# স্থাপত্যের মুক্তাঙ্গন

# A PLATFORM FOR ARCHITECTURAL DIALOGUE

Ву

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SEMINAR II

Submitted in partial fulfillment for the requirements
For the degree of Bachelor of Architecture
Department of Architecture

BRAC University Summer 2015

#### Abstract

শ্বাপত্যের মুক্তাঙ্গন is a common platform to promote society, architecture and culture. It is a center where people will come, share and learn from each other activities. It's a platform for the people and by the people. It will serve as a channel of communication between architects with the rest of the population, a platform for historical, cultural and architectural education, and exhibition spot, gallery for exploring arts and artifacts as well as a digital explorer for important architectural documentation and historical issues. It is soul-ly purposed to generate spontaneous public activities like learning, sharing and cultural activities etc. and to act as an important ingredient to enrich the society, culture, humanity and environment.

Architecture can change society - this is the belief I still hold in me. So designing a platform for public should have such spatial quality which not only generate different public activity but also promote different social dynamics between people. The site is near the Luis I Kahn's Assembly Hall. But as the attempt is to invite people from every stratum, the intention is to create monumentality and dominancy .Thus to create a stepped elevation from the ground level. People have been invited from all site of the plot. The central court yard with a central water body hold a solemn consolation with its surrounded spacious alcoves. Annexation of large open spaces generates different activities like exhibition, jury, libraries, workshops and group gathering or even like protesting procession. One archive, one seminar hall and two café have been provided with control guidance. It's a society dedicated platform. Every single space has such hegemonic character to promote spontaneous public participation. Trees have been taken as symbolic parts of a society. Lots of trees have been put in distinct location to hold its unique identity in a society. Contemplating spaces have strong capability to convince human psychology. So to promote such qualitative space, the attempt was to play with light and shadow in different zones. Light separates the function and also light generates the activity. That is the behind philosophy to generate such meditative space. People will come and participate and will feel the drama of the space. And they will promote a better society to its inhabitants. Grandness and overwhelming inviting entry can be felt at the beginning but not any horrified way rather than with solemn and general invitation. The materiality has been considered as so close to human. Heavy concrete has been used to sustain and to promote the feeling of closeness. Because flashy material stands like showy and that is not for poor and general people. This is a hypothesis project. The idea is to design a center which can add some

value to human quality. Participating, sharing, learning, listening and contemplating all are necessary to build a good society, to enrich human values and to promote culture.

# Acknowledgement

I am ever grateful to the Almighty Allah for gifting me with an unimaginably beautiful life & this thesis project is the consequence of everything that I learned consciously & unconsciously through this life.

I would like to thank my parents & my family for supporting me through the years in architecture. I would also like to express my gratitude to all my teachers for giving me the opportunity to learn.

Special thanks should to the juniors and seniors who supported me throughout this project.

Thank you.

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# CHAPTER 01 INTRODUCTION

Background of the project

1.1 Project Brief

1.2 Motivation

1.3 Thoughts behind the concept

1.4 Rationale of the project

1.5 Aims and Objectives of the project

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Background of the project

Throughout the 5 years of our academic life, all we were taught about architecture is

architecture can change our life, our society our nation; we all are like a family. But in real life

do these philosophy matters at all? Are we really connected like a family? Do this platform

really working with the people or just doing its own work in its own way?

The method and curriculum of architectural education have not changed significantly since the

time of Vitruvius. Only the tools and techniques and the field of specialization show a

remarkable change over the years. The pedagogy in architecture shows a need for change in

the context of current trend and demand in practice. There is an increase in the number of

institutes offering architectural education, number of students, and graduating architects in

Bangladesh, especially in recent times. At the same time the current trend of development

work has created wider opportunities for graduating architects not only in their own country,

but also to different places of the world. The above trend compels to rethink about architectural

system and the future of the graduating students in Bangladesh.

I believe that architecture does have this power in inspiring and elevating the spirit. This

project which will form a hub for all architects, architecture students, and people interested in

architecture, providing for them a rich architectural experience, and underlining quality and

sustainability aspects of architecture all within a civic environment, with spaces for social and

public activities.

1.1 Project brief

<u>Title of the project</u>: স্থাপ্ত্যের মুক্তাঙ্গল A platform for Architectural dialogue

Statement: A facility that build a common platform for Architects/students/citizens to share

ideas and information to bring positive movement within the society. And the best way to

approach is through sharing and education.

Client: Government

<u>Site location</u>: As there is no proposed project as such there is no specific site for the project as well. But it demanded a central location, well connected to the rest of the city, situated around a variety of functional zones so as to attract and include as much people as possible. Thus the IAB Site at Agargoan was selected as the site as it is surrounded by other public spaces.

Site area: 4.1 acres approximately.

#### 1.2 Motivation

"I believe that architecture has the power to inspire, to elevate the spirit, to feed both the mind and body. It is for me the most public of the arts."

\_\_\_ RICHARD MEIER.

Architecture can play a significant role in the development of communities and wider society. It is architecture which provides the background for a nation; persistently it projects who we were, who we are and who we want to be. Architecture is that great living creative spirit which from generation to generation, from age to age, proceeds, persists, creates, according to the nature of man, and his circumstances as they change.

The literacy rate of Bangladesh is very high but it is denoted by the people who can sign their name. So the question to be asked is that "is this true literacy." Bangladesh is a country full of potentials and possibilities and to take full advantage of this situation the citizens need to have some basic knowledge and understanding about Architecture. Thus came up with the thought of platform for architecture-A space that tries to address all the citizens to provide basic understanding and knowledge through various means.

#### 1.3 Thoughts behind the concept

Dhaka city, in its present form, happens to lack what we understand to be a prominent platform or a space of sharing, the city lacks a common ground, a prominent land area that will serve the community and the city through Architecture, a place that will help people to grow. The project set in its place, the IAB which is at the center of the whole city. The main idea of the project was to set a platform for the Architects/students/citizens of this city to interact, to live, to share and to gain ideas. To gain knowledge, not only through the conventional way that we are already familiar with but also through the ways in which people have enlightened through ages, through sharing.

#### 1.4 Rationale of the project

Any form of oppression thrives on estrangement, not knowing, preaching belief systems. Their foundation is forged upon social inhibitions, prejudice. On the other hand knowledge is addictive, not to know is sometimes considered bliss. Because asking a single question may lead to a chain reaction of reasoning; reasoning creates opinions. Eventually opinions create conscious individuality.

The project aims at igniting the thoughtfulness and curiosity of the mind; and an exploring mind asks questions. The project aims to create a shift within the mind of the people and resulting in a change in the society in the larger scale.

Consequently the enlightened individuals would unite to build another social structure based on compassion, taste and mutual respect. United then on the grounds of greater identity, this would bring social change.

Throughout history architecture has been used as a means for manipulating or guiding public taste and opinions. And this is one of the major ways to provide the society with a thrust to change and be better.

In such a way the ultimate objective of the project is to constantly provide a positive energy into the urban social fabric, so as in not too distant future Dhaka becomes a much more

livable, tasteful, and culturally and aesthetically oriented city. This utopian dream cannot be only possible by rapid development of infrastructure, economy or by providing other such commodities, but only by education. And thus it is no harm to target the people who are not educated in the formal academic system. Thus this project aims to educate people in a way that suits each individual.

## 1.5 Aims and objective of the project

There are three main objectives of this project -

- The project aims to combine people from various fields, ages and income group to engage in various discussions, sharing, debates and ideas about architecture. It should be always kept on mind that knowledge has no boundaries and there is always something new to learn and each individual has the something to teach others.
- The project should be inviting enough to attract people. And the project should be able to blend into the lifestyle of the people.
- Lastly the project should add a new dimension in the context of the city. The
  project should act as a guideline or path that drives the society forward.

### 1.6 Major Programs

Center for architecture includes program to integrate this community by empowering them through providing:

- Administration
- Architectural data resource
- Architectural display
- Digital interactive galleries
- Archive for important documents
- Seminar halls
- Classrooms
- Labs
- Professional workshops

- Public workshops
- Auditorium
- Café
- Library
- Exhibition/ concert/ group gathering hall
- Space for journalists

In the proposed design, in addition to providing these opportunities, the design will include the buffer space or the event space to catalyze the social interaction with the society.

# **CHAPTER 02**

**Site Appraisal** 

2.1 Site location

2.2 Analyzing the site

2.3 Site and surroundings, photographs, environmental considerations, detail area plan and land use pattern

2.4 SWOT Analysis

2.5 Conclusion

# **Site Appraisal**

As there is no allocated site for the project, a number of potential sites were initially chosen that complies with the conditions required for such project.

#### 2.1 Site location

The site to be chosen had to be very strategic. The site had to attract as much people as possible. As a result the site that was taken is located right at the center of the city. The site required a location that does not belong to any specific residential neighborhood but had surrounded by mixed use development and public spaces to different scales.



Fig: 2.1. Source: Author from Google (AUG, 2015)

The site is the IAB site beside the old airport. The site was just perfect for the project as it is at The center of the city and also the site is surrounded by major civic spaces. The exact site chosen is the western side of the old airport. The reason for taking this site is that it is surrounded by major roads, busy nodes and most importantly it is surrounded by major civic spaces.

The civic spaces that surround the site are as follows-

Novo theatre, Army Museum, National Assembly, Zia Uddan, Bangabandhu International Conference Centre and the Trade Fare ground.

# 2.2 Site Analysis



Fig 2.2 Source: Author

Fig 2.3

Source: Author

Fig 2.4 Source: Author



Fig 2.5 Source: Author

Fig 2.6 Source: Author



Fig 2.7 Source: Author

Fig 2.8 Source: Author



Fig 2.9 Source: Author

Fig 2.10 Source: Author

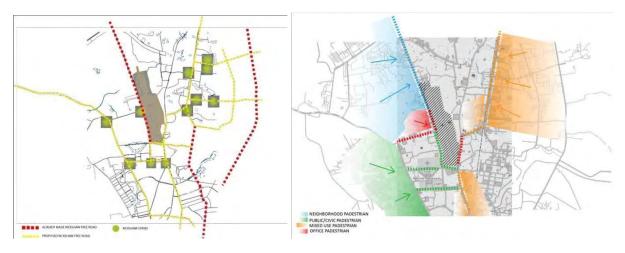


Fig 2.11 Source: Author Fig 2.12 Source: Author



Fig 2.13: Source: Author

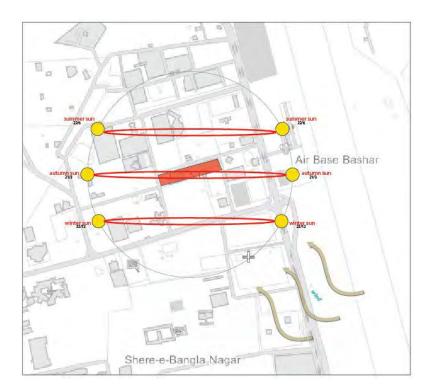


Fig 2.14: Source: Author



Fig 2.15: Source: Author

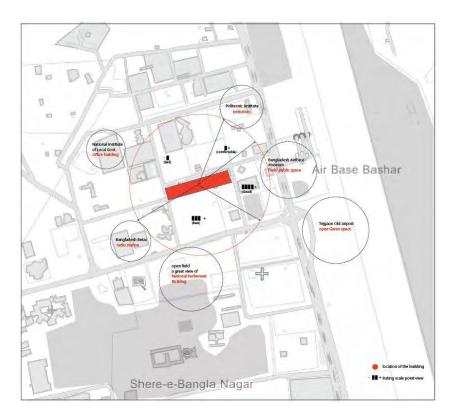


Fig 2.16: Source: Author

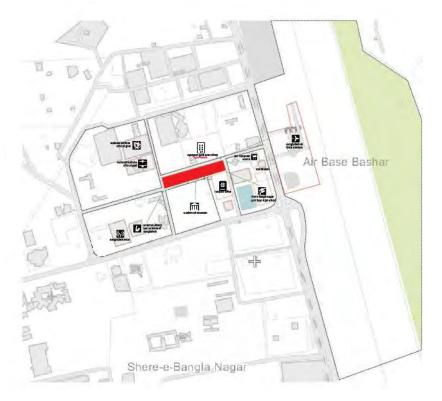


Fig 2.17: Source: Author

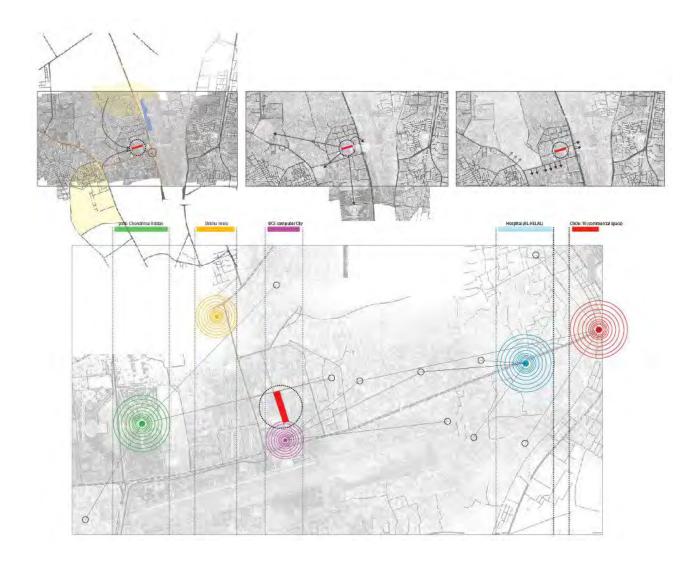


Fig 2.18: Source: Author



Fig 2.19: Source: Author

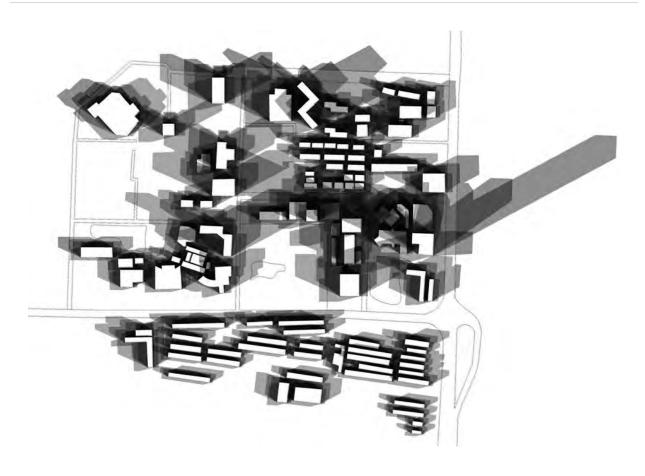


Fig 2.20: Source: Author

The site is surrounded by taller buildings. So shadows casted throughout the day on the site have been recorded and merged to see which area on the site gets maximum shadow.

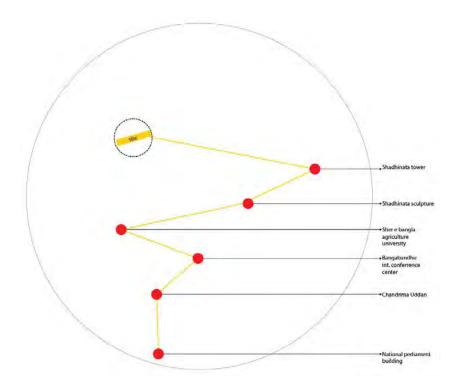
# 2.3 Site and surroundings, photographs, environmental considerations, detail area plan and land use pattern

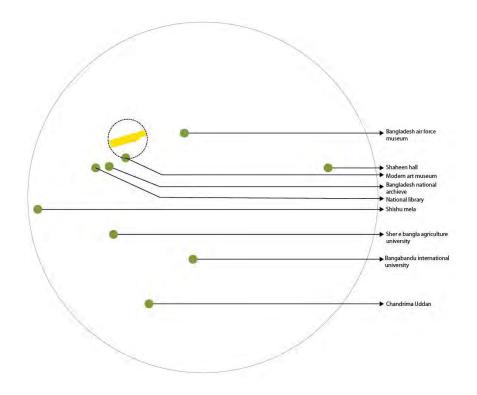
# 2.3.1Site Surroundings

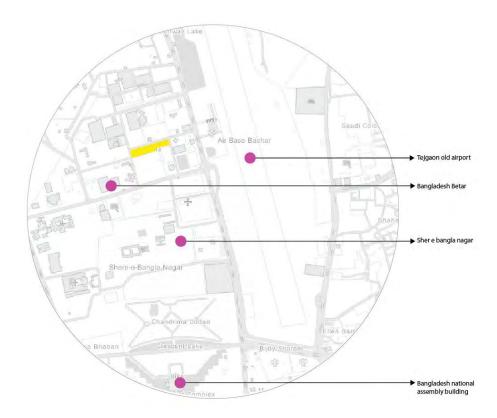
The site is surrounded by places like Agargoan, Shymoli, Sher-e- Bangla Nagor, farmgate and Tejgoan.

Agargoan and Shymoli is mostly a mixed use area with few governmental quarters. The place is densed with very few coverage of green space. The traffic condition is a major problem during pick hours. Mainly middle income people reside here. The place consists of many administrative offices. The area has no community or gathering spaces. The lack of green, water bodies and open spaces make the area a densed concrete jungle. The mixed use is not integrated with the residential zones. The place is very vibrant and active during the day and dies out by 5 pm.

The Sher-e- bangle Nagor is designed by Louis I. Kahn. It is a busy commercial and central neighborhood. It is home to many offices of government and public institutes. It also consists of many educational institutes, banks and financial institutes and shops. It is the home of the National Assembly, the area is very restricted. The area is vibrant during the day and dies out at night. The place contains lots of green spaces and water bodies but maximum of it is restricted for security issues. The place holds civic activities along the road but due to the restrictions most of the activities are limited.







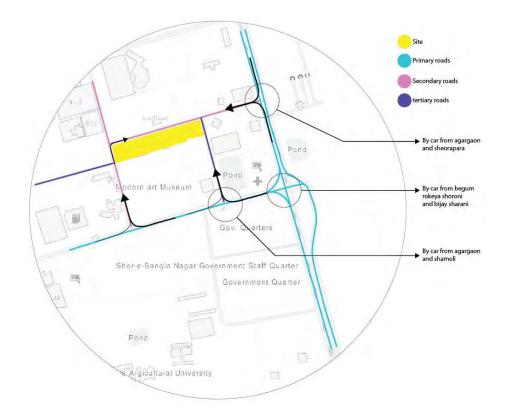


Fig 2.21: Source: Author

Farm gate is one of the busiest places in Dhaka city. It is the commercial and transportation hub of the city. The area also has residential facilities but it is very few in number. The majority of inhabitants in this area are serviceman and businessman. As this place is a major transport hub traffic is always an issue day and night. This place remains active almost 24 hours. This is a very crowded zone with no open and public gathering spaces. The zone consists of very little green and water spaces.

Predominantly industrial, the entire Tejgaon region is now growing into the extended Central Business District. Most major arteries of the city connect or pass through this region. The upcoming infrastructure projects of the city also integrate with the region. This area brings in a lot of people from different socio-economic brackets from all over the city every day for various reasons. In terms of community and locality, the region belongs to the whole city rather than to any particular neighborhood. The place also consists of educational institutes, parks and lakes.

Tejgaon also has a restricted zone. Its holds the Air force Headquarters, Prime Minister's

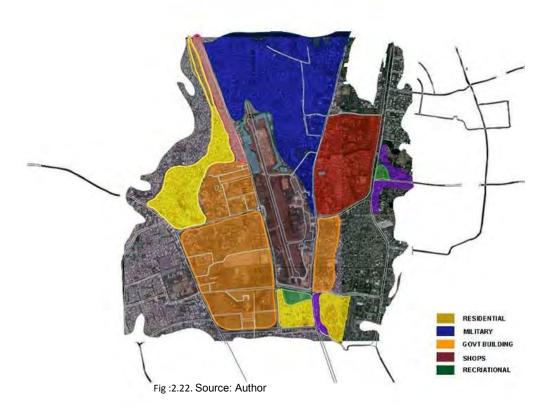
office and government administrative headquarters.

#### 2.3.1 Environmental considerations

In many research studies the Tejgaon and farm gate area is significantly mentioned as the most polluted area of Dhaka city in terms of sound, air and soil pollution. Tejgaon as it is a industrial area and Farm gate as it is a transport hub. But the gradual development of the city is making this Tejgoan a mix of commercial and industrial use. Many industries are being moved from this area to the out skirts of Dhaka city for reducing the environmental damage caused by them.

As a fabric of mixed use contents, the temperature of Tejgaon is slightly different from the rest of the Dhaka. The air is more carbonated and hotter. On the other hand Shere Bangla Nagor is relatively better as it has a lot more green, water and open space. As the site is located in the transition between these two different environments, it is always a challenge to flow the positive environment and defeat the negative one.

### 2.3.2 Detail area plan and land use pattern



The surrounding urban fabric shows variety and, interrelated and integrated development. The different zones have very distinct flavor of built environment, locality and community. The site also creates very interesting relationships with other public and urban spaces.

The site is surrounded by residential areas, military areas, government buildings, shops and recreational areas as shown in the figure above. There are surrounding water bodies and green around the site. Both the green and water has a restricted zone as well as a public zone.

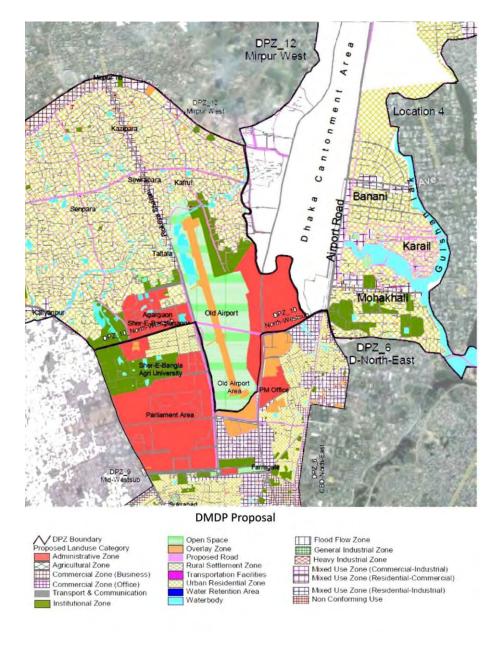


Fig 2.23: Source: Author

# 2.4 SWOT Analysis

#### **Strengths**

Mobility

Wide roads on all sides of the site Footpaths along the roads

Land use

Number of universities and schools Number of markets

- Important Landmarks around the site
- Environmental

Large amount of green Presence of water bodies Open space

#### Weakness

Mobility

Illegal car parking
The road in divided into three
parts No proper bus stops
Rickshaw banned

Land use

Some areas are restricted

Environmental

Restricted green Restricted water bodies Restricted open space

#### **Opportunities**

Mobility

Reduce surrounding traffic Footpaths extends to form plaza Encourage pedestrian activities

# 2.5 Conclusion

The chapter well establishes the potentials of the chosen site and its analysis in context of the idea in question. The site already exhibits a huge number of people gathered for recreation and relief; so with infrastructure and other surrounding development the project can create a huge impact on the city, considering this as its site. The following chapters would elaborate how the site is addressed in the design consideration.

# Chapter 03

Literature review

3.1 Introduction

3.2 Theoretical Background

3.3 Influence of technology over societies

3.4 Historical background of multidisciplinary groups & accumulation of knowledge

3.5 Contemporary examples of uniting all knowledge

3.6 Features enhancing participation

3.7 Types of alternate education

3.8 Learning styles

3.9 The organizations of Bangladesh for architecture

3.10 How do the organizations work?

3.11 Conclusion

#### 3.1 Introduction

The project required a wide range of conceptual rationalization, which actually formulated and helped develop the basics of the functionalities. This chapter deals with those aspects of the project which reinforces the thought process behind the practical development of such a project. This chapter is very important in this sense that it collaborates between the concept and its transformation into establishing rational domains of physical development.

## 3.2 Theoretical background

The project aims at becoming an instrument of social change in a very versatile or multi-dimensional way. It creates opportunities of personal or individual growth and betterment by enhancing knowledge and creativity by generating motivation and inspiration, scopes for higher aspirations. These individuals directly influenced by the facility and probably involved with its fundamental functions. Then again these individuals will singularly or collectively influence many others to participate in the chain reaction of a process that would create greater consciousness and awareness, motivate people in general towards greater good. It would create an environment of positive energy and boost the public taste, sentiments and opinions in a better, democratic and patriotic direction. স্থাপত্যের মুক্তাঙ্গল is a place that tries to bring about the right chemistry of people and create a higher state of mind. And the facility aims to do it in such a manner as the process becomes quite evident and obvious and a natural course of action. This would in turn create similar opportunities of various scale and type throughout the city and eventually the country. The project can be said as the right kind of spark required to create such chain of reactions that would eventually bring about a massive change in our social, economic and political scenario.

#### 3.2.1 What is the fundamental purpose of architecture?

That's a very simple yet complicated question. Architecture exists to create the physical environment in which people live. Obviously that's a very simple answer, but if we deep digger we see the complexities. What is the built environment? What constitutes quality of life? How

do architects determine whether something is positive, helpful or relevant for individuals and collectives? It serves society and improves quality of life. It's a physical manifestation of the society's wishes to be civilized! Public domain being the obvious place which encapsulates this as buildings, alongside being art and science, are part of the public domain. Architecture should fulfill multiple criteria. One of its purposes is to itself. A lot of people believe to some degree, in the autonomy of architecture as a discipline which means that part of the purpose of architecture is to construct new forms of knowledge that relate to the enhancement and advancement of the discipline itself. In a way, this is inseparable from the performance or performativity of architecture in terms of its responsibilities to engage with the society at large. There is, in a sense, a purposive dimension to architecture which really provides the symbolic ideas of habitation and- broadly- serving the humankind. It's both this version of architecture that removes purpose, and one that really engages it fully in a purposive dimension.

#### 3.2.2 How does architecture relate to wider culture?

Without a doubt, architecture is a part of culture- it has been called the mother of all arts! It is certainly part of how we see ourselves, and part of how we see the world. The unique aspect of architecture is that in its physical incarnation of buildings, it may last for hundreds and hundreds of years. Architecture is created by people! The most successful architecture goes beyond just being a shed or a box for living. the most important architecture as we look back over history are buildings or environments that have done so much more in a variety of waysbe that innovation in building and construction, or buildings that have pushed the discipline to get us to think about our environment in different ways, or just incredibly beautiful buildings that have lifted the human spirit in addition to housing our activities and our lives. Whenever we collaborate on a project which involves multiple agencies and participants- like people playing jazz together- each player contributes to the tonality, sound and experience of the overall. In that sense, architecture as a cultural production has the responsibility to be of them time, but represent the time, to be the vehicle through which transformations are made. We have to be aware of the responsibilities we have for architecture as a framework for social action. In that way, there is reciprocity, a connection between how we're affected by a circumstance and how we affect the circumstance itself.

#### 3.2.3 Current Trend in Architectural Education

Once there was only one educational institute for architecture. Presently there are around fifteen institutes in both government and private sectors. Along with four government universities there are eleven private universities offering facilities for architectural education; a few more are planning to start architectural education in future. All of them are now offering five years of Bachelor of Architecture (B. Arch) degree program. The BUET started an M.Arch program in 1979 and Ph.D in 2001. The Discipline of Architecture at Khulna University (KU), the second public university located in the southeastern region of Bangladesh, started their B. Arch program in 1991 to cope with the growing demand for architects in the professional field of work. With the passing of the Private Universities act in 1992, three private universities came up with their department of architecture consecutively. The Ahsanullah University of Science and Technology (AUST), The University of Asia Pacific (UAP) and the BRAC University started their B. Arch program in 1996, 1997 and 2001 respectively. All these private universities are based in Dhaka, the capital city of Bangladesh. The annual number of intakes in all these universities shows a gradual increase in numbers over the years. The BUET started with six students in 1961 and has increased its capacity to 50 at present. In the AUST, the number of intakes has increased from 20 in 1996 to around 50 per intake in 2010. The private universities offer admission two to three times in a year while the public universities have annual intake. The following figures show the present state of student enrollment and number of faculty members of different schools of architecture. The total number of students varies between 200 and 350 in different universities. The number is increasing significantly in the private universities.

## 3.3 Influence of technology over societies

Technology is very important in our everyday life. It has become an inseparable part of our lives. Every day we Architects connect and experience the world in ways never imagined even a few decades ago, thanks to the blessings of modern technology. It is quite apparent the effects and influences of technology over human beings and even in some case other species. Good or bad technology is the most significant and powerful catalyst driving our lives. From computers, cell phones and microchips to mega industries, satellite stations to supercars, warheads to home Appliances technology rule our everyday lives. It becomes more evident when we consider that all developed nations are highly developed with their technology and as well the technology usage. The affairs of technology has a very strong

appeal to people; trying to keep up with the rapid rate of technological innovations, people generally tend to be very interested in learning technological news and updates, about gadgets to distant planets to a new medicine out of a tree or some complex research on the configuration of molecules, everything in general related to science and technology appeals to people. More over technological innovations very directly affect people's lives, thoughts and opinions to be more liberal, open minded and patient to others. It connects people to information and other people, lets them communicate and interact in an instance. Moreover no other area can match the amount of research and innovations happening in the fields of technology.

# 3.4 Historical background of multidisciplinary groups & accumulation of knowledge

#### 3.4.1La Convivencia

La Convivencia ("the Coexistence") is a term used to describe a postulated situation in Spanish history from the Muslim Umayyad conquest of Hispania in 711 to 1492 – concurrent with the Reconquista ("Reconquest") - when Jews, Muslims, and Catholics in Spain lived in relative peace together within the different kingdoms (during the same time, however, the Christian reclaiming of land conquered by the Moors was ongoing). The phrase often refers to the interplay of cultural ideas between the three groups, and ideas of religious tolerance. It played an important role in bringing the classics of Greek philosophy to Europe, with translations from Greek to Arabic to Hebrew and Latin.

#### 3.4.2 Navaratna

Navaratnas or Nauratan (Sanskrit dvigunava-ratna- "nine gems") was a term applied to a group of nine extraordinary people in a emperor's court in India. Some well-known groups are in the RaajSabha (court) of King Janaka, Emperor Vikramaditya and in Emperor Akbar's darbar.

The Mughal ruler Akbar, despite his illiteracy, was a great lover of the artists and intellectuals. His passion for knowledge and interest in learning from great minds led him to attract men of genius to his court, known as the nine courtiers of Emperor Akbar or Navratnas.

## 3.4.3 Similar Groups

Many famous emperors in India had courtiers labeled in similar ways. For example, the valuable members of the court of Krishna Deva Raya were termed Astadiggajas, the eight elephants.

LakshmanSen the ruler of the Sena Empire had Pancharatnas (meaning 5 gems) in his court; one of whom is believed to be Jayadeva, the famous Sanskrit poet and author of Gita Govinda.

#### 3.5 Contemporary examples of uniting all knowledge

Since the invention of the internet, sharing information is becoming easier everyday & every gadget, software or electronic devices we use are getting interconnected. Accessing & gathering knowledge or information is easier than ever and becoming adapted to the highly complex interconnectivity of different fields of knowledge by becoming highly sophisticated systems with the simplest interfaces.

#### 3.5.1Google

Google started with a simple internet search engine but has become, due to the need of time, associated with almost every possible aspects of information technology. Google has merged with Youtube, the most popular video sharing website and its database is now even stronger. Association & quick sharing system among products such as – Blogger, Google books, Google Chrome, Google Earth, Google Sketchup, Google Maps, Picasa, Google Docs, Gmail, Orkut, Android, Google Translator, Google AdWords, Google Apps, 3D Warehouse etc. has led to a spontaneous information gathering & sharing system which could sustain longer than any other attempts in history.

#### 3.5.2 Wikipedia

Wikipedia is a free, web-based, collaborative, multilingual encyclopedia project supported by

the non-profit Wikimedia Foundation. Its 18 million articles (over 3.6 million in English) have been written collaboratively by volunteers around the world, and almost all of its articles can be edited by anyone with access to the site. Wikipedia was launched in 2001 by Jimmy Wales and Larry Sanger and has become the largest and most popular general reference work on the Internet, ranking around seventh among all websites on Alexa and having 365 million readers.

#### 3.5.3 Social Networks

Social networks such as Facebook, My Space, and Twitter are playing a major role in sharing information at a mass level. Through spontaneous growth of connections among the users it becomes a complex network of human being & organization which virtually covers almost every aspect of life.

#### 3.5.4TED

TED (Technology Entertainment and Design) is a global set of conferences owned by the private non-profit Sapling Foundation, formed to disseminate "ideas worth spreading." SinceJune 2006, the talks have been offered for free viewing online, under a Creative Commons license, through TED.com. As of July 2010, over 700 talks are available free online. By January 2009 they had been viewed 50 million times. In July 2010, the viewing figure stood at more than 290 million, reflecting a still growing global audience.

#### 3.6 Features enhancing participation

There are many ways and types of demonstrations in all kinds of arts; but some of them are very public oriented or interactive. For the project it is very important to manipulate such interactions to a higher level so as to make the project more influential to the people.

#### 3.6.1 Thrust Theater & Jury space

In theater, a thrust stage (also known as a platform stage or open stage) is one that extends

into the audience on three sides and is connected to the backstage area by its upstage end. A thrust has the advantage of greater intimacy between audience and performer than a proscenium, while retaining the utility of a backstage area. Entrances onto a thrust are most readily made from backstage, although some theatres provide for performers to enter through the audience using vomitory entrances. An arena, exposed on all sides to the audience, is without a backstage and relies entirely on entrances in the auditorium or from under the stage.

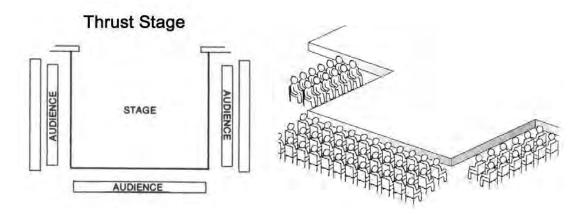


Fig 3.1 Source: Wikipedia

As with an arena, the audience in a thrust stage theatre may view the stage from three or more sides. If a performance employs the fourth wall, that imaginary wall must be maintained on multiple sides. Because the audience can view the performance from a variety of perspectives, it is usual for the blocking, props and scenery to receive thorough consideration to ensure that no perspective is blocked from view. A high backed chair, for instance, when placed stage right, could create a blind spot in the stage left action.

#### 3.6.2 Open studios/gallery space

Open studios or galleries offer opportunities for the audience to see the process behind the artworks as well; or in other words the creative process becomes the exhibit. On one hand these studios are open to all who are interested to use with minimal legislations and on the other hand the studio itself is an exhibition space for visitors to come and see the work in progress. These allow more interaction with artists and art in different ways.

#### 3.6.3 Circulation pattern as an exhibition space

#### 3.6.4 Art plaza, sculpture court, open performance spaces i.e. amphitheater

Art plaza, sculpture courts and open performance spaces are capable of bringing people close to artwork and artists. These spaces can be very versatile and multi-functional. In such places people get to interact more with art in various ways. Different sort of smaller or large scale exhibitions, participation and experimentation are possible here. And as these are not indoor or institutionalized spaces, they offer more opportunities for spontaneity and public involvement. These spaces are flexible to be used for varying purposes according to different event and occasions. So these spaces have very different kind of attractions or invitations to people to come and participate or observe.

# 3.7 Types of alternate education

Educational literature, the study of alternative education systems often mentions "open systems", "non-formal education", "distance learning", "non-conventional studies", among other terms. In some cases these are employed as synonyms, whereas in others, there is no agreement as to their meanings, making it impossible to reach a consensus for their concepts. A more precise definition of such concepts is fundamental, as is their possible classification, aimed at better understanding and practical utilization. We shall therefore analyze the concepts of formal, non-formal and informal education, in an attempt to define their features, advantages, limitations and inter-relations.

#### 3.7.1 Formal Education

It corresponds to a systematic, organized education model, structured and administered according to a given set of laws and norms, presenting a rather rigid curriculum as regards objectives, content and methodology. It is characterized by a contiguous education process

named, as Sarramonaremarks, "presential education", which necessarily involves the teacher, the students and the institution. It corresponds to the education process normally adopted by our schools and universities. Formal education institutions are administratively, physically and curricularly organized and require from students a minimum classroom attendance. There is a program that teachers and students alike must observe, involving intermediate and final assessments in order to advance students to the next learning stage. It confers degrees and diplomas pursuant to a quite strict set of regulations.

#### 3.7.2 Non Formal Education

As seen above, formal education has a well-defined set of features. Whenever one or more of these is absent, we may safely state that the educational process has acquired nonformal features. Therefore, if a given education system is not presential most of the time non- contiguous communication - we may say that it has non-formal education features. Likewise, non-formal education characteristics are found when the adopted strategy does not require student attendance, decreasing the contacts between teacher and student and most activities take place outside the institution - as for instance, home reading and paperwork. Educative processes endowed with flexible curricula and methodology, capable of adapting to the needs and interests of students, for which time is not a pre-established factor but is contingent upon the student's work pace, certainly do not correspond to those comprised by formal education, but fit into the so-called non-formal education.

#### 3.7.3 Informal Education

Informal education is quite diverse from formal education and, particularly, from non-formal education, although in certain cases it is capable of maintaining a close relationship with both. It does not correspond to an organized and systematic view of education; informal education does not necessarily include the objectives and subjects usually encompassed by the traditional curricula. It is aimed at students as much as at the public at large and imposes no obligations whatever their nature. There generally being no control over the performed activities, informal education does not of necessity regard the providing of degrees or diplomas; it merely supplements both formal and non-formal education. Informal education for instance comprises the following activities:

- (a) visits to museums or to scientific and other fairs and exhibits, etc.
- (b) listening to radio broadcasting or watching TV programs on educational or scientific themes;
- (c) reading texts on sciences, education, technology, etc. in journals and magazines;
- (d) participating in scientific contests, etc.;
- (e) attending lectures and conferences.

#### 3.8 Learning Styles

Kolb defines four kinds of learning styles based on four learning modes:

The concrete experience models characteristic of people who feel more than they think learning from feelings

The reflective observation mode is characteristic of people who would rather watch and observe others than be active participants- learning from watching and listening

The abstract conceptualization mode is characteristic of people who think more than they feel, and analyze problems by some systematic method- learning by thinking

The active experimentation mode is characteristic of individuals who welcome practical applications rather than reflective understanding as well as actively participating rather than observing - learning by doing.

## 3.9 The Organizations of Bangladesh for Architecture

There are actually very few organization is present in Bangladesh having standard activities combining socio-economic, cultural and infrastructure development activities. Most of the universities/ educational institutions having Department of Architecture does not have their own social platform / organization to perform for greater visions of Architecture. Though, now a day, there are number of Local / intra institution organizations are growing up consisting of students and professionals trying to cross the boundary of limited thinking and vision, the initiatives and necessary resources or support for the entrepreneurs are simply not enough. Besides student organizations, some national organizations are also playing role in different related issues.

Institute of Architects Bangladesh (IAB), may be denoted as one of the active and well recognized national organization which was founded in 1972. It is a professional institution to safe guard, promote and develop the profession of architecture in Bangladesh. The members of the Institute of Architects are morally bound to practice the profession according to rules, regulation and ethics established by the IAB. It has the mandate of its members to represent them as the supreme authority to deal with any matter related to the profession of architecture in Bangladesh.

#### 3.10 How do the organizations work?

The government organizations here in Bangladesh basically serve as the central authority of national infrastructure and act planning, development and execution. Professional organizations like IAB, IEB etc. organizations serve several purposes. They work as the central authority for the relative professionals as well as serving the purpose of social community platform. In Bangladesh, traditions of arranging education/training events, social activities, seminars and workshops on various technical and non-technical issues are now becoming regular practices done by these organizations.

These organizations provide a platform for architects/ other professionals to collaborate between them. Awareness development, personal improvements like leadership, professionalism etc. can also be mentioned as the additional works of these organizations.

#### 3.11 Conclusion

As the project is not a proposed one or one of which the program or functionalities and their inter-relations could be developed quite easily, this chapter would create a solid framework for such requirements of the project. From these studies it can be derived that the **Platform for Architecture** intends to combine the past and the present together into an appropriate chemistry. Public involvement or participation is rather important here. The whole process that is at work has to become an exhibit to the city; so that this creative exhibit can inspire the people of the city and they are encouraged and intrigued to participate.

**Chapter 04**Case Studies

4.1 Introduction
4.2 Cases

#### 4.1 Introduction

As there are no exactly similar projects like this, therefore in this chapter different aspects of the project would be briefly analyzed with a number of various local and international projects.

#### 4.2 Cases

# 4.2.1 National assembly building, Dhaka

JatiyoSangsadBhaban is the National Assembly Building of Bangladesh, located in the capital Dhaka. It was created by architect Louis Kahn and is one of the largest legislative complexes in the world. It houses all parliamentary activities of Bangladesh. Kahn's key design philosophy optimizes the use of space while representing Bangladeshi heritage and culture. External lines are deeply recessed by porticoes with huge openings of regular geometric shapes on their exterior, shaping the building's overall visual impact.

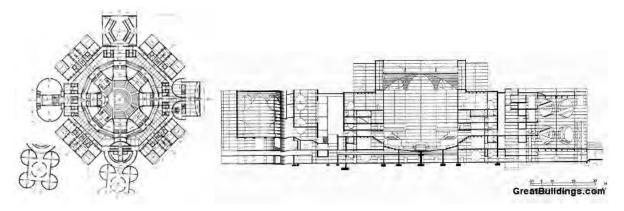


Fig 4.1: Source: greatbuildings.com

Architects: Louis I. Kahn, Philadelphia, U.S.A., with David Wisdom and Associates (after 1979),

Philadelphia, U.S.A

Location: Dhaka, Bangladesh

Duration: 1962-1983

Structural system: Concrete

In architect Louis Kahn's own words:

"In the assembly I have introduced a light-giving element to the interior of the plan. If you see a series of columns you can say that the choice of columns is a choice in light. The columns as solids frame the spaces of light. Now think of it just in reverse and think that the columns are hollow and much bigger and that their walls can themselves give light, then the voids are rooms, and the column is the maker of light and can take on complex shapes and be the supporter of spaces and give light to spaces. I am working to develop the element to such an extent that it becomes a poetic entity which has its own beauty outside of its place in the composition. In this way it becomes analogous to the solid column I mentioned above as a giver of light. It was not belief, not design, not pattern, but the essence from which an institution could emerge..."

The lake on three sides of the Bhaban, extending up to the Members' hostel adds to site's aesthetics and also portrays the riverine beauty of Bangladesh. The assembly building received the Aga Khan Award for Architecture in 1989.

#### **Analysis**

The national assembly building, Dhaka has a very open invitation to the people, architecturally. It has given form an idea of freedom and democracy. The plaza and the huge open spaces create opportunities of mass gathering and different activities and interaction. The interior spaces are transformation of the interactive space found in traditional spaces. The quality of light and serendipity is remarkable. It creates a positive energy and persuades to think and be creative.





Fig 4.2: Source : Author

## **4.2.2** The Jean-Marie Tjibou Cultural center

The cultural center is situated on a narrow strip of land surrounded by the ocean and lots of lush vegetation. Ten pavilions of various sizes ranging in height between 9 and 24 meters high are situated asymmetrically along a main path. Each pavilion serves a various function or evokes certain themes and includes permanent or temporary exhibitions. Some contain studios for traditional activities, such as music, dance, painting and sculpture. Also housed at the center is an auditorium, an amphitheater, the administrative departments, research areas, a conference room and a library.

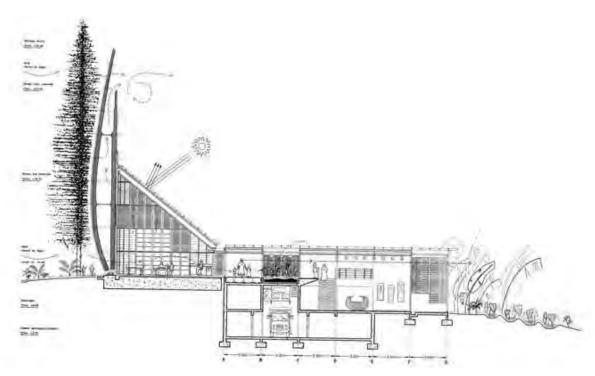


Fig 4.3: Source: Archdaily.com

Architect: Renzo Piano

Location: New Caledonia, Spain

Opened for public: 1998 Structural System: Bamboo

The pavilions themselves were inspired by traditional Kanak huts, but were not copied exactlythey're more of a modern take on the traditional architecture. Built from iroko wood as well as glass, steel, and bamboo, they respect traditional construction methods according to the most sophisticated engineering studies. Operable roof skylights and a screen of laminated wood facilitate natural ventilation using the wind to push hot air out of the top, while a bamboo wall filters light into the interior.

## **Analysis**

The cultural center offers an amazing solution corresponding the site and heritage. The scale and various details, use of materials, and different spaces are noteworthy. The place is very successful and vibrant due to its broader public inter activeness.



Fig 4.4: Source: Author

## **4.2.3** Fine Arts Institute, Dhaka University

Faculty of Fine Art (FFA) was an Institute of Dhaka University. The Institute turned into Faculty in 2008. This educational institute which established in 1948 was the first art educational Institute in this region and became the main center of art and cultural practice. It's currently situated in Shahbagh, in Dhaka city, close to the National Museum. Architect Muzharul Islam designed the institute.



Fig 4.5: Source: Author

Architect: Muzharul Islam

Location: Shahbagh, Dhaka, Bangladesh

Duration: 1953 - 1955

Structural system: Masonry

This masterpiece was Muzharul Islam's first architectural endeavor. The site is located in the roman area apart of Dhaka University Campus. The Roman area is well known for it's gardens and parks. Most of the buildings in this area have been designed in the scheme of a "baganbari" (house in a garden). The site that was given for the purpose of the institute was dotted with beautiful trees with a large circular depression at the end of the site. Muzharul Islam decided to come up with a design scheme that will retain all the trees on the site (as some of them were large beautiful trees that would have require many years to grow). His scheme was also climate responsive and had large continuous verandahs shading the inner walls and windows of the classrooms and studios. The design echoes the outhouse and inner house scheme of rural Bangladesh. It also transforms 'Jalees' (lattices) and 'beras' (perforated screens) into wonderful screens that separates and creates thresholds. One enters into the front pavilion, a wonderful structure that houses galleries on the ground floor and teachers and common rooms etc. on the first. A wonderful sculptural stairs connects the two levels around a wonderful internal courtyard.

Source: Wikipedia

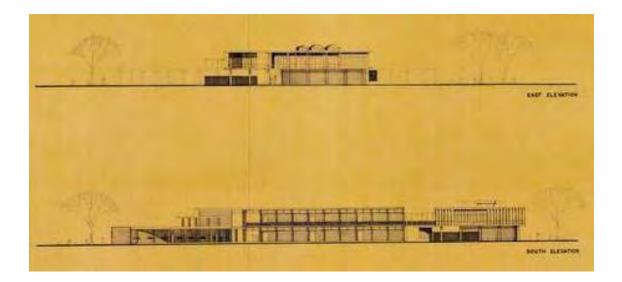


Fig4.6: Source: Author

## **Analysis**

The fine arts institute, Dhaka offers a variety of spaces. These spaces in forms of courtyards, pocket spaces generate a lot of activities and interaction around them. The use of screen is also very interesting along with the private – public relationship.

## **4.2.3** Seattle Central Library

The Seattle Public Library's Central Library is the flagship library of The Seattle Public Library system. The 11-story (185 feet or 56 meters high) glass and steel building in downtown Seattle, Washington was opened to the public on Sunday, May 23, 2004. The architects conceived the new Central Library building as a celebration of books, deciding after some research that despite the arrival of the 21st century and the "digital age," people still respond

to books printed on paper. The architects also worked to make the library inviting to the public, rather than stuffy, which they discovered was the popular perception of libraries as a whole.

Although the library is an unusual shape from the outside, the architects' philosophy was to let the building's required functions dictate what it should look like, rather than imposing a structure and making the functions conform to that.

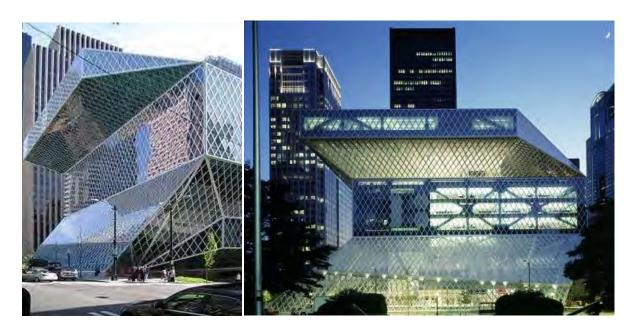


Fig 4.7: Source: Author

Architects: OMA + LMN

Location: Seattle, Washington, USA

Key Personnel: Rem Koolhaas and Joshua Prince-Ramus (Partner-in-Charge), with Mark von Hof-Zogrotzki, Natasha Sandmeier, Meghan Corwin, BjarkeIngels, Carol Patterson Consultants: Arup, Bruce Mau Design, Davis Langdon, Dewhurst Macfarlane, Front, HKA, Hoffman Construction, Inside/Oustide, Jones & Jones, KuglerTillotson, Magnusson Klemencic, McGuire, Michael Yantis, Pielow Fair, Quinze& Milan, Seele

Client: Seattle Public Library

Program: Central library for Seattle's 28-branch library system, including 33,700 sqm of hq, reading room, book spiral, mixing chamber, meeting platform, living room, staff floor, children's collection, and auditorium, and 4,600 sqm of parking.

Project year: 1999-2004 Constructed Area: 38,300 sqm Budget: US \$169.2 M

Source: Archdaily.com

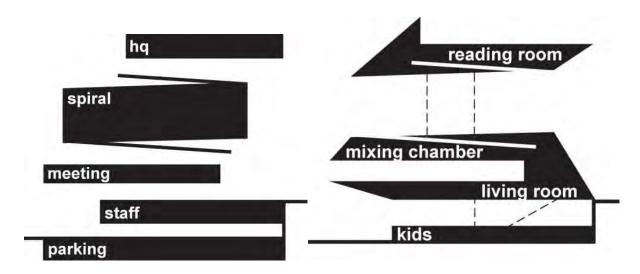


Fig 4.8: Source: Arch daily

Flexibility in contemporary libraries is conceived as the creation of generic floors on which almost any activity can occur. Programs are not separated, rooms or individual spaces not given unique characters. In practice, this means that bookcases define generous (though nondescript) reading areas on opening day, but, through the collection's relentless expansion, inevitably come to encroach on the public space. Ultimately, in this form of flexibility, the library strangles the very attractions that differentiate it from other information resources. Each platform is a programmatic cluster that is architecturally defined and equipped for maximum, dedicated performance. Because each platform is designed for a unique purpose, their size, flexibility, circulation, palette, structure, and MEP vary. The spaces in between the platforms function as trading floors where librarians inform and stimulate, where the interface between the different platforms is organized—spaces for work, interaction, and play.

The Seattle Central Library has broken the traditional library norms. It introduced new programs in the library for example the "living room of the city." The programs are blended and interlinked to provide a large volume of space. The quality of light and shadow according to the related functions is splendid.

#### 4.2.3 Guggenheim Museum, New York

The Solomon R. Guggenheim Museum (often referred to as "The Guggenheim") is a well-known art museum located on the Upper East Side of Manhattan in New York City. It is the permanent home of a renowned and continuously expanding collection of Impressionist, Post-Impressionist, early Modern and contemporary art and also features special exhibitions throughout the year. The museum was established by the Solomon R. Guggenheim Foundation in 1939 as the Museum of Non-Objective Painting, under the guidance of its first director, the artist Hilla von Rebay. It adopted its current name after the death of its founder, Solomon R. Guggenheim, in 1952.

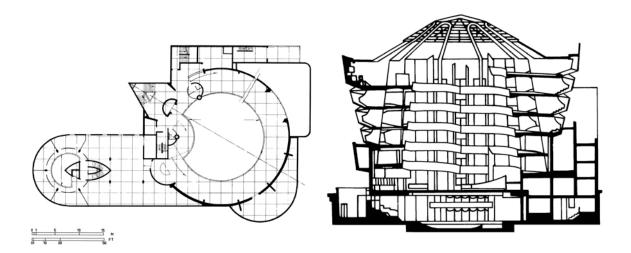


Fig 4.9: Source: Wikipedia

Location: 1071 5th Avenue, New York, USA

Area: less than one acre

Built: 1959

Architect: Frank Lloyd Wright Architectural Style: Modern Movement

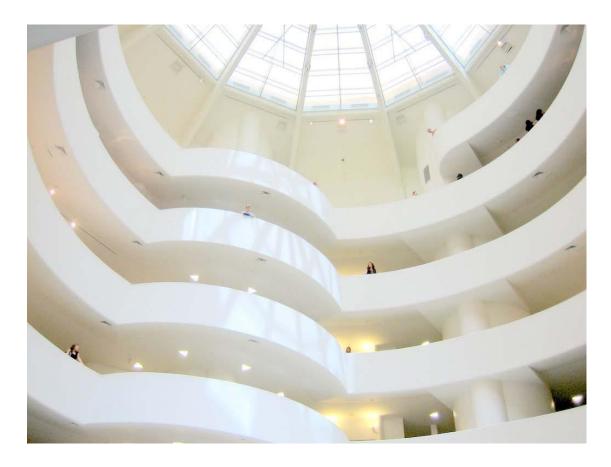


Fig 4.10: Source: Wikipedia

# **Analysis**

The Guggenheim Museum demonstrates the concept of hierarchy of space. The ramps around the open court in very interactive and playful. The central light creates a divine atmosphere inside the building. It is an open plan with the perfect flow of space.

# Chapter 05

**Program Development** 

5.1 Introduction
5.2 Rationale of the program
5.3 Events and Activities
5.4 Program development
5.6 Final Programs

#### 5.1 Introduction

This chapter deals with developing understanding the requirements of the program and the functional spaces. As mentioned before there is no specific programmatic for this project, it is very important to have thorough understanding of how the programs derived and the space took shape. The program development of the Temple of Knowledge unlike most other projects had to evolve parallel with the design development in various phases.

## 5.2 Rationale of the program

The basic understanding of the programmatic requirements of the project could be gathered from the from the literature overview. There it is strongly established that for such a project to be successful it needs to facilitate creative and innovative areas and the programs needs to be questioned and modified to serve the current demands of the 21<sup>st</sup> century. The programs were thought of to be flexible in nature. This will ensure the facilities continual vibrant ambience and provide an opportunity of change and variety according to time.

As the site was quite large, the existing rules and regulations regarding the sit and functions were well under the limits. The functional extents and area requirements of the programs were derived from various local and international case studies, Time Saves Standards, The Architect's handbook. Then as the programs developed alongside the design, the central idea influenced different aspects of both program and design. Ultimately the functional areas were hugely influenced by the design and scale of the project.

# **5.2.1** Survey

This survey was conducted considering three particular target group with three individual set of questionnaires in order to get the basic functional layout and to know what was their demand regarding the project-

Target group 1 - architects and other professionals

Target group 2 - students

Target group 3 - general people

And the result came as following diagrams-

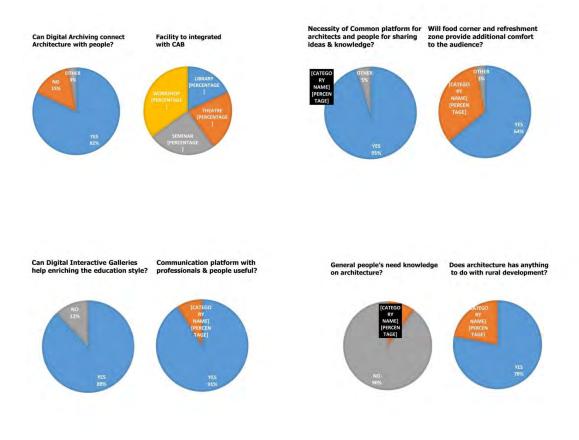


Fig:5.1 : Source : Author

#### 5.3 Events and Activities

The space was thought of to be very busy and interactive. And thus events and activities have to run all throughout the year.

## **REGULAR ACTIVITIES**

Exhibition

Workshop and conference Jury

Documentary and Films

#### **PERIODICAL ACTIVITIES**

Fair

Seminar

Art competition

Design competition

Book fare

Performance

## **5.4 Program Development**

#### 6.2.1 Phase I

- Place for knowledge and information
- Invitation to people in general
- Sharing and exchanging ideas and innovations
- Opportunities for collision of ideas to generate discussions and debates
- Place for entertainment
- Mainly three types of spaces civic, educational and sharing space

#### 6.2.2 Phase II

## Civic spaces

Indoor exhibition space

17,000 sft

Multipurpose Space	10,000 sft
Outdoor exhibition space	25,000 sft
Food court (indoor)	15,000 sft
Food court (outdoor)	25,000 sft
Book market	12,000 sft
Gaming zone	5,000 sft
Observatory	10,000 sft

# **Educational spaces**

Lobby including gallery, newspaper area	20,000 sft
Back office and technical area	10,000 sft
Common reading space	30,000 sft
Group reading space	10,000 sft
Self-reading space	10,000 sft
Multimedia zone	8,000 sft
Seminar, Class rooms	10,000 sft
Exhibition Space	15,000 sft
Food court	15,000 sft
Gallery	5,000 sft
Archive	70,000 sft

# Other spaces

Parking Circulation

Amphitheatre

Public and private wash rooms

Store

Information centers

Kiosks for various displays

Comment and graffiti walls

Sculpture displays

# 5.5 Final Program

# Administration

functions	details	visitors	staff	Area	Special requirements
				sqf	
entry and	*reception/inquiry		1	200	*seating area
visitors waiting room	*lobby				*toilets for the men and women
	*lounge			150	
				500	*asst. marketing officer
					*accounts
					*asst. clerk
					*supporting professionals
General office	*Common office space		4	200	
	*public relation officer		2	250	
	*marketing officer				
	*account officer		1	150	
	*meeting room				
	*tea room		2	250	
	*toilet				
			25	600	
			1	40	
				40	
M.Director's	*Office room		1	250	
office	* toilet		1	40	
	*P.S. office				
	*tea room		1	150	

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		1	40	
Asst.	Office room	1	250	
Director's office	*Office room with toilet	1	250	
Maintenance	*maintenance officer	1	150	
	*technician's room  *drivers room	6	120	
		4	150	
	Total		3780	

# Workshops

functions	details	visitors	staff	Area	Special requirements
				sqf	
Professional	*classrooms	100	20	1000	8 sqft per person
workshops	*storage			800	collection storage on shelves &cupboards
Public	*classrooms	250	50	2500	8 sqft per person
workshops	*storage			1200	collection storage on shelves &cupboards
Student	*classrooms	300	60	3000	8 sqft per person
workshops	*storage			1500	collection storage on shelves &cupboards
Children	*classrooms	100	20	1000	8 sqft per person
workshops	*storage			800	collection storage on shelves &cupboards

Other facilities	*Stationary shops	random	2	300	based on shelves & selling capasity
	Total			12100	

# Library

functions	details	visitors	staff	Area	Special requirements
				sqf	
Entry and visitor's waiting	*foyer	random		150	*seating area
visitor 3 waiting	*check room *lobby lounge	per	1	100	*toilets for the men and women
	*vestibule	random		150	
	*book return	random		200	
	DOOK TELUITI		2	180	
Administration	librarian		1	150	
Book section	*card catalogue		2	200	*issue and return
	*reference		2	500	*catalogue, drawers, disk for reference
	*reading section	100	2	1400	Toilet for the men and women
	*stack area				
	*store			1000	
	*counter			250	
			1	100	
Cyber library	*browsing	20		1000	
	*control room			250	

	*toilet			50	
others	*mechanical room		5	250	
	*staff lounge  *work space		20	180	-toilet,dressing area,storage
	work space		100	1000	-typing,book mobile stacks,offiecs
Children	reading area	25	5	800	
	Total			7910	

# **Auditorium**

functions	details	visitors	staff	Area	Special requirements
				sqf	
Entry and visitor's waiting	*foyer  *ticket officer  *lobby/lounge		2	300 100 500	*non-controlled area. Out-let for the handicapped. *seating area with toilets *snacks bar
Administration	*manager's room *electrical support		1	150	*enclosed for manager,  *storage
Monitoring	*Spotlight booth *light and sound		1	200	
Performance	*stage		3	750	

	*audience area		1800	00	
Service	*workshop	20	500	)	
	*makeup room	10	300	)	
	*boys	20	250	)	
	dressroom	20	250	)	
	*girls dress room	40	450		
	*choral room	1	100	)	
	*maintenance	2	600	)	
	*music				
	instrument	3	200	)	
	*control room	3	400	)	
	*tv studio	2	600	)	
	*seating storage				
	Total		7900	00	

# Multipurpose

functions	details	visitors	staff	Area	Special requirements
				sqf	
Entry and	*foyer			150	*toilets for men and women
visitor's waiting	*check room		1	100	
	*lobby			500	
Administration	Manager's room		1	150	

All purpose		1000	
room			
Stage		500	
Stage		300	
Training center	*classroom	750	
	*teacher's	250	
	room		
storage		1200	
Storage		1200	
	Total	4600	

# Seminar hall

functions	details	visitors	staff	Area	Special requirements
				sqf	
	Lobby			300	
	toilet			300	
	Seating area	350		1800	
	Chair closet			250	
	Total			2650	

# Permanent gallery space

functions	details	visitors	staff	Area	Special requirements
				sqf	
Entry and visitor's waiting	*foyer  *check room		1	80 80	*sitting area  *Toilet for men and women

	*lobby			200	
	*office		2	180	
	*toilet	2		100	
Display area		50	5	1500	*including circulation & seating
Store/archive	collection storage		10	450	large items,layoyt table,shelves etc
Conservation	*worktable		total	450	
/repair unit	*desk		20		
	*closet				
	*material rack				
	*work bench				
	*sink				
	*mech				
	Total			3040	

# Temporary gallery space

functions	details	visitors	staff	Area	Special requirements
				sqf	
Entry and	*foyer			80	*sitting area
visitor's waiting	*check room		1	80	*Toilet for men and women
	*lobby			200	
	*office		2	180	
	*toilet	2		100	
Display area		50	5	750	*including circulation & seating

Store/archive	collection	10	450	large items,layoyt table,shelves
	storage			etc
Conservation	*worktable	total	450	
/repair unit	*desk	20		
	*closet			
	*material rack			
	*work bench			
	*sink			
	*mech			
	Total		2290	

# Digital interactive galleries

functions	details	visitors	staff	Area	Special requirements
				sqf	
Entry and visitor's	*foyer  *check room		2	300	*sitting area  *Toilet for men and women
waiting	*lobby				
Display area	*lecture	200	5	1500	
	*animation studio	50	5	750	
	*3d modelling studio	50	5	750	
	*printing tech				
	*CGI workshop	20	3	1200	
	*photography	50	15	3000	

	*outdoor	100	10	1200	
	workshop	100	10	1200	
Store				3000	
Control room			2	200	
	Total			13100	

# Archive for important document

functions	details	visitors	staff	Area	Special requirements
				sqf	
Entry and visitor's waiting	*foyer  *check room  *lobby		2	150	*toilets for men and women
Administration	Manager's room		2	200	
Archive area			5	600	
	Total			950	

# Plaza /open theatre / performance space

functions	details	visitors	staff	Area sqf	Special requireme nts
Pageant	episods,precessions,marches,da	250	100	5000	
&symphonic			musician		

## Restaurant

functions	details	visitors	staff	Area	Special requirements
				sqf	
	Lobby		250	200	*toilets for men and women
	Dinning	250	10	3500	
	Kitchen		6	1000	
	Storage			300	
	Total			5000	

# **Building services**

functions	details	visitors	staff	Area	Special requirements
				sqf	
	A.C. plant room		10	400	
	Cooling tower		1	80	
	Electrical substation		2	120	
	Water supply storage		5	500	
	Garbage disposal		5	300	
	Prayer hall	100		800	
	Total			2200	

# Chapter 06

**Design Development** 

**6.1 Introduction** 

**6.2 Development Phase** 

6.3 Final Design

6.4 Model photos

6.5 Rendered images

#### 6.1 Introduction

The development process of the project is very important as the process is what transformed the intangible concept into a rational built form. The design development can be divided into two segments; conceptual development and physical development. In this chapter the overall approach to the design solution would be portrayed through development diagrams, models and drawings.

## 6.2 Development Phases

#### 6.2.1 Phase I

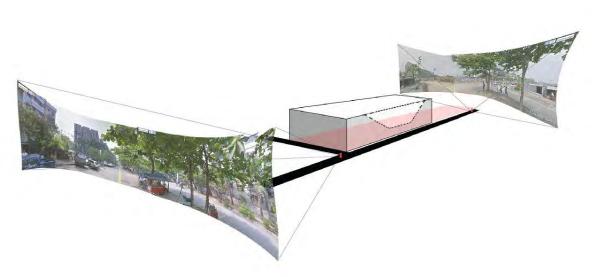


Fig 6.1: Source: Author

Initially the idea was thought of to create a collision between spaces. And through this various functions and their configurations were analyzed to understand the zoning and private public relations.

### 6.2.1.1 Project Abstraction

Libraries & Exhibition in the 21st Century should present themselves to the public in different way and with innovative programs: whether as life-long learning centers, as cultural market-

places, as settings for new kinds of aspirational lifestyles, as agencies of public information and welfare rights, or as community facilities and meeting places. The design will need to reflect the priority services and ethos being offered in that library for its particular set of users.

With the advancement of technology the relationship between the learning-sharing center and the civic society is changing. As more learning-sharing catalogues go online, enabling people to order, reserve or renew stocks from home. And thus the interaction and meeting of people is decreasing as lies by. And this also creates a division among the society as only a few numbers of people are associated with advanced technology if we think of Dhaka city as a whole. স্থাপ্তার মুক্তাঙ্গন seeks to uplift the society through a positive change and that is through sharing and learning the knowledge and ideas. To uplift the society the project had to address all sorts of people, rich, poor, people from all professions and even people of all age groups. Thus a typical platform wouldn't be enough. As a result the project is being deinstitutionalized, and becoming more like a club or leisure center.

### 6.2.1.2 Concept development diagrams

This diagram describes the initial idea of spreading knowledge throughout the society. As described earlier in chapter 3 that knowledge can be attained in different ways and most importantly it varied for person to person. Thus the project was divided into three major levels hoping to address a wider range of people. And most importantly the levels dispersed horizontally. This diagram also analyzes the layering of different spaces in the facility. The layering of spaces allows different sort of activities to take place as well as to create layers of public to private spaces.

**Level 1** was dedicated entirely as a public space. In this level the public will be presented with a lot of options and opportunities. The main intention of this level was to present the people with a lot of basic required information to raise awareness.

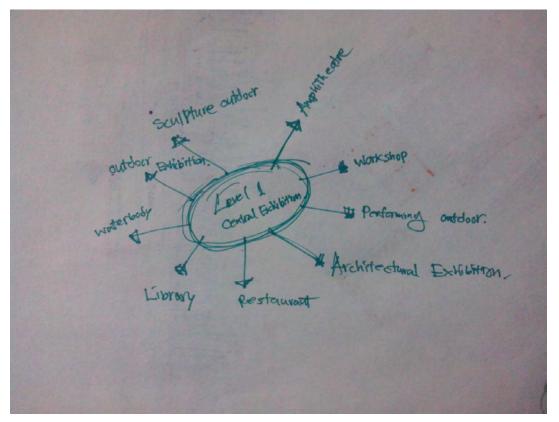


Fig 6.2 : Source : Author

The above diagram actually tells the true nature of the level. The idea was to make this level very subtle and sensitive. This space was thought of to be a juxtaposition of learning and entertainment. This would provide learning through visuals and experience.

**Level 2** was thought of as the transition level. The space acted as a link between the formal and the informal level. This space has acted as a support to both the other levels.

**Level 3** is the typical learning spaces like as-library and workshops. It is the formal space in the project. It will act as a resource for the entire project.

The levels were divided according to people demands and attraction. All the levels had education combined with it but in different manner within the given space. The idea of spreading knowledge was thought about through the five senses: touch, sight, hear, smell and taste.

#### **6.2.2** Phase II

This phase deals with conceptual layering of spaces and integrating the functions, then exploring ideas of forms for such a facility. This phase also dealt with the relationship of the project with the site and its surroundings.

## 6.2.2.1 Concept Development Diagrams

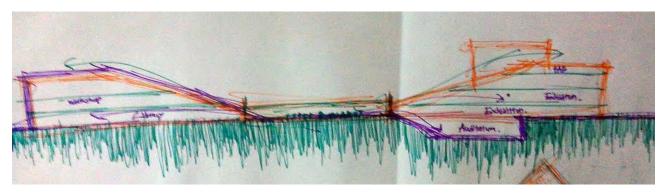


Fig 6.3: concept diagram

The Connection was thought of the main concept of the project. This is because a platform can act as the perfect symbol and can be related to knowledge. The first basic concept is to connect the learning & sharing blocks into one platform. The roots could act as the learning corridors and the structure could support all the facilities and levels.

In this phase the zoning of the levels were reconsidered and thought of again. The problem with the horizontal zoning was that it created further segregation and the filtration started very early. The zones were also not defined. In this phase the idea of a common space came about. And the levels were stacked in relation with the open space.

### 6.2.2.2 Approaching Site

The site was thought of to create an urban court. The site was gradually create an inviting space for the civic. The idea was to create a learning environment within the busy city. The

entry leading to the urban court allowed to create a meditative space and also cut down the amount of noise reaching the project. The project had to blend into the lifestyles of the people and to achieve that the entire site had to be inviting and it had to blend with the urban fabric. Thus the introduction of the urban court can only act as a positive space of attraction and learning. The learning corridors were now thought of as the entry to the main functions and the urban court would act as the common space from where filtration would start to reach the different levels.

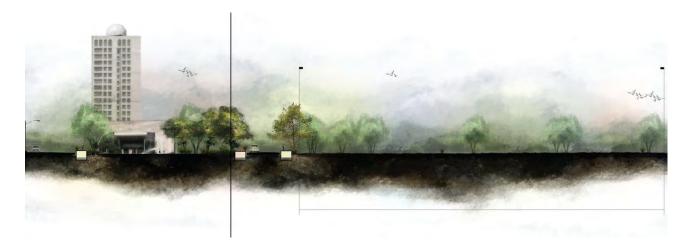


Fig 6.4: Source: Author

#### 6.2.2.3 Form derivation



## 6.2.2.4 Mass Analysis

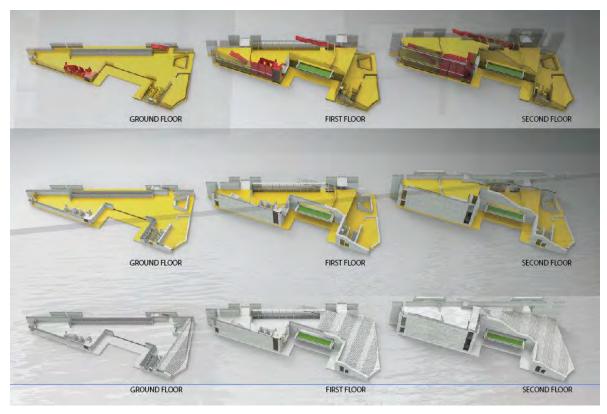


Fig 6.5: Source: Author

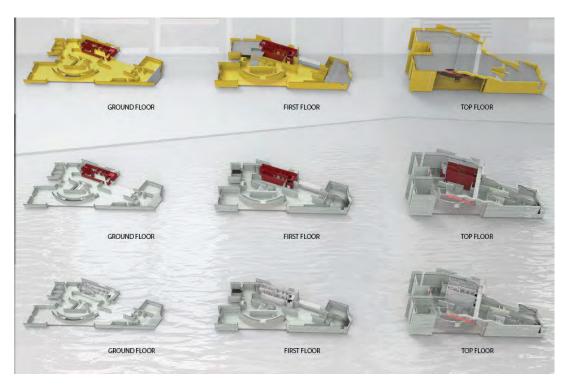


Fig 6.6: Source: Author



Fig 6.7: Source: Author

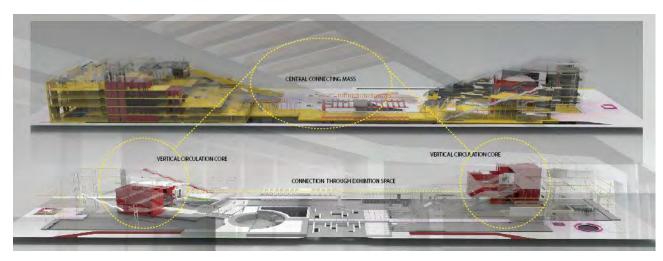


Fig 6.8: Source: Author

# 6.3 Final Design

# **6.3.1** Plans

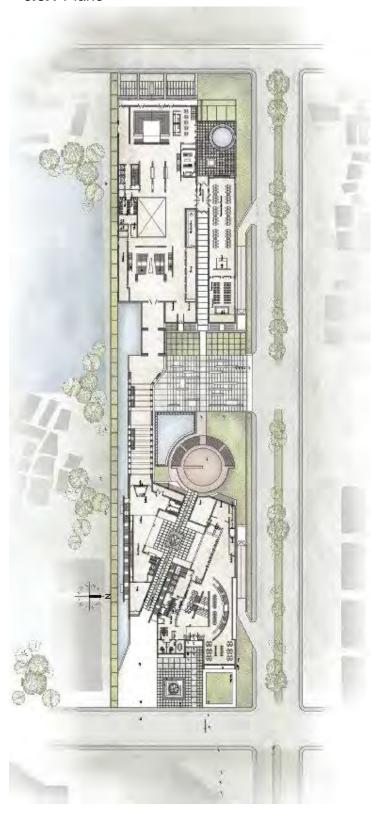
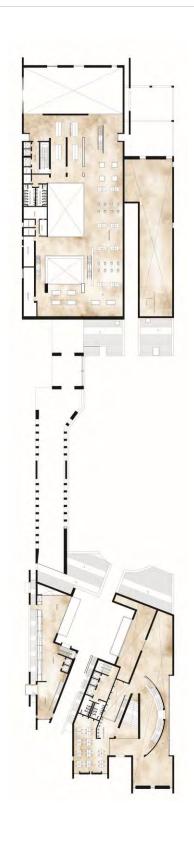


Fig 6.9: Source Author



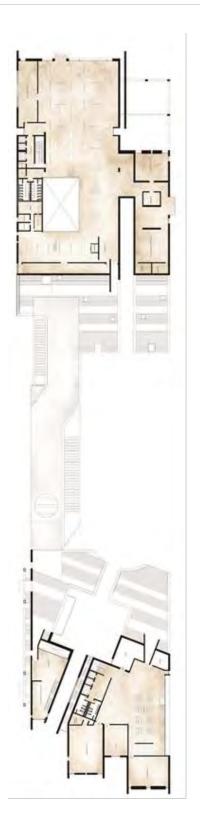
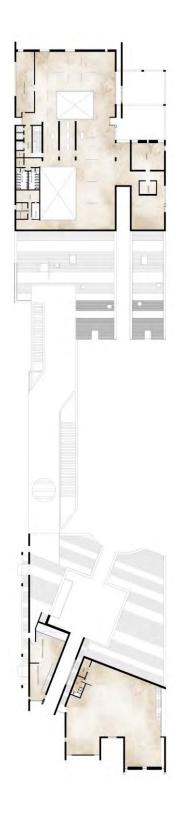


Fig 6.10: Source Author

Fig 6.11: Source Author



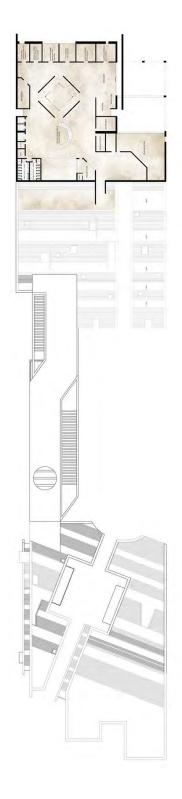


Fig 6.12: Source Author

Fig 6.13: Source Author

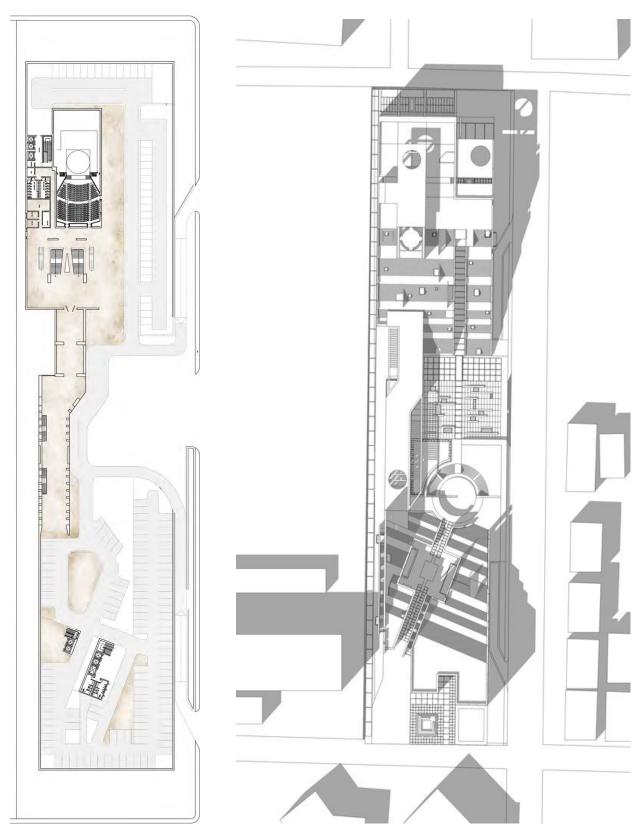


Fig 6.10: Source Author

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## 6.3.2 Elevations



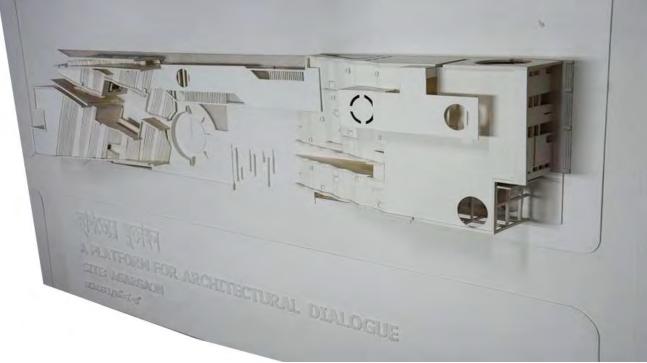
# 6.3.2 Sections



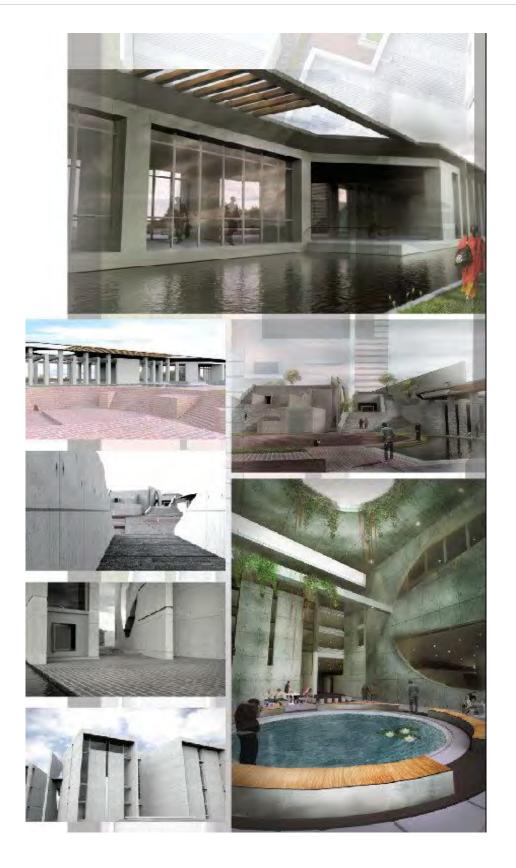


6.3.3 Model Photos





6.3.4Rendered images



### 7.1 Conclusion

Sthapatter muktangon is an idea centric project. The overarching objective of the project is to create positive social change by bringing together and facilitate people through enlightenment. The scale of the project allows it to create an impact at the urban level and become a potential learning hub. This hub would then inspire and influence various other such facilities or hubs of different scales to generate throughout the city. Apparently simple in functionalities, but its creative juxtaposing of various fields enables it to act as an antidote continuously injected in the society, fighting against social prejudice, fundamentalism, moral decay and other such stigma.

## **Bibliography:**

http://en.wikipedia.org/wiki/Navaratna

http://en.wikipedia.org/wiki/TED\_(conference) http://en.wikipedia.org/wiki/Google

http://en.wikipedia.org/wiki/List\_of\_Google\_products http://www.google.com

www.ted.com

www.actiongalleries.com www.londondrawing.com www.muzharulislam.com

www.greatbuildings.com

Mowla, Q. A, Memory association in place making: understanding an urban space www.kmt.com

www.Archdaily.com

Currell, D 1999, Puppets and Puppet Theatre, The Crowood Press Ltd, Ramsbury, Malborough Wiltshire.

Monwar, M 2000, Contemporary Puppets of Bangladesh, Orchid Printers, Dhaka.

Time-saver standards for building types,3rd edition, Joseph De Chiara & Jhon Callender

Architects' data, Ernst and Peter Neufert

www.Archspace.com