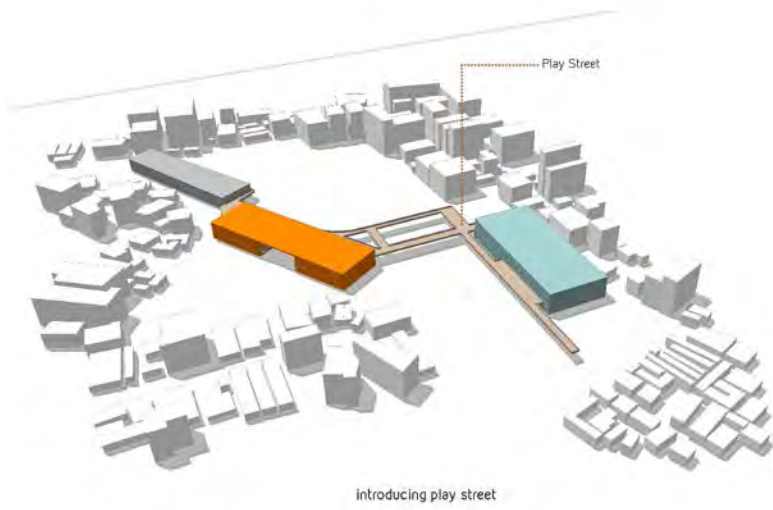
Conceptual approach

"play for grown people is recreation- **renewal of life.**

for children it is growth- **the gaining of life.**"

-Joseph Lee





Design



Playground



existing



proposed

Threshold



existing



proposed

Activity



existing



proposed

Waterscape



existing



proposed

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