INFUSING PUBLIC INTERACTION IN MIXED USE DEVELOPMENT THROUGH ARCHITECTURAL INTERVENTION AT MIRPUR 2

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Seminar II

Submitted in partial fulfillment of the requirements for the degree of bachelor of Architecture
BRAC University

August 2012
ABSTRACT

Dhaka city has been highly populated & the same time dense with both the planned & unplanned buildings. Some of them are governmental complexes which are sustainable & more open for mass gathering in comparison with the private commercial one. These commercial buildings are more than the governmental in number whereas these only serve for the spaces for the economic purposes. These growing high-rises have no scopes for public gathering whereas a proper public space is mostly needed for the people in Dhaka. Publicly interactive spaces are more important than any other things behind a successful marketplace. On the other hand, a commercial complex can bring a good example of cultural development through giving such spaces for societal activities in their complexes. This project site is in mirpur .Mirpur is physically the largest Thana of Dhaka. Mirpur was established as a sub-urban area. Since the urban spaces of the Dhanmondi Lake have transformed the lifestyle of Dhanmondi dwellers; public spaces in Mirpur can also be influential for local dwellers as it has an intense need for public spaces. Mirpur is quiet potential for public spaces, as it is known mostly after its landmarks such as National Zoo, National Botanical Garden, National Cricket stadium, Shah Ali Mazar & National Intellectual Memorial. Although these are not completely ticket free places, the peripheral spaces of these complexes remain crowded most of the days & the eventful days show the extremity of demands for public spaces. In this project, the essence of public interactional scopes in mirpur have been enhanced in mixed use development complex which could have give some examples of creating a public gathering friendly commercial complex.
ACKNOWLEDGEMENT

This design project would not have been possible without the support of many people. The author wishes to express her gratitude to her supervisor, Prof. Dr. Fuad H Mallick who was abundantly helpful and offered invaluable assistance, support and guidance. Deepest gratitude are also due to the course teachers, Prof. Zainab Faruqui Ali, Assistant Professor Mr. Tariq Mahbub Khan, Mr Shakil Ahmad Shimul & Mr Atiqur Rahman without whose knowledge and assistance this study would not have been successful.

Special thanks also to all her classmates for sharing the literature and invaluable assistance. Not forgetting to her best friends who always been there. The author wishes to express her love and gratitude to her beloved families for their understanding & endless love, through the duration of her studies.
# TABLE OF CONTENTS

Abstract

Acknowledgment

Table of contents

List of figure, map & table

List of abbreviations

1. **CHAPTER 01: BACKGROUND OF THE PROJECT**............................................... 1
   - Project brief .................................................................2
   - 1.1 Project introduction...........................................................2
   - 1.2 Objectives..................................................................3
   - 1.3 Program..................................................................3

2. **CHAPTER 02: SITE APPRISAL**................................................................. 4
   - 2.1 Site Location.................................................................5
   - 2.2 Site surroundings.........................................................6
   - 2.3 Site potentials...............................................................7
   - 2.4 SWOT Analysis..............................................................9
   - 2.4 Findings.................................................................10

**CHAPTER 03: LITARATURE REVIEW**...................................................... 11
   - 3.1 Introduction ...............................................................12
   - 3.2 Portrayal of public spaces............................................12
   - 3.3 Need for public space in Dhaka city.............................13
   - 3.4 Image of public space in Mirpur..................................14
   - 3.5 Existing public gathering spaces in Mirpur.........................14
     - 3.5.1 National Botanical Garden of Bangladesh................14
     - 3.5.2 Dhaka Zoo..............................................................15
     - 3.5.3 Mirpur Martyred Intellectuals Memorial.....................19
List of Figures

Fig 1: satellite image for some parts of Mirpur ......................................................... 4
Fig 2: satellite image proposed site ........................................................................ 4
Fig 3: panorama view of existing site ..................................................................... 5
Fig 4: panorama view of site surrounding ................................................................ 5
Fig 5: panorama view of site surroundings at night ............................................... 7
Fig 6: panorama view of site surroundings at night ............................................... 7
Fig 7: KNGBODONTI sculpture on the circle ............................................................ 8
Fig 8: internal road besides site ............................................................................. 8
Figure 9: site map of national botanical garden ....................................................... 15
Figure 10: internal space of botanical garden .......................................................... 16
Figure 11: internal space of national botanical garden ............................................ 17
Figure 12: internal space of national botanical garden ............................................ 17
Figure 13: outdoor space quality of national zoo ...................................................... 18
Figure 14: outdoor space quality of national zoo ...................................................... 18
Figure 15: Public Square at Mirpur Martyred Intellectuals Memorial ....................... 19
Figure 16: Aerial view of the Athenian Agora in sketch .......................................... 24
Figure 17: Aerial view of the Athenian Agora archaeological park, May 1975 ........... 25
Figure 18: Plan of the Agora at the height of its development in ca. A.D. 150 ............. 28
Figure 19: Lower colonnade of the Stoa of Attalos .................................................. 28
Figure 20: publicly vibrant thorough fare of Buchanan street Glasgow ..................... 31
Figure 21: Buchanan Street
Fig 22: View of the northern part of Times Square, with the Renaissance New York Times Square Hotel in the center.

Fig 23: Broadway at 42nd St in 1880.

Fig 24: The Crossroads of the World.

Fig 25: Times Square pedestrianized, Lights and advertising at the southern end of the square.

Fig 26: Times Square ball.

Fig 27: Horton Plaza.

Fig 28: Aerial view from 1,000 feet.

Fig 29: Horton Plaza.

Fig 30: Dhaka New Market.

Fig 31: Dhaka mouchak market.

Fig 32: Extreme need for a public space which also can act as a thoroughfare creating a community access with the housing area.

Fig 33: Creating an axis that ends with Mirpur zoo & botanical garden.

Fig 34: Naturally ventilated market according to Mirpur dwellers' affordability.

Fig 35: Clear vista of existing sculpture which is serving now as a public gathering space.

Fig 36: Exposed circulation.

Fig 37: Zoning of the functions.

Fig 38: Ventilation path diagram.

Fig 39: Shopping zonal decisions.

Fig 40: Zonal planning phase 1.

Fig 41: Zonal planning phase 2.

Fig 42: Zonal planning phase 3.
Fig 43: zonal planning phase 4
Fig 44: zonal planning phase 5
Fig 45: three dimensional expression of massing
Fig 46: three dimensional expression of massing
Fig 47: detailing of master planning
Fig 48: master plan
Fig 49: all floor plans
Fig 50: section BB'
Fig 51: section AA'
Fig 52: north elevation
Fig 53: final model image
Fig 54: final model image
Fig 55: final model image
ABBREVIATIONS

B.N.S.B (Bangladesh national society for the blinds)

B.N.V.T (Bangladesh national society for the blinds vocational training)
CHAPTER 01: BACKGROUND OF THE PROJECT

1.4 Project brief
1.5 Project introduction
1.6 Objectives
1.7 Program

1.1 Project brief:
Title: Infusing public interaction in mixed use development through architectural intervention at MIRPUR

Site Location - located near to Mirpur 2 node

Client - B.N.S.B (Bangladesh national society for the blinds)

Shadhin Bangla bohumukhi shomobay shomiti

Area – 2.09 acres

1.2 Project introduction:

Mirpur is the largest area in Dhaka metropolitan city. It is bounded by Pallabi Thana to the north, Mohammadpur Thana to the south, Kafrul to the east - to the west it is bounded by Savar Upazila. Genuinely, Mirpur thana was established as a sub-urban area in 1962, but in recent times it is getting highly dense with many kind of commercial implements to cope up with the current demands for mass growth of population. Observing the different neighborhood groups in such large area, it can be seen that a large number of people living in Mirpur are lower middle classified according to their financial affordability. Other than that, middle classified occupants are also in a moderate number. Most of their needs are still depended on the old market areas of Mirpur, which are very down to earth, & the environment of those market areas is completely public activities oriented. Those markets are exceptionally vibrant with public shopping actions though these do not have a designed character or the essence of high-rise glass buildings. On the other hand, Mirpur has an intense need for public spaces. Mirpur is quiet potential for public spaces, as it is known mostly after its landmarks such as National Zoo, National Botanical Garden, National Cricket stadium, Shah Ali Mazar & National Intellectual Memorial. Although these are not completely ticket free places, the peripheral spaces of these complexes remain crowded most of the days & the eventful days show the extremity of demands for public spaces. These were the clues of this project to rethink about all these facts and get a potential idea of designing a mixed-use development in corporate with public spaces. Basic functionality of this mixed-use development architecture would be retailing & health facilities. Mirpur unsurprisingly works with both of these different commercial purposes in a common ground. Crowd for consultations & crowd for shopping work together at this point. Existing commercial building for B.N.S.B organization in the vital income source for the charity of this blind society. Designing a better urban responsive & vibrant market would be more profitable scope for such commercial purposes. Both of the authorities of this land have been a common ground of making a better commercial center with adequate feedbacks towards the societal needs.
1.3 Objectives:
- Designing a mixed-use development building both for shopping & health amenities.
- Redesigning this complex so that this will be more public orientated & at the same time sustainable.

1.4 Program:
There is an existing market & clinic complex in this site. As these will be redesigned like a mixed-use development, the existing programs have been used as a reference & some other functions were added in this project.

**Shadhin bangla super market**
1. Shops & other facilities--- 48,000 sq ft.
2. Restaurant –12,000 sft approx.
Total area =65098 sq.ft.

**B.N.S.B  [ Bangladesh national society for the blinds ]**
1. B.N.S.B office [administrative building] ---250 sq.ft. (Without toilet area)
2. B.N.S.B commercial space ---1700 sq.ft
3. B.N.S.B clinic ---11,630 sq.ft

Total functional area = 1, 04,830 sq.ft
CHAPTER 02: SITE APPRISAL

2.1 Site Location

2.2 site surroundings

2.3 Site potentials

2.4 SWOT Analysis

2.4 Findings

2.1 Site Location:
This site is located in the threshold of Mirpur 2 node, which is situated in between of two primary vehicular junctions in Mirpur 10 & 1 nodes. Since Mirpur is quiet known for National Zoo & National Botanical Garden, the zoo road has been an importantly characterized for this aspect. Two major roads along with the site are also linked with some important complexes such as Intellectual Memorial, National Cricket Stadium, National Swimming complex, Shah ali mazar. These three roads get an axial junction in this site which makes this site very important.

Fig 1: satellite image for some parts of Mirpur
Source: Google Earth_ 2012

Fig 2: satellite image proposed site
Source: Google Earth_ 2012

2.2 site surroundings:
This site is almost trapezoid in shape, three sides of this land are surrounded by secondary vehicular streets which are licked with different residential areas, the vital edge of this site is along with 114 ‘ wide primary road. Many boutiques that started form Mirpur 10 surround eastern side of this site while the western portion is full of medical facilities in midrise. Front portion of this is very important aspect of this site, as it gets vibrant with much kind of public gathering.

Fig 3 : panorama view of existing site
Source : NOVA _ 2012

Fig 4 : panorama view of site surrounding
Source : NOVA _ 2012

2.3 Site potentials:
This site is surrounded with four roads, which give a good opportunity for natural ventilation system. Existing landmarks give a vibrant image to the site. Sony cinema hall, one of the oldest cinema halls of Mirpur locates in opposite of the proposed site which always keeps the nearby area crowd & vibrant in holidays. Mirpur 2 circle is another attraction point here, as it is always vibrant with different people gathering.

Fig 5: panorama view of site surroundings at night

Source: NOVA _ 2012

Fig 6: panorama view of site surroundings at night

Source: NOVA _ 2012
Fig 7: KNGBODONTI sculpture on the circle
Source : NOVA _ 2012

Fig 8: internal road besides site
Source : NOVA _ 2012
2.4 SWOT Analysis:

Strength –

- Presence of the important landmarks,
- Existing vibrant quality for public gathering
- Site gives expression as a junction of vital axis of Mirpur

Weakness –

- Three sides of the site are very compact with residential area
- Buildings in backside are low rises in maximum, any structure designed in this site could be a block for natural lighting
- Lack of enough green spaces

Opportunity –

- Existing streets in all sides of site gives a good scope for natural ventilation system for the proposed building
- 12’ wide walkways are vibrant with many small grouped discussion & gathering behaviors that gives a clear expression of the public needs
- Presence of sculpture Kingbodonti have been an attraction point for public interactions

Threat –

- Mirpur 1 & 10 link road is the primary vehicular road which is quiet risky for pedestrian activities
- Lack of foot-over bridge or underpass makes this space much chaotic and more possible toward accidents
2.4 Findings:

This site has been very important location for Mirpur because of its surroundings & the events happen here every day. Public gathering in such narrow space give the indication of extreme need for public space. On the other hand mass gathering around such busy street is risky. At this point, the need for safe public gathering space has acted as a motivation for the design decision later.
CHAPTER 03: LITERATURE REVIEW

3.1 Introduction

3.2 Portrayal of public spaces

3.3 Need for public space in Dhaka city

3.4 Image of public space in Mirpur

3.5 Existing public gathering spaces in Mirpur
   3.5.1 National Botanical Garden of Bangladesh
   3.5.2 Dhaka Zoo
   3.5.3 Mirpur Martyred Intellectuals Memorial

3.6 Mixed Use Development

3.7 Lack of urban open spaces in mixed-use development

3.8 Conclusion
3.1 Introduction:
This chapter focuses on the valid origin of the topic “infusing public interaction in mixed use
development”. It describes the relationships between the mixed-use development & public
spaces. The analogy of the social needs for public spaces & how the market area can be
more vibrant working together with this space is the gist of this chapter.

3.2 Portrayal of public spaces:
The importance of cities has increased significantly over the centuries, and the
current dramatic growth of urban populations is seen as critical to the future of
earth by some. The development from village and rural life to urban ‘civilization’
has had both social and environmental impacts; the growth of urban populations
and associated industrialization has resulted in a range of detrimental and often
dehumanizing outcomes. In 1800 London was the only city in the world with a
population of a million people, while the 100 largest cities altogether had a
population of only 20 million. By 1990 the world’s largest 100 cities had a
combined population of 540 million people with 220 million of these living in
the twenty largest cities (Girardet, 1996). By 1991, in England alone, over 80 per
-cent of the population was living in towns and cities of over 10,000 people (OPCS,
1993). It is expected that by the year 2025 half of the global population, anticipated at
some three billion people, will be living in cities (UNCHS, 1996). Thus the city
and the urban environment will become extremely important in the daily lives of
increasing numbers of people across the world. The quality of that urban
environment will have an impact on a wide range of elements of daily life
including housing, education, health, crime, employment and leisure, both for
individuals and communities or populations as a whole. In that case the need for urban open
spaces which are also called as public spaces have been more important for building
better urban environment & our cultural identity. The most well known of definitions related
to use was developed some thirty years ago with the categories of public, semi-public,
semi-private and private open space being suggested (Newman, 1972). Private
open space is possibly the easiest to understand and includes individual gardens
to homes. Public open space can be identified as spaces such as parks and plazas.
Semi-private open spaces include those where a limited number of people use the
space but where the ordinary public would generally not be welcomed. Such
open spaces might include courtyards to houses or flats and communal gardens
and play spaces. Semi-public open spaces might include spaces with limited opening times to the public or be generally accessed and used by particular groups within society—spaces such as school playgrounds. A definition of different types of public space, both indoor and outdoor, has also been described by Walzer (1986) who suggests that Public space is space where we share with strangers, people who aren’t our relatives, friends or work associates. It is space for politics, religion, commerce, sport; space for peaceful coexistence and impersonal encounter. Its character expresses and also conditions our public life, civic culture, everyday discourse. Two types of public space—single-minded space and open-minded space—are suggested by Walzer. The former, he suggests, is designed, planned, built and used with only one activity in mind. Such an example might be a zoned central business district and the use of such spaces is not only single minded, but often associated with hurrying. Open-minded space, on the other hand, includes spaces such as squares or plazas, where a variety of buildings provide a context of mixed use and where the space itself is more likely to be used for activities of a less hurried nature, such as watching, walking, talking, eating lunch and discussing politics and world affairs. Generally, it is said that a public space is a social space such as a town square that is generally open and accessible. Most streets, including the pavement, are considered public space, as are town squares or parks. Government buildings which are open to the public, such as public libraries are public space. Although not considered public space, privately owned buildings or property visible from sidewalks and public thoroughfares may affect the public visual landscape, for example, by outdoor advertising. Contemporary perception of public space has now branched and grown into a multitude of non-traditional sites with a variety of programs in mind. It is for this reason that the way in which design deals with public space as a discipline, has become such a diverse and indefinable field.

3.3 Need for public space in Dhaka city:
Dhaka city is one of the largest cities in the world and also one among the most densely populated cities in the world. This city has been enlarged many times in these 404 years after the establishment. This city growth was always focused to accomplish the accommodation needs of population. Dhaka city planning was hardly designed considering the public informal activities, which influences & portrays the actual cultural behaviors of a society. Dhaka University area, Dhanmondi & some other places are the central public spaces of Dhaka which always have been the space for inspiration for us. However, these are not enough for 16 million people living in Dhaka. On the other hand, this city has been so bigger that the demands of neighborhood public spaces can significantly play very important role in our public interactions & many kind of cultural needs. These spaces even can be a
good break from our regular life & sometimes these can establish a strong role as a space for celebration in our significant public incidents or can build our public decisions.

3.4 Image of public space in Mirpur:

Mirpur is physically the largest Thana of Dhaka. It contains almost 1,074,232 people. Mirpur was established as a sub-urban area in 1962. Since the urban spaces of the Dhanmondi Lake have transformed the lifestyle of Dhanmondi dwellers; public spaces in Mirpur can also be influential for local dwellers as it has an intense need for public spaces. Mirpur is quiet potential for public spaces, as it is known mostly after its landmarks such as National Zoo, National Botanical Garden, National Cricket stadium, Shah Ali Mazar & National Intellectual Memorial. Although these are not completely ticket free places, the peripheral spaces of these complexes remain crowded most of the days & the eventful days show the extremity of demands for public spaces.

3.5 Existing public gathering spaces in Mirpur:

Mirpur Thana is famous for various historical places in Dhaka city. The Dhaka Zoo, the National Botanical Garden of Bangladesh, Sher-e-Bangla Cricket stadium, Shah Ali Mazar, mirpur beribadh are the landmarks of Mirpur. Though most of these are either national complex, these have played a major role for informal public gathering in the public festivals & in many other events. These places are controlled and have a time limitation for their governmental securities. These places don’t have that quality of mixed reactive events. Moreover these are allowed only with ticket. On the other hand the complex authorities have nothing optimistic responses about the public activities as these harm their security at some extent.

3.5.1 National Botanical Garden of Bangladesh:

The National Botanical Garden of Bangladesh, also referred to as Bangladesh National Herbarium, is the largest plant conservation center in Bangladesh, with an area of around 84 hectares (210 acres). It is located at Mirpur in Dhaka, beside the Dhaka Zoo. It was
establishes in 1961. It is one of the greatest botanical gardens of Bangladesh and a tourist

Figure 9: Site map of national botanical garden

Source: NOVA 2011
Figure 10: internal space of botanical garden

Source: NOVA  _  2011
Figure 11: internal space of national botanical garden
Source: NOVA _ 2011

Figure 12: internal space of national botanical garden
Source: NOVA _ 2011
3.5.2 Dhaka Zoo:

Dhaka Zoo is located in the Mirpur section of Dhaka. The Zoo contains many native and non-native animals and wild life, and hosts about three million visitors each year. Established in 1974, the 186-acre (75 ha) Dhaka Zoo is the largest zoo in Bangladesh, and is operated by the Ministry of Fisheries and Livestock. The zoo attracts around 10,000 visitors every day with the number increasing during the weekends.

Figure 13: outdoor space quality of national zoo
Source: NOVA _ 2011

Figure 14: outdoor space quality of national zoo
Source: NOVA _ 2011
3.5.3 Mirpur Martyred Intellectuals Memorial:
It is a monument to commemorate the intellectual martyrs of Bangladesh Liberation War. It was first built on 22 December 1972 and has since been renovated a few times. The memorial is located in Mirpur area in Dhaka, Bangladesh. Almost at the end of Liberation war of Bangladesh, when the Pakistani military became certain of their defeat, they started killing university teachers, writers, artists and statesmen in a planned manner. Especially on the night of 14 December, just two days before the official surrender, Pakistani army, along with the help of local collaborators systematically abducted hundreds of intellectuals from their houses and killed them blindfolded. The memorial is dedicated to the memory of 1971 killing of Bengali intellectuals.

Figure 15: Public Square at Mirpur Martyred Intellectuals Memorial
Source: www.wikipedia.com _ 2012

3.6 Mixed Use Development:
Mixed-use development is the use of a building, set of buildings, or neighborhood for more than one purpose. Since the 1920s, zoning in some countries has required uses to be separated. However, when jobs, housing, and commercial activities are located close
together, a community’s transportation options increase. In addition, mixed-use developments often have higher property values. Often located in existing urban areas or as part of a new town center, mixed-use development provides a range of commercial and residential unit sizes and options. In planning zone terms, this can mean some combination of residential, commercial, industrial, office, institutional, or other land uses. The concept of "mixed-use" as a discrete zone is predicated on the relatively recent practice of single-use zoning whereby different uses in different places are set by legislative mandate. Throughout most of human history, the majority of human settlements developed as mixed-use environments. Walking was the primary way that people and goods were moved about, sometimes assisted by animals such as horses or cattle. Most people dwelt in buildings that were places of work as well as domestic life, and made things or sold things from their own homes. Most buildings were not divided into discrete functions on a room by room basis, and most neighborhoods contained a diversity of uses, even if some districts developed a predominance of certain uses, such as metalworkers, or textiles or footwear due to the socio-economic benefits of propinquity. People lived at very high densities because the amount of space required for daily living and movement between different activities was determined by workability and the scale of the human body. This was particularly true in cities, and the ground floor of buildings was often devoted to some sort of commercial or productive use, with living space upstairs. Mixed residential and religious building This historical mixed-used pattern of development declined during industrialization in favor of large-scale separation of manufacturing and residences in single-function buildings. This period saw massive migrations of people from rural areas to cities drawn by work in factories and the associated businesses and bureaucracies that grew up around them. These influxes of new workers needed to be accommodated and many new urban districts arose at this time with domestic housing being their primary function. Thus began a separating out of land uses that previously had occurred in the same spaces. Furthermore, many factories produced substantial pollution of various kinds. Distance was required to minimize adverse impacts from noise, dirt, noxious fumes and dangerous substances. Even so, at this time, most industrialized cities were of a size that allowed people to walk between the different areas of the city. These factors were important in the push for Euclidian or single-use zoning premised on the compartmentalization of land uses into like functions and their spatial separation. In Europe, advocates of the Garden City Movement were attempting to think through these issues and propose improved ways to plan cities based on zoning areas of land so that conflicts between land uses would be minimized. Modernist architects such as Le Corbusier advocated radical rethinking of the way cities were designed based on similar ideas, proposing plans for Paris such as the Plan Voisin, Ville Contemporaine and Ville
Radieuse that involved demolishing the entire center of the city and replacing it with towers in a park-like setting, with industry carefully sited away from other uses.

3.6 Lack of urban open spaces in mixed-use development:
A mixed use development usually get enclosed with its serviceable spaces which make this more isolated as an urban setting. In that case, the economical value of such space gets high & out of reach for majority of people. In maximum times, it does not even relate with natural elements such as air, light & other things. A naturally ventilated and lighted mixed-use development that is also publicly interactive have more potentials of being a vibrant space.

3.7 Mixed Use Development In Mirpur:
Observing the different neighborhood groups in such large area, it can be seen that a large number of people living in Mirpur are lower middle classified according to their financial affordability. Other than that, middle classified occupants are also in a moderate number. Most of their needs are still depended on the old market areas of Mirpur, which are very down to earth, & the environment of those market areas is completely public activities oriented. Those markets are exceptionally vibrant with public shopping actions though these do not have a designed character or the essence of high-rise glass buildings. On the other hand, Mirpur has an intense need for public spaces. Mirpur is quiet potential for public spaces, as it is known mostly after its landmarks such as National Zoo, National Botanical Garden, National Cricket stadium, Shah Ali Mazar & National Intellectual Memorial. Although these are not completely ticket free places, the peripheral spaces of these complexes remain crowded most of the days & the eventful days show the extremity of demands for public spaces. These were the clues of this project to rethink about all these facts and get a potential idea of designing a mixed-use development in corporate with public spaces. Basic functionality of this mixed-use development architecture would be retailing & health facilities. Mirpur unsurprisingly works with both of these different commercial purposes in a common ground. Crowd for consultations & crowd for shopping work together at this point. Existing commercial building for B.N.S.B organization in the vital income source for the charity of this blind society. Designing a better urban responsive & vibrant market would be more profitable scope for such commercial purposes. Both of the authorities of this land have been a common ground of making a better commercial center with adequate feedbacks towards the societal needs.
3.8 Conclusion:
Both of the public space & mixed-use development have good potentials of working more vibrantly if they both motivate each other vibrantly. Market area, rentable office space, convention hall, health facilities and the underpass can be composed as an integrated mixed use development which will inspire the positive possibilities of this complex.
CHAPTER 04 : CASE STUDY

4.1 Introduction

4.2 overseas case study
   4.2.1 Case study 01 - Agora
   4.2.2 Case Study 02 - Buchanan Street Glasgow
   4.2.3 Case study 03 - Times Square
   4.2.4 Case Study 03 - Westfield Horton Plaza

4.3 Local Case Studies
   4.3.1 Case study 01 - Dhaka New Market
   4.3.2 Mouchak Market

4.4 Conclusion
4.1 Introduction:

This chapter focuses on the case studies which are related to my design topic. Both the overseas the local examples were important for the findings the basic background for design decisions. Some of them have been described in this chapter.

4.2 Overseas case study:

Some examples of market, local market or historical meeting point were important to study. Though this design topic goes for a mixed use development building or complex, the market the public space were the most important parts of this design. In that case, publicly vibrant market specially when it is more concerned for pedestrians many other public squares have been emphasized in overseas case studies.

4.2.1 Case study 01 - Agora:

Figure 16 : Aerial view of the Athenian Agora in sketch
Source: www.agathe.gr/overview/the_archaeological_site.html http://www.agathe.gr/overview/the_archaeological_site.html _2012
- Location & Essence

The Agora of Athens was the center of the ancient city a large, open square where the citizens could assemble for a wide variety of purposes. On any given day the space might be used as a market, or for an election, a dramatic performance, a religious procession, military drill, or athletic competition. Here administrative, political, judicial, commercial, social, cultural, and religious activities all found a place together in the heart of Athens, and the square was surrounded by the public buildings necessary to run the Athenian government.

These buildings, along with monuments and small objects, illustrate the important role it played in all aspects of public life. The council chamber, magistrates offices, mint, and archives have all been uncovered, while the law courts are represented by the recovery of bronze ballots and a water-clock used to time speeches. The use of the area as a marketplace is indicated by the numerous shops where potters, cobblers, bronze workers, and sculptors made and sold their wares.
-History:

The site of the agora (market place) was a cemetery during the Mycenaean period. It is only during the 6th century BC that the Agora became the main square of the city. Beforehand this role belonged to the Old Agora to the west of the Akropolis. The new Agora extended between the Kolonos Agoraios and the Eridanos river. Some private houses were demolished to make room for a typical Greek agora: an open place delimited by boundary stones and surrounded by public buildings. The Agora was the commercial, political, administrative and social center of Athens. Therefore, stoai (porticoes), shops, stalls, fountains, municipal buildings and courts of justice were grouped in and around the Agora. It also played an important role in the religious life of the City.

In 480 BC, when the Persians captured the city, they destroyed several buildings of the Agora. The temple of the Mother of the Gods was never reconstructed while the sanctuary of Apollo Patroos was not reconstructed before 330 BC. Some of the ruins were probably left untouched to remind the Athenians of the sacrilege committed by the Persians.

Soon after the liberation of Athens, plane trees were planted by Kimon on the Agora around 479 BC. Therefore, by 421 BC, they should have reached a respectable size, allowing merchants and their customers to rest under their shade.

The "New Bouleuterion" and its Propylene were probably built after our period of reference (421 BC) towards the end of the 5th century.

The Southwest Fountain House was built around 325 BC, several years after our period of reference (421 BC). New buildings were erected on the Agora between 338 and 326 BC when Lykourgos ruled the city: the shrine of Zeus Phratrios and Athena Phratria, the Temple of Apollo Patroos. Meanwhile a group of buildings for the use of the Law courts at the northeast corner of the Agora was replaced with a large building known as the Square Peristyle. Finally, the Altar of Zeus Agoraios which probably stood on the Pnyx up to this date was relocated on the Agora during the same period.

During the 3rd century BC, a shrine dedicated to Aphrodite Hegemonies, the Demos and the Graces was erected at the foot of the north slope of the Kolonos Agorae’s, along the street leading from the Agora to the Sacred Gate.

From 175 to 125 BC the south part of the Agora underwent major changes with the addition of the Middle Stoa, the East Building and the South Stoa II. Meanwhile King Attalos II of Pergamon erected the so called "Stoa of Attalos" on the east side of the Agora. Finally, the Metroon was built on the west side of the Agora during the same period.
The temple of Ares was in fact a temple originally built outside Athens at Acharnai. It was probably built at the same time as the Hephaisteion, around 430 BC, and had similar proportions. Much later, around 20 BC during the reign of the Roman Emperor Augustus, the temple was moved piece by piece to the Agora and rededicated to Ares.

In 15 BC, the Romans built the Odeion of Agrippa on the north side of the Agora.

The Southwest, Southeast Temples and Civic Offices were built in the 1st century AD.

The library of Pantainos was built just after 100 AD.

-Objective:

The market time was between 9:00 and 12:00 AM. The square was covered with little booths made of boards and wicker work aligned along lanes. Specific areas of the Agora were dedicated to each type of goods: livestock, meat, fish (a bell rang each time that a new cargo of fresh fish arrived from the Peiraeus), onion and garlic, gardens products, fruits, honey (the honey from Mount Hymettos was famous and expansive), bread, wine, oil, flowers, charcoal, pottery, cooking pots, clothes, jewelry, chariots, furniture, books. Furthermore, each merchant rented a specific place in these areas. Phoenician and Greek merchants were offering goods from all over the Mediterranean basin. Besides these merchants, many peddlers simply displayed their goods on the ground. Others had little stands between the columns of the stoai. The shops of various artisans were not located on the Agora but were rather lining the streets leading to it. It was usually the case for barbers, smithies, physicians, cutlers etc.

A slave market was held on the Agora each month at the new moon. During our period of reference (421 BC), several open-air law courts probably stood at the northeast corner of the Agora, where the stoa of Attalos was later built. The northwest corner of the Agora was probably occupied by tavernas.
Figure 18: Plan of the Agora at the height of its development in ca. A.D. 150. Source: www.agathe.gr/overview/the_archaeological_site.html (accessed 2012)

Figure 19: Lower colonnade of the Stoa of Attalos. Source: http://www.agathe.gr/overview/the_archaeological_site.html (accessed 2012)
**-Boundary Stones:**
The boundary stones of the Athenian agora were rectangular posts of Parian marble wearing the inscription: "I am the boundary of the Agora". They were erected circa 500 BC. The southwest boundary stood near a wall of the house of Simon the Cobbler. There could be no private buildings on the Agora. Furthermore, certain people were not allowed within the area delimited by these boundary stones. This was the case for individuals who had not reported for military duty, or had showed cowardice during battle, or had been convicted of impiety or mistreatment of their parents.

**-The Herms:**
A Herm was a square stone pillar topped by a head of Hermes with a phallus at mid height of the pillar. It was used to mark boundaries. Kimon was authorised to set up three such Herms at the northwest entrance of the Agora. Other Herms were erected in the same area, between the Stoa Basileios and the Stoa Poikile, where they became so numerous that the whole area was designated as "the Herms".

**-Street Network:**
The Panathenaic Way, a graveled road some 16 m wide, coming directly from the Dipylon Gate forked into three streets at the northwest corner of the Agora. The east street continued eastward and was bordered with rows of shops facing south. The middle street, the continuation of the Panathenaic Way, headed to the southeast toward the Akropolis. The south street headed south towards the buildings of the west side of the Agora.

The Panathenaic Way was not paved before 200 AD. Its section extending from the southeast corner of the Agora to the Monumental Access Ramp was delimited by retaining walls on each side and had steps at some places to ease the ascent. During the Panathenaia, wooden stands were erected on the Agora along the Panathenaic Way to allow the population to easily watch the Panathenaic Procession.

**-Old Orchestra:**
Before the construction of the theatre of Dionysos, there was a circular orchestra in the Agora used for dramatic and musical contests. It was centrally located between the Panathenaic Way to the east and the west side of the Agora. This original orchestra later disappeared under the racetrack.
-Racetrack:
The racetrack ran diagonally through the Agora from the Peribolos of the 12 Gods to the South Stoa. It measured 38 m by 184 m (a *stadion*).
The starting line was located at the north end. The racetrack was used during the Panathenaic Games.

-Statues of Harmodios and Aristogeiton:
A bronze sculptural group of the “Tyrannicides” Harmodios and Aristogeiton stood on the Agora. The Athenians considered them as their liberators from the rule of the tyrant Hipparchus. The initial group was made by Antenor somewhere between 510 and 480 BC. It was taken away by the Persians in 479 BC. A new group was made by Kritios and Nesiotes in 476 BC to replace it. It probably stood between the racetrack and the Panathenaic Way, a few meters north of the old orchestra.

-Findings:
Agora eventually was a complete public gathering space kept an influential impact on their civic decisions. It became a space for inspiration, societal, commercial activities at the same time became a strong motivation in public life in different aspects. This one of the oldest example actually made people necessitate for publicly gathering.

4.2.2 Case Study 02 - Buchanan Street Glasgow:
This is Scotland’s principal shopping street, and the heart of Glasgow. This is working as a huge public space for the people of Scotland & is popular as a shopping street which has a strong connection of this project.
-Location:

![Publicly vibrant thoroughfare of Buchanan Street Glasgow](source: www.google.com)

Buchanan Street is one of the main shopping thoroughfares in Glasgow, the largest city in Scotland. It forms the central stretch of Glasgow’s famous shopping district with a generally more upmarket range of shops than the neighboring streets: Argyle Street, and Sauchiehall Street.

It runs south from the junction with Sauchiehall Street. At its north end are the Buchanan Galleries and the Glasgow Royal Concert Hall. The Princes Square mall and a flagship branch of the House of Fraser department store are opposite one another further south, and the street meets Argyle Street at the south, just north of St. Enoch Square. Buchanan Street is now entirely pedestrianised, but the streets that cross it (Bath Street, George Street, St. Vincent Street, and Argyle Street) are not. Buchanan Street cuts through Nelson Mandela Place, which was renamed by the Labour city council from St George's Place, the address of the South African Consulate, as a protest to the ANC activist Nelson Mandela being a political prisoner of the South African Apartheid regime. At the time and even after becoming the first black president of South Africa, Prime Minister Margaret Thatcher considered him and the ANC to be "terrorists". Buchanan Street is also adjacent to St George's-Tron Church and the Glasgow Stock Exchange building, and Royal Exchange Square, which now houses the Gallery of Modern Art.

-History:

Buchanan Street was first feued in 1777 and was named after a wealthy Tobacco Lord, Andrew Buchanan of Buchanan, Hastie, & Co. He was proprietor of the ground on which it was formed from Argyle Street as far North as Gordon Street.

The land around the north and northeast of Buchanan Street was formerly home to Buchanan Street railway station. Originally owned by the Caledonian Railway, then the
London Midland and Scottish Railway and finally British Railways, Buchanan Street station was closed in 1966. It was not rated highly either for location, architecture or convenience. Glasgow Queen Street station is immediately to the East of Buchanan Street, and the Buchanan Street station on the Glasgow Subway (which also serves Queen Street Station) is underneath the North end of Buchanan Street. The St. Enoch station of the subway is at the South end of Buchanan Street. Buchanan bus station was opened at the Northern end in 1978, at the same time as the street itself was pedestrianised between Bath Street and Argyle Street. The most Northern reaches of the street were badly dilapidated following the closure of the Glasgow NAAFI and the railway station, but this was addressed in the 1990s by the construction of the Glasgow Royal Concert Hall in 1990, and the adjoining Buchanan Galleries shopping mall in 1998. In 1999, the entire street was repaved with high quality granite stonework and striking blue neon lighting. The combination of impressive Victorian architecture and modern urban design won Buchanan Street the Academy of Urbanism 'Great Street Award' 2008, beating both O'Connell Street in Dublin and Regent Street/Portland Place, London.

- Planning features:

The area between Argyle Street and St. Vincent Street is particularly popular with buskers. The bus station was also substantially redeveloped following the closure of the bus station at Anderston, and became the principal bus terminus in the city centre. It was renamed simply as "Buchanan Bus Station", since the street itself now terminated some distance away due to the building of the Concert Hall.

In March 2011, it was revealed that Land Securities had secured planning permission to rebuild the last remaining derelect site on the northern end of Buchanan Street opposite the Buchanan Galleries complex - the new buildings will incorporate new residential and retail space, bringing some big names to Glasgow's retail offering, including Scotland's first Forever 21, Banana Republic (clothing stores), Sketchers as well as Scotland's largest Paperchase (company), and many more. This new development will extend westward onto West Nile Street, removing the former General Accident office block, and the vacant land on the corner of Bath Street. It shall be finished in Spring 2013.
Findings:

Buchanan Street has been Glasgow’s premier street for the past two centuries and is an integral part of the fabric of Glasgow’s historic city centre. It sits at the junction between the Merchants City and Glasgow’s Victorian commercial heart. Two stations on the city’s underground network sit at either end of the street, whilst the city’s two main rail termini are within 5 minutes walk. The River Clyde lies at the southern end of the street.

Buchanan Street was first pedestrianized in 1978. The present day appearance of its public realm is the result of an international competition held in 1997. This was won by a team lead by the British leading design and landscaping practice Gillespies. It is a design of radical simplicity, which emphasizes the identity of the street by removing clutter and revealing the richness and elegance of its architecture. Lighting is integral to the success of the design and unusually the street has been demarked by blue tones. The street has been cited by the authors of the "Good Place Guide" as one of Britain's 10 best places. The area is popular with both locals and tourists, but it is overwhelmingly a retail street. In retail terms it attracts well in excess of 30 million visits a year. As such it is an integral part of the largest UK retail centre outside the west end of London. Glasgow was once the most densely populated city in northern Europe. It had a large city centre population. Economic depression, comprehensive redevelopment, rigid mortgage lending practices, and the flight to the
suburbs from the 1950’s onwards have done much to reverse this. However as part of the drive to regenerate the city centre, Glasgow City Council is promoting the conversion to residential use of disused space in the upper floors of many of the commercial buildings lining the street. Glaswegians are renowned for their friendliness and sense of humor. Buchanan Street epitomizes this and is a very social place. It is the city's main promenade where people meet up to shop or socialize. The ratio of locals to tourists is well balanced.

4.2.3 Case study 03- Times Square:
This is treated as the most popular public place & mostly visited square throughout the world. This public square was important to study how the mass gathering can be appreciated in such narrow space especially when it’s on a busy street.

-Location:

Times Square is a major commercial intersection in Midtown Manhattan, New York City, at the junction of Broadway and Seventh Avenue and stretching from West 42nd to West 47th Streets. Times Square – iconified as "The Crossroads of the World" and the "The Great White Way" – is the brightly illuminated hub of the Broadway theater district, one of the world's busiest pedestrian intersections, and a major center of the world's entertainment industry.

Fig 22 : View of the northern part of Times Square, with the Renaissance New York Times Square Hotel in the center
Source: www.wikipedia.com_2012

Formerly Longacre Square, Times Square was renamed in April 1904 after The New York Times moved its headquarters to the newly erected Times Building – now called One Times Square – site of the annual ball drop on New Year's Eve. The northern triangle of Times
Square is technically Duffy Square, dedicated in 1937 to Chaplain Francis P. Duffy of New York City's "Fighting 69th" Infantry Regiment; a memorial to Duffy is located there, along with a statue of George M. Cohan, and the TKTS discount theatre tickets booth. The stepped red roof of the TKTS booth also provides seating for various events. The Duffy Statue and the square were listed on the National Register of Historic Places in 2001.

-History

Before and after the American Revolution, the area belonged to John Morin Scott, a general of the New York militia, in which he served under George Washington. Scott's manor house was at what is currently 43rd Street, surrounded by countryside used for farming and breeding horses. In the first half of the 19th century it became one of the prized possessions of John Jacob Astor, who made a second fortune selling off lots to hotels and other real estate concerns as the city rapidly spread uptown. By 1872 the area had become the center of New York's carriage industry. The area not having previously been named, the city authorities called it Longacre Square after Long Acre in London, where the carriage trade in that city was centered.

In 1904, New York Times publisher Adolph S. Ochs moved the newspaper's operations to a new skyscraper on 42nd Street at Longacre Square. Ochs persuaded Mayor George B. McClellan, Jr. to construct a subway station there, and the area was renamed "Times Square" on April 8, 1904. Just three weeks later, the first electrified advertisement appeared on the side of a bank at the corner of 46th Street and Broadway.
The New York Times, according to Nolan, moved to more spacious offices west of the square in 1913. The old Times Building was later named the Allied Chemical Building. Now known simply as One Times Square, it is famed for the Times Square Ball drop on its roof every New Year's Eve.

In 1913, the Lincoln Highway Association, headed by entrepreneur Carl G. Fisher, chose the intersection of 42nd Street and Broadway, at the southeast corner of Times Square, to be the Eastern Terminus of the Lincoln Highway, the first road across the United States, which originally spanned 3,389 miles (5,454 km) coast-to-coast through 13 states to its Western Terminus in Lincoln Park in San Francisco, California.

As the growth in New York City continued, Times Square quickly became a cultural hub full of theaters, music halls, and upscale hotels.

Celebrities such as Irving Berlin, Fred Astaire, and Charlie Chaplin were closely associated with Times Square in the 1910s and 1920s. During this period, the area was nicknamed The Tenderloin because it was supposedly the most desirable location in Manhattan. However, it was during this period that the area was besieged by crime and corruption, in the form of gambling and prostitution; one case that garnered huge attention was the arrest and subsequent execution of police officer Charles Becker.

The general atmosphere changed with the onset of the Great Depression in the 1930s. Times Square acquired a reputation as a dangerous neighborhood in the following decades. Madame Tussauds Wax Museum and auditoriums are two of the newer attractions on the redeveloped 42nd Street.

In the 1980s, a commercial building boom began in the western parts of the Midtown as part of a long-term development plan developed under Mayors Ed Koch and David Dinkins. In the mid-1990s, Mayor Rudolph Giuliani (1994–2002) led an effort to "clean up" the area, increasing security, closing pornographic theaters, pressuring undesirables to relocate, and opening more tourist-friendly attractions and upscale establishments. Advocates of the remodeling claim that the neighborhood is safer and cleaner. Detractors have countered that the changes have homogenized or "Dignified" the character of Times Square and have unfairly targeted lower-income New Yorkers from nearby neighborhoods such as Hell's Kitchen.

In 1990, the state of New York took possession of six of the nine historic theatres on 42nd Street, and the New 42nd Street non-profit organization was appointed to oversee their
restoration and maintenance. The theatres underwent renovation for Broadway shows, conversion for commercial purposes, or demolition.

The theaters of Broadway and the huge number of animated neon and LED signs have long made them one of New York's iconic images, and a symbol of the intensely urban aspects of Manhattan. Times Square is the only neighborhood with zoning ordinances requiring building owners to display illuminated signs. The density of illuminated signs in Times Square now rivals that of Las Vegas. Officially, signs in Times Square are called "spectaculars", and the largest of them are called "jumbotrons."

Notable signage includes the Toshiba billboard directly under the NYE ball drop and the curved seven-story NASDAQ sign at the NASDAQ MarketSite at 4 Times Square on 43rd Street and the curved Coca-Cola sign located underneath another large LED display owned and operated by Samsung. Both the Coca-Cola sign and Samsung LED displays were built by LED display manufacturer Daktronics. Times Square's first environmentally friendly billboard powered by wind and solar energy was first lit on December 4, 2008.[24]

In 1992, the Times Square Alliance (formerly the Times Square Business Improvement District, or "BID" for short), a coalition of city government and local businesses dedicated to improving the quality of commerce and cleanliness in the district, started operations in the area. Times Square now boasts attractions such as ABC's Times Square Studios, where Good Morning America is broadcast live, an elaborate Toys "Я" Usstore, and competing Hershey's and M&M's stores across the street from each other, as well as restaurants such as Ruby Foo's (Chinese food), the Bubba Gump Shrimp Company (seafood), Planet Hollywood Restaurant and Bar (theme restaurant) and Carmine's (Italian) along with a number of multiplex movie theaters. It has also attracted a number of large financial, publishing, and media firms to set up headquarters in the area. A larger presence of police has improved the safety of the area.

In 2002, New York City's mayor, Rudy Giuliani, gave the oath of office to the city's next mayor, Michael Bloomberg, at Times Square after midnight on January 1 as part of the 2001–2002 New Year's celebration. Approximately 500,000 revelers attended. Security was high following the September 11, 2001, terrorist attacks, with more than 7,000 New York City police officers on duty in the Square, twice the number for an ordinary year.

From August 14, 2003 to August 15, 2003, the lights of Times Square went dark as a result of the 2003 Northeast blackout, which paralyzed most of the region and parts of Canada for over 24 hours. Power was finally restored to the area on the evening of Friday, August 15.
On the morning of March 6, 2008 a small bomb caused minor damage but no reported injuries.

On February 26, 2009, Mayor Michael Bloomberg announced that traffic lanes along Broadway from 42nd Street to 47th Street would be de-mapped starting Memorial Day 2009 and transformed into pedestrian plazas until at least the end of the year as a trial. The same was done from 33rd to 35th Street. The goal was to ease traffic congestion throughout the Midtown grid. The results were to be closely monitored to determine if the project worked and should be extended. Bloomberg also stated that he believed the street shutdown would make New York more livable by reducing pollution, cutting down on pedestrian accidents and helping traffic flow more smoothly.

The original seats put out for pedestrians were inexpensive multicolored plastic lawn chairs, a source of amusement to many New Yorkers. They lasted from the onset of the plaza transformation until August 14, 2009, when they were ceremoniously bundled together in an installation christened "Now You See It, Now You Don't" by the artist Jason Peters. They were shortly replaced by sturdier metal furniture, and on February 11, 2010, Mayor Michael Bloomberg announced that the pedestrian plazas would become permanent.1

In February 2011, Times Square became smoke free as New York extended the outdoors smoking ban to the area. The measure fines any person smoking within the area a fee of $50.

Times Square is the site of the annual New Year's Eve ball drop. On December 31, 1907, a ball signifying day was first dropped at Times Square, and the Square has held the main New Year's celebration in New York City ever since. On that night, hundreds of thousands of
people congregate to watch the Waterford Crystal ball being lowered on a pole atop the building, marking the start of the new year. It replaced a lavish fireworks display from the top of the building that was held from 1904 to 1906, but stopped by city officials because of the danger of fire. Beginning in 1908, and for more than eighty years thereafter, Times Square sign maker Art raft Strauss was responsible for the ball-lowering. During World War II, a minute of silence, followed by a recording of church bells pealing, replaced the ball drop because of wartime blackout restrictions. Today, Countdown Entertainment and One Times Square handle the New Year’s Eve event in conjunction with the Times Square Alliance.

A new energy-efficient LED ball, celebrating the centennial of the ball drop, debuted for the arrival of 2008. The 2008/2009-ball, which was dropped on New Year’s Eve (Wednesday, December 31, 2008) for the arrival of 2009, is larger and has become a permanent installation as a year-round attraction, being used for celebrations such as Valentine’s Day and Halloween. On average, about 1 million revelers crowd Times Square for the New Year’s Eve celebrations. However, for the millennium celebration on December 31, 1999, published reports stated approximately two million people overflowed Times Square, flowing from 6th Avenue to 8th Avenue and all the way back on Broadway and Seventh Avenues to 59th Street, making it the largest gathering in Times Square since August 1945 during celebrations marking the end of World War II. Since 1972, the celebration in Times Square has been covered on national television.
4.2.4 Case Study 03 -Westfield Horton Plaza :

This is basically a market place which is mostly popular for its spatial quality & the huge mass gathering here.

- Location :
Horton Plaza, officially Westfield Horton Plaza, is a five-level outdoor shopping mall located in downtown San Diego and remarkable for its bright colors, architectural tricks and odd spatial rhythms. It stands on six-and-a-half city blocks and is adjacent to the city's historic Gas lamp Quarter and is currently anchored by Macy's and Nordstrom. It was the first successful downtown retail center since the rise of suburban shopping centers decades earlier.

-History:
Before it was redeveloped as a shopping center, Horton Plaza was a grassy area surrounded by banks of plants and flowers, standing in stark contrast to the buildings around it. It was named for Alonzo Horton, who was largely responsible for the location of downtown San Diego. In the 1960s and 1970s the plaza was a major public transit center, with most public buses that entered downtown having stops there. The entire area was run down by the 1960s, and the plaza was home to a substantial homeless population. Despite the poor condition of the plaza, initial plans to redevelop it into a shopping center were met with some skepticism and resistance.
On November 2, 1960, then Senator John F. Kennedy spoke at Horton Plaza to make a last-minute appeal for votes just six days before the 1960 Presidential Election.[3]

Horton Plaza was the $140,000,000 centerpiece of a downtown redevelopment project run by The Hahn Company, and is the first example of architect Jon Jerde’s so-called “experience architecture”[citation needed] When it opened in August 1985, it was a risky and radical departure from the standard paradigm of mall design. Its mismatched levels, long one-way ramps, sudden dropoffs, dramatic parapets, shadowy colonnades, cul-de-sacs, and brightly painted facades create an architectural experience in dramatic contrast to the conventional wisdom of mall management. Conventional malls are designed to reduce ambient sources of psychological arousal, so the customers’ attention is directed towards merchandise. By making the mall an attraction in itself, Jerde stood this model on its head.

Horton Plaza was an instant financial success, with 25 million visitors in the first year. Twenty years after opening, it continues to generate the city’s highest sales per unit area, in
the range of $600 to $700 per square foot ($6500 to $7500/m²)). From an urban planning standpoint, Horton Plaza is a civic asset that generates pedestrian traffic and shares it with a number of contiguous destinations, paving the way for the revitalization of the Gas lamp District. According to its web site, the mall has been "hailed locally and nationally as an overwhelming success since its opening in August 1985, winning dozens of awards in design, architecture and urban development."

When originally built, the center was anchored by The Broadway, Mervyn's, Nordstrom and J. W. Robinson's. The Robinson's was renamed Robinsons-May in early 1993 and closed in June 1994, being subdivided for shopping and entertainment space. The Mervyn's was closed in 2006.

In 1998, Hahn sold the center to Westfield America, Inc., a precursor of The Westfield Group. It was renamed "Westfield Shopping town Horton Plaza" shortly afterwards. The unwieldy "Shopping town" name was dropped in June 2005.

On January 11 2011, the San Diego City Council unanimously approved a plan to raze a major building at Horton Plaza, former home of the now-bankrupt Sam Goody store, to make way for a 37,000 sq/ft urban park.

### 4.3 Local Case Studies:

Local public markets were of case studies. The space quality pedestrian activities were the focus of these studies.

#### 4.3.1 Case study 01 - Dhaka New Market:

New market is one of the most popular market place in Dhaka. It is hugely famous for its essence of public space & the availability of all kinds of staffs here. It’s location has also been an important factor for its popularity.

**-Location**

Dhaka New Market is located in the north of Azimpur, Dhaka.

**-History**

Dhaka New Market was built during the period when Mr. Nurul Amin was the Chief Minister of East Pakistan. The construction began in 1952 and completed in 1954. The area is
triangular in shape with 3 high arched entry gates on three sides. There were spaces for 440 shops and a nice triangular lawn at the center. In the 80’s, 3 more New Market blocks were constructed on the north under Dhaka City Corporation each having over 1000 shops. The nice green park inside has been converted into a mosque at first floor level with 60 new shops under it.

-Objective
The building of Dhaka New Market marked a new era of modernization of Dhaka city. When recreation of shopping in the narrow lanes of conservative, noisy and crowded “old Dhaka” was not always anymore a preferable option for families, the Dhaka New Market with its spacious center space and new shops with shaded archways were more welcoming to families and young people.

-Findings
In 50’s and 60’s, it was the most popular place for shopping as well as recreation. Young people, particularly college and university students in groups used to hang around inside the market arena. The market area was extended and new shops were built later in the 80’s because of the constant demand of the increasing number of city dwellers. Since the last two decades, many new large and ultra modern malls have sprung up in Dhaka, but the demand of New Market in Dhaka is still unique. The Dhaka New Market serves the city people with shopping necessities and with a number of popular ice-cream parlors and fast food shops, a successful public recreation place as well.
4.3.2 Mouchak Market:
This market is a famous local market in Dhaka. This is quiet old & popular market. It was mostly visited market even a few years ago when there were not a number of high-rise markets in Dhaka.

-Location:
Mouchak market is located in Malibag, one of the busy places in Dhaka city.

-History:
Mouchak Market is one of the oldest and famous markets in Dhaka city. It was also one of the most famous markets at the time and was mostly visited by the British and French rulers over Dhaka. It is known to be the General Meeting Building of the Royal British Family.
-Objectives :

The market is a five-storey building. The ground floor consists of fast food shops, thus making the market a popular meeting place for young people, the next 3 floors consist of shops for garments and household things. There is a mosque and a Chinese restaurant in the 4th floor. Around 3,000 to 4,000 people come to this market every day. But the number increases exponentially during the festival.

4.4 Conclusion:

All of these case studies have a common feature of having public gathering facilities which was a strong indication of introducing public space in this mixed use development.
CHAPTER 05: PROGRAMME DEVELOPMENT

5.1 Shadhin Bangla super market, Mirpur 2 node
5.2 B.N.S.B office [administrative building]
5.3 B.N.S.B clinic
5.1 Shadhin Bangla super market, Mirpur 2 node:

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| Total      |                               |                |                                 | 60,000                       |

5.2 B.N.S.B office [ administrative building ]:

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### B.N.S.B Clinic

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<td>Consultation</td>
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<td>5</td>
<td>Investigation room</td>
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<td>6</td>
<td>Refraction room</td>
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<td>7</td>
<td>Computer test room</td>
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<td>8</td>
<td>Biometry room</td>
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<td>9</td>
<td>Vision test</td>
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<td>13</td>
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<td>17</td>
<td>cabin</td>
<td>6</td>
<td>100</td>
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</table>

**total area** 11,630
total area = 80000 sft apx (with 30% circulation)

total car parking area = 8000 sft for 60 cars
CHAPTER 06 : CONCEPTUAL STAGE & DESIGN DEVELOPMENT

6.1 Introduction
6.2 basic conceptual ideas
6.3 design development 1
6.4 design development 2
6.5 design development 3
6.6 design development 4
6.7 Conclusion
6.1 Introduction:
This chapter focuses on the logical derivation of the conceptual ideas towards design decisions & the design development phases.

6.2 basic conceptual ideas:
The conceptual ideas came from the site analysis. Creating a public space in the mixed use development complex was the major design decision. At the same time natural ventilation was an important decision which would make the market more affordable for the mirpur dwellers. Some other ideas were also worked as inspiration that came from the site analysis.

Fig 32: Extreme need for a public space which also can act as a thorough fare creating a community access with the housing area
Source : NOVA _ 2012re
Fig 33: Creating an axis that ends with mirpur zoo & botanical garden
Source: NOVA | 2012

Fig 34: Naturally ventilated market according to mirpur dwellers' affordability
Source: NOVA | 2012
Fig 35: clear vista of existing sculpture which is serving now as a public gathering space
Source: NOVA _ 2012

Fig 36: Exposed circulation
Source: NOVA _ 2012
6.3 design development 1:
Bubble diagram & Zonal planning of the programs has been developed in this phase. Conceptual ideas & the basic zonal planning were tried to be merged according to the functions.

Fig 37: zoning of the functions
Source: NOVA _ 2012

Fig 38: ventilation path diagram
Source: NOVA _ 2012
6.4 design development 2:

In this development phase the solid void relationship between the form & the open spaces in this complex have been tried in different phases considering the basic zonal planning which have been developed before. Shape & volume of the public space have been tried in different phases according to the location of the functions.
Fig 41: zonal planning phase 2
Source: NOVA _ 2012

Fig 42: zonal planning phase 3
Source: NOVA _ 2012
Fig 43: zonal planning phase 4
Source: NOVA _ 2012

Fig 44: zonal planning phase 5
Source: NOVA _ 2012
Fig 45: three dimensional expression of massing
Source: NOVA _ 2012
6.5 design development 3:
Solving floor plans and the master planning was the main focus of this phase. Landscape, gathering spaces, threshold & edge treatment were achieved in this design phase. To split the major & semi-public spaces into several spaces has been followed throughout this development phase so that there could have several gathering group & also having opportunity for vendor gathering.
6.6 design development 4:
Final developments of the form, functional & aesthetical decisions were the main focus of this design phase. Finalizing design detailing, plan, section & elevation designing were basics of this phase.
Fig 48: master plan
Source: NOVA _ 2012
Fig 49: all floor plans
Source: NOVA _ 2012
Fig 53: final model image
Source: NOVA_2012

Fig 54: final model image
Source: NOVA_2012
Fig 55: final model image
Source: NOVA _ 2012

Fig 56: final model image
Source: NOVA _ 2012
6.7 Conclusion:
This project was designed in intension to exemplify the approach of creating public interaction spaces in such complex which could be a breathing space for people not just only a recreational commercial space. Different kind of analysis, treatment & analytical design decisions made on the whole a design approach towards the design process which has made this project flourishing. These kind of social decisions through architectural intervention really can create such public friendly commercial complex which is extremely on demand in this time.
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