# 'Breaking the Binary'

# Exploring the scope of architecture to function as a social catalyst towards social inclusion of the third gender

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# Seminar II

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### **Abstract**

We are born and raised in a binary world, a world of opposites where things are black or white, 1 or 0, good or evil, male or female. More than we know, our lives, are conditioned by our ideas about these opposite poles of gender. But there are many people who do not fit neatly into either/or categories of male or female. Marginalizing them, we miss all the unique variations that occur in biology and behavior. We damage people by forcing them to conform to these ideas. We limit their and our own possibilities.

The proposed project aims to provide space to explore this unbound human potential which may help to instigate **naturally occurring interaction** and create a platform for knowledge exchange between this marginalized group and the wider society. The design proposes a strategic plan coupling together with a master plan designed to catalyze the social integration through **social interaction** with **community participation.** For this to happen, the idea of 'event space' is a key element in the design, which encourages the unexpected encounters among different groups of people.

The project emphasizes on 'naturally' occurring interaction rather than on 'intervened' interaction such as interaction through schools and cultural activity. While these institutes will play a role in appealing to the wider audience to create awareness about such community, the key to social inclusion would remain in the acceptance of this 'hijra' population by the immediate society of the locality, to allow them to participate in the everyday social activity without any prejudice.

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And to finish, I want to dedicate this to all the martyrs who has scarified their lives to establish our right for equality.

# Chapter 01

# 1.1 Key aspects of the project

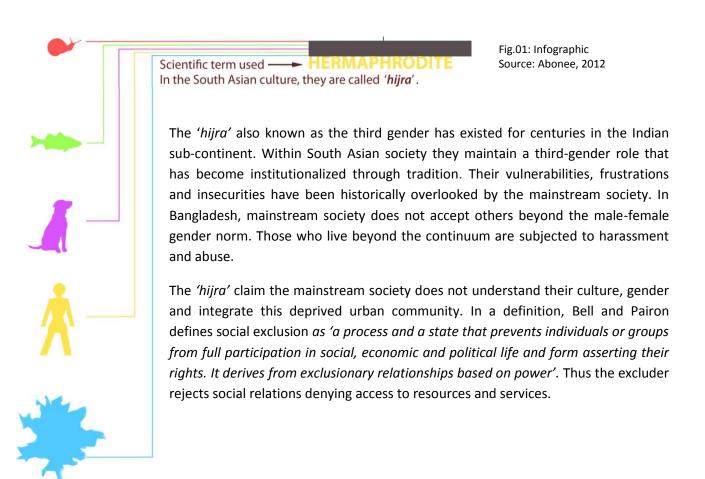
**Title of the project: 'BREAKING THE BINARY'** -Exploring the scope of architecture to function as a social catalyst towards social inclusion of the third gender.

Client: Social Welfare Ministry

Location: Rayer Bazar

Site Area: 318186.6 Sq ft

# 1.2 Background of the project



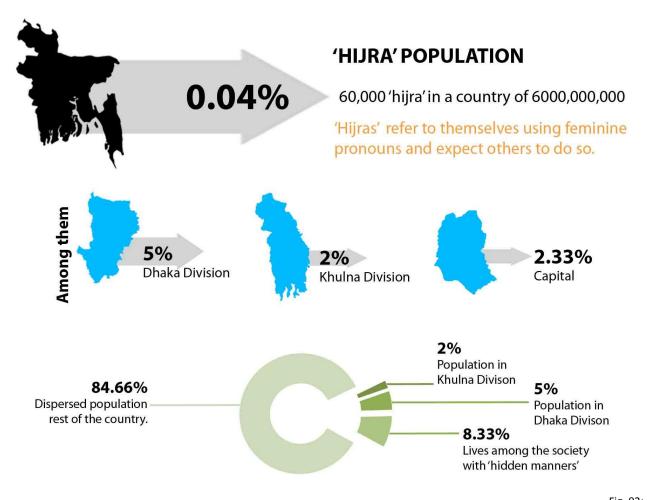


Fig. 02: Infographic Source: Abonee, 2012

The above statistics are in accordance to the information provided by the Social Welfare Ministry. In reality, these numbers are expected to be much higher.

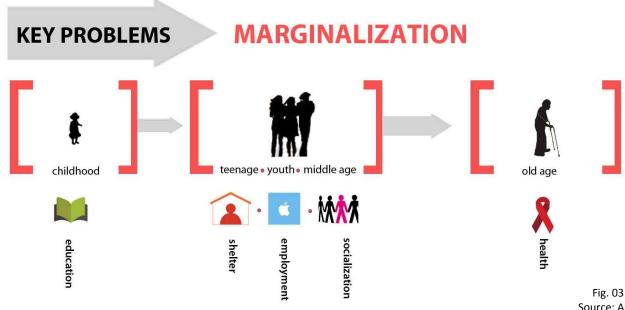
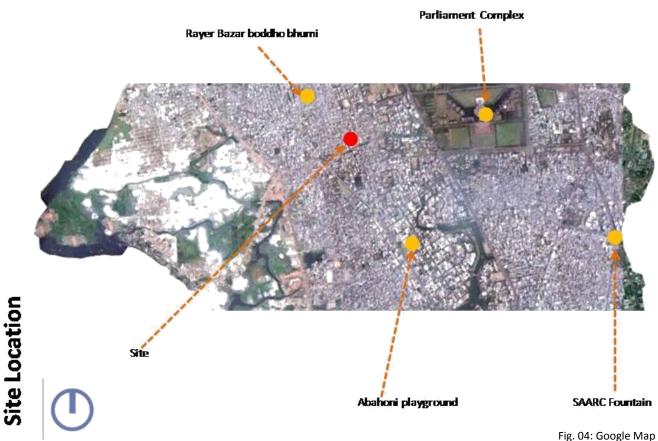


Fig. 03: Infographic Source: Abonee, 2012

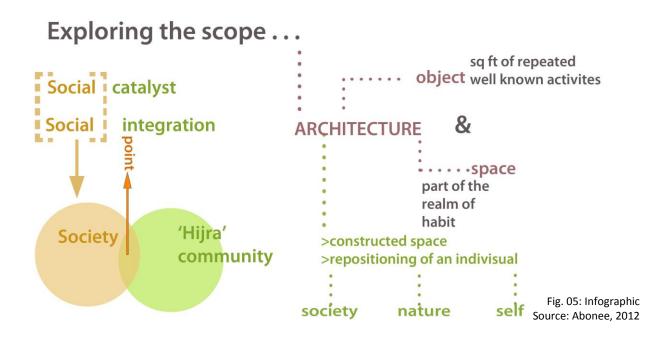
### 1.3 Choice of the site

The site selected is in 'Rayer Bazar' near the 'khelar math'. The 'hijra' community lives scattered in different regions instead of living as a community. They live as a group of four of five. Few of these groups can be found in 'Rayer Bazaar' as well. One of the reasons for preferring this site over any other is because this region can be labeled as a buffer zone or as a threshold of the capital. Since through the design, I am trying to create a buffer space between this community and the society to function as a social catalyst, this location seemed like an ideal place for creating such space. Also this place houses people for different income group which will help to ensure interaction with different groups of the urban communities.



Source: Abonee, 2012

### 1.4 Aim



The project will try to explore the scope of architecture to function as a social catalyst by indentifying the potential of the community to contribute to the society, a function that will house the activities addressing the needs of the society and this particular community. A key element in the design will be the buffer space, which is the 'event space' that will encourage the social interaction between the community and the society.



Fig. 06: Infographic Source: Abonee, 2012

# 1.5 Given Program

In June 2011, Social Welfare Ministry has taken up a program to integrate this community by empowering them through providing

- housing
- education
- vocational training
- health services

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**

# 2.1 Site Appraisal

The site is located in a densely populated area. There is a water body to the West of the site. The main vehicular access to site is from the East.



Fig. 07: Site Condition Source: Abonee, 2012

Even though the road

adjacent to the site is a

secondary, the road is mainly accessed by non-mechanical vehicle. Other access to the site is mostly

### **Road Network Pattern**

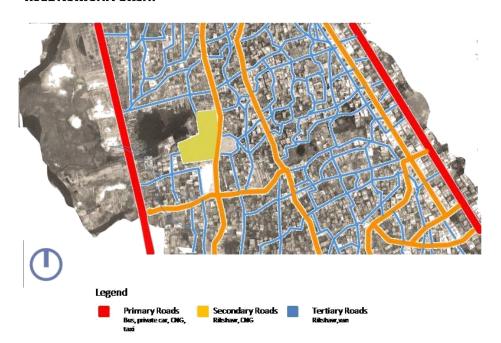
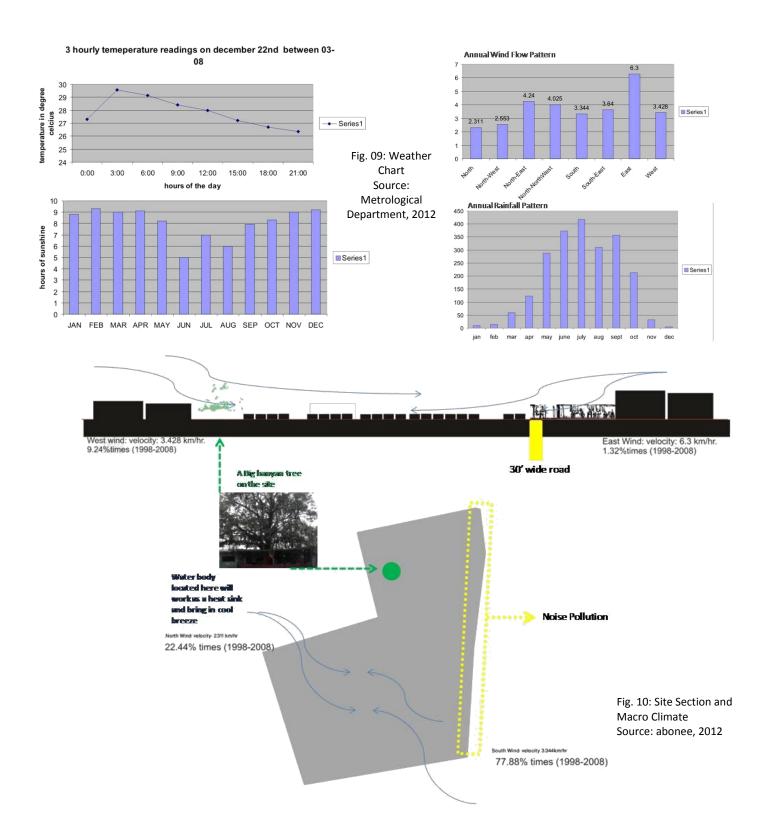


Fig. 08: Road Network Source: Abonee, 2012

availed by the pedestrian.

# 2.2 Macro Climate

The graph indicates that the site is located on a hot and humid climate. As a result deep shading is necessary to cool the wind blowing from the south. The water body on the West is going to serve as a heat sink and bring in wind which is going to have a cooling effect.



### 2.3 Social Context

The main street adjacent to site is an important site force. Even though it's a thirty feet wide road, it's hardly accessed by car like vehicle. It's mainly because of the economic class of the people living there.

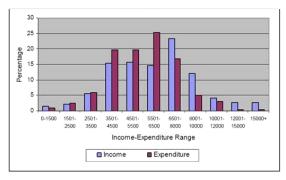


Figure 2-3: Income-Expenditure Pattern

Fig. 11



View from the site towards the field



Most of the families live in the mess pattern houses. Majority of the people are day labourer and both male and female contribute in the family income. Most of the houses are 'paccha' except for in few areas. Most of the buildings of the lower income are 2-3 storied and the facilities like toilets and kitchens are shared by the community. Since there is hardly any room for community space in this tightly shared space, by the night, the main street becomes a community space hustling bustling with activities

# 2.4 Site Surrounding

# Commercial shops on both side of the roads

Community gathers in the evening time after the days works

# Types of shop > tea stalls > grocery > raw material > pharmacy > saloon > electronics





View from the site towards the road

By the end of the day's work, the street becomes the community space for the community. Everybody gathers on the tea stalls to hangout and watch TV. This is due to the lack of open space in and around the houses in this community.

# Chapter 03

### 3.1 Literature Review

The 'hijra' also known as the third gender has existed for centuries in the Indian sub-continent. A person who has both sex organ (male or female) and do not have the ability to reproduce.

In the south Asian culture, they are called 'hijra'.

The scientific term used is 'hermaphrodite'.

The reference of the third gender can be found both in 'Mahabharata' and the Greek mythology.

# 3.2 Historical Background

The oldest reference of the third gender recorded can be found in the ancient Indian text of Kamasutra. They were refered as the "tritiya prakriti".



The word hermaphrodite derived from the ancient Greek god/godes s ' Hermaphroditus that was the child of Hermes and Aphrodite.



provide other sources of reference. The deity Shiva sometimes assumes the form of a woman; Arjuna in the Mahabharata epic lived as eunuch during his exile.

Hinduism



The Mughal period probably is the period when this community felt less excluded from the society. Here they served the Royal palaces h hamams and served the ladies in the palace.



From 1858 1947, to India was ruled by the British, who believed hijras were of unpleasant public decency. Although the British rule prohibited men befrom coming hijras,



31 B.C. 7200 B.C.

800 B.C.

1526 A.D.

1900 A.D.

### 3.3 Family Structure

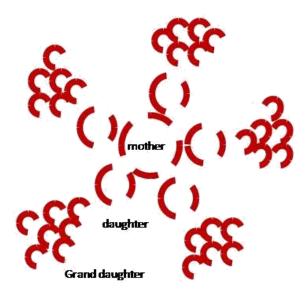


Fig. 15: Family Structure Source: Abonee. 2012

'Hijras' refer to themselves using feminine pronouns and expect others to do so. They typically live together in the traditional commune arrangement of five or more 'shirsho' (disciples), supervised by a 'guru.' When a new 'shirsho' is accepted into a 'Hijra' household, she assumes not only the guru's surname but also membership in the guru's 'house,' one of seven fictive lineages that confer a sense of kinship and identity, each house having its own history and rules of behavior. She receives training in singing, dancing, and other activities to enable her to earn a livelihood.

### 3.3 Livelihood

Most of the 'hijras' stop going to school at an early age due to integrating problem in the school premises with their peers. This lack of education remains a key problem in intervening to rehabilitate them in the mainstream society.

With the non acceptance of the society in the everyday work, typically 'hijras' are left with two professions to choose from. One of which is being a sex-worker which being common in this community only the recently. Other, the more traditionally recognized profession of the 'hijras' known as 'badhai'. They conduct at wedding and birth celebrations which has won them a colorful (and licentious) reputation. At the news of a wedding or birth of a male child in the neighborhood, a troupe of 'hijras' will show up unannounced--and uninvited--to bless the event by singing, drumming, and dancing. The ostensible purpose of the performance is a ritual entreaty for fertility on behalf of the bridegroom or newborn son. Their dancing and behavior are sexually suggestive, a deliberate attempt to perturb the

party's decorum, with the implication that if appropriate recompense is not forthcoming they will escalate their outrageousness to more shocking extremes.

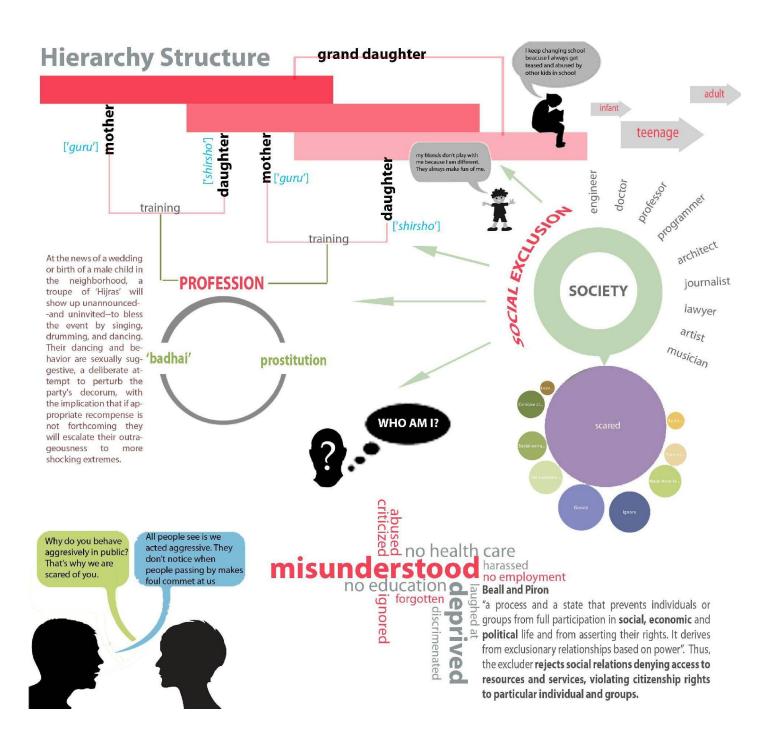


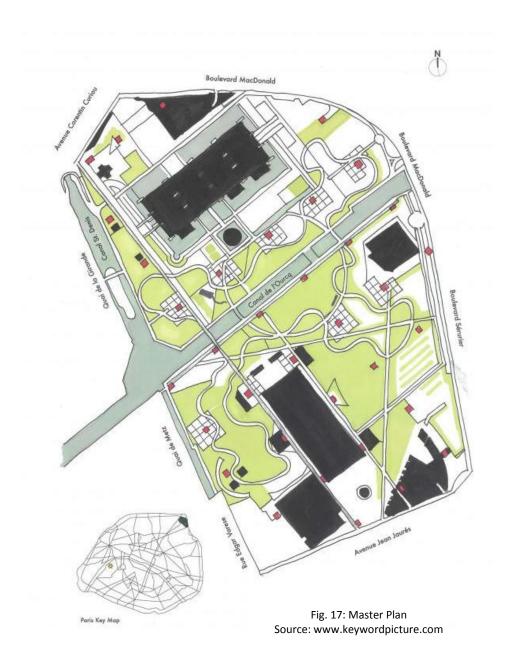
Fig. 16: Info Graphic Source: Abonee 2012

# **Chapter 04**

### 4.1 Case Studies

As a case study, I tried to look into the theoretical researches on naturally occurring interactive places. The work of the French philosopher Derrida on 'Event Space' is very similar to the idea of a naturally occurring interaction spaces. While his ideas were explored in theoretical terms, this concept was further explored later by the deconstructivist architect Bernard Tschumi in 'Parc De La Villete'.

# 4.2 Parc De la Villette



- 125 acre expanse previously occupied by the central slaughter houses and situated on the northeast corner of the city
- "Urban Park for the 21st Century" develops a complex program of cultural and entertainment facilities, encompassing
  - o open-air theaters
  - o restaurants, art galleries
  - o music and painting workshops
  - o Playgrounds
  - video and computer displays
  - as well as the *obligatory gardens* where cultural invention, rather than natural recreation

• No of follies: 35

• No of gardens: 10 thematic gardens

• Cost: US \$500,000,000

• Client: French Government, Establishment Public du Parc de la Villette

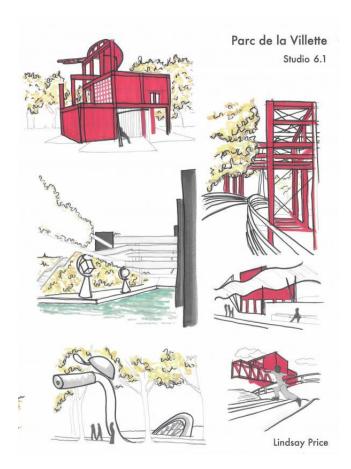


Fig. 18: Sketches

Source: www.complexitys.tumblr.com

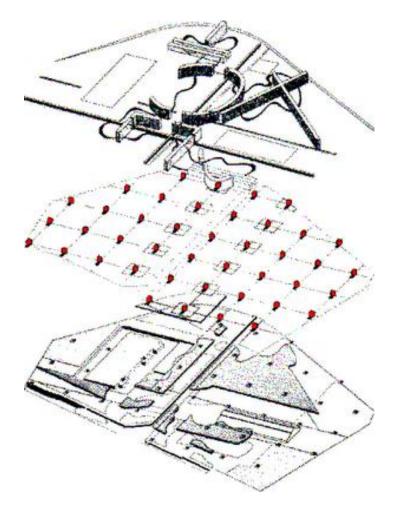


Fig. 19: Overlaying System Source: www.keywordpicture.com

The park is a superimposition of three systems points, lines and plane.

The line system. (An underlying grid.)

The Follies grid is related to a larger coordinate structure ( the coordinates), an orthogonal system of high-density pedestrian movement that marks the site with a cross. Five-meter-wide, open, covered structure runs the length of both Coordinates. Organized around the Coordinates so as to facilitate and encourage access are Folios designated for the most frequented activities. The Line system

also includes the Path of Thematic Gardens, the seemingly random curvilinear route that links various parts of the park in Thematic Gardens intersects the Coordinate axes at various places, providing unexpected encounters with unusual aspects of domesticated or "programmed" nature.

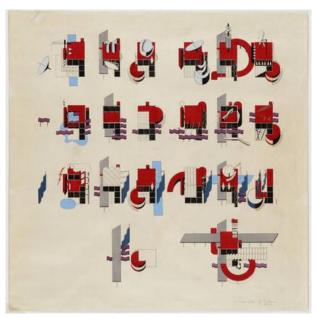


Fig. 20: Follies
Source: www.complexitys.tumblr.com

- The surface system. The surfaces of the park receive all activities requiring large expanses
  of horizontal space for play, games, ten themed gardens, body exercises, mass
  entertainment, markets, etc. So-called left-over surfaces (when every aspect of the
  program has been fulfilled) are composed of compacted earth and gravel, a park material
  familiar to all Parisians. Earth and gravel surfaces allow for complete programmatic
  freedom
- The point are a grid system of 35 follies

The Follies are places according to a point grid coordinate system at 120-meter intervals. They provide a common denominator for all events generated by the program. Each is essential to the program. Each is basically a  $10 \times 10 \times 10$  meter

Cube or a three-story construction of neutral space, that can be transformed and elaborated according to specific programmatic needs.



Fig. 21: Parc De La Villette Source: www.uk.tourisme93.com

The design questions the conventional conception of a park as green open space. While there is plenty of grass here, the 'natural' park is clearly designed to express the fact that it is artificial, domesticated. Follies by definition are an architectural structure that does not have a function. There are many follies painted red throughout the park.

Follies are there as a reference point to guide the visitors.

A discontinuous building but a single structure nevertheless. The park strives to strip down the signage and conventional representations that have infiltrated architectural design and allow for the existence of a "nonplace." This non-place, envisioned by Tschumi, is the most appropriate example of space and provides a truly honest relationship between the subject and the object.

The park embodies anti-tourism, not allowing visitors to breeze through the site and pick and choose the sites they want to see. Upon arrival and the park, visitors are thrust into a world that is defined by exact architectural relationships and languages.



Fig. 22:Parc De La Villette Source: www.uk.tourisme93.com

The park currently accommodates 8 million visitors a year.

# **Chapter 05**

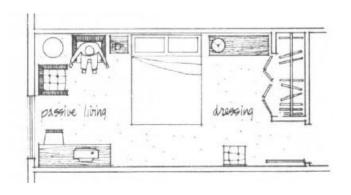
# **Program**

# Housing

Number of people: 75 –third gender, 15-male/female

Number of people per dwelling unit: 18

Total number of dwelling unit: 10



8'-0"

SINK CABINET OVER!

DISH WASHER RANGE

CABINET OVER!

CABINET OVER!

Fig. 8 U-shaped kitchen cabinets.

Per unit area: 500 sq ft (500x10)

Kitchen for 20 people and storage: 500 sq ft

Dinning: 1000 sq ft



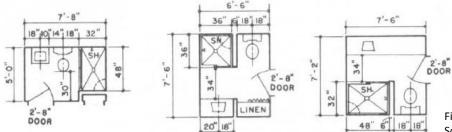


Fig. 24: Bathroom

Source: Times Savers, 1987

Total toilet: 1350 sq ft

Circulation: 2355 sq ft

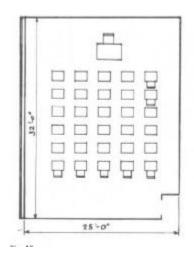
Area per dwelling unit: 10,205 sq ft

Total area: 51,024 sq ft

# **Secondary School**

Total class room: 10

Classroom sq ft: 3000 sq ft



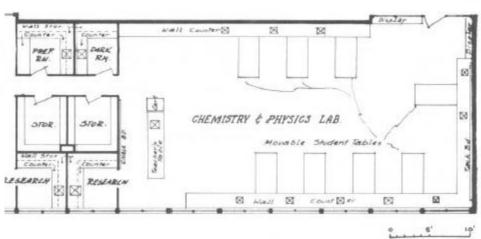


Fig. 25: Classroom and Laboratory Source: Times Savers 1987

Administration: 600 sq ft

Cafeteria: 1100 sq ft

Total toilet: 708 sq ft

Other functions: 2200 sq ft

Circulation: 2200 sq ft

Playground: 7812 sq ft

Total area: 17,629 sq ft

# **Vocational traning**

Total room: 6

Classroom sq ft: 1800 sq ft

Administration: 600 sq ft

Other functions: 400 sq ft

Circulation: 800 sq ft

# Total area: 15000 sq ft

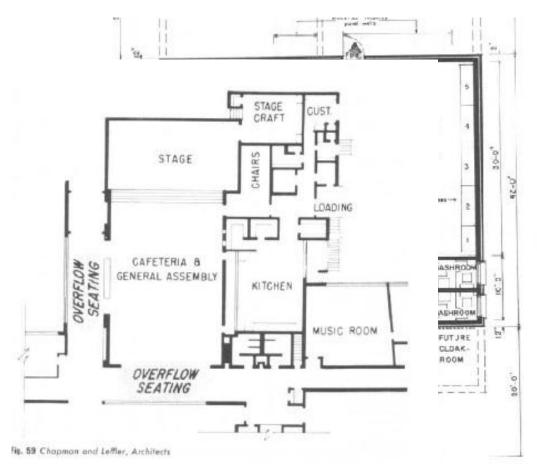


Fig. 26: Multi Purpose Source: Times Savers 1987

# **Community Center**

Kitchen area: 1500 sq ft

Toilet: 600 sq ft

Main Hall: 3100 sq ft

Total area 5200 sq ft

# **Art Gallery**

Exhibition space: 2098 sq ft

Collection room and storage: 1000 sq ft

Administrations: 700 sq ft

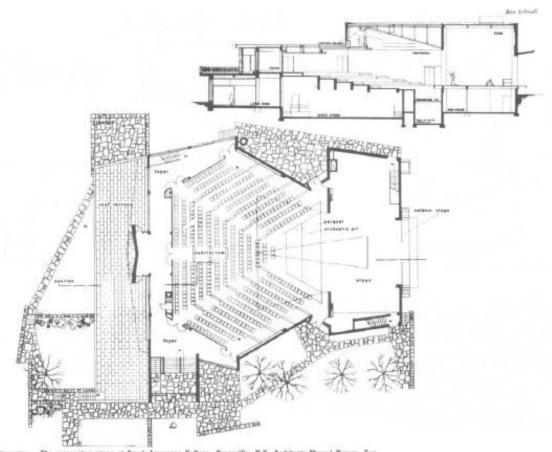
Workshop: 1200

Restaurant: 1800 sq ft

Toilet: 350 sq ft

Total area: 7900

# **Auditorium**



Arts comer. The presentium stage at Seriah Lawrence College, Bransville, N.Y. Architect: Marcel Brauer. Consultants: Steeley C. McCandless, E. C. Cole, Sidney K. Wolfe. This multipurpose auditorium (capacity 500) is stoughy raked and the stage floor is low to allow better audience purspective, especially for dance performances. Alternate rows of souts are removable to psemit installation of tables or deals. The lighting gallery is close to the stage so that the control board operator's sight lines are similar to those of the spectators. The backstage well opens onto tennis courts so the stage may be used for outdoor performances, commencement exercises, and special events.

Fig. 26: Auditorium Source: Times Savers 1987

Main Hall: 4000 sq ft

Lobby: 1900 sq ft

Administration: 1000 sq ft

Abonee 26

Back Stage facilities: 3800 sq ft

Toilet: 1000 sq ft

Total area: 11700 sq ft

Shops

Total shops: 11710

Total 108453

# Chapter 06

# **Design Development**

# 6.1 Concept

The proposed project here aims to explore the scope of architecture to function as a social catalyst by proposing a strategic plan coupling together with a master plan designed to catalyze the social integration through social interaction and community participation. This integration problem of the 'hijra' community is unique to the Indian sub-continent and no such example was available to do case studies.

The prime concern in designing this program was 'what should not be done' rather than 'what should be done'. The design addresses the issue as a part of the urban context. The idea was to create an image which is very similar to the context of 'Rayer Bazar'. The philosophy behind this was not to create something so unique that people may not identify this particular area as a place for a special community. As mentioned earlier, the core attempt was to create scope to encourage naturally occurring interaction.

The proposed master plan was an attempted to derive from the existing scenario while preserving the essence of the place.



# 6.2 Zoning



Fig. 28: Zoning Map Source: Abonee 2112

One of the major urban interventions in this project was the introduction of a street market intersecting through the site to connect the two communities on the opposite sides of the proposed site. The primary concern was to bring in people to this place for their everyday purpose. Even though the natural expectation would be that this market would be run by the 'hijra' community here as a strategic reason this market was proposed to be run the local people otherwise it might result in people avoiding the street altogether. However few of the shops of strategic importance will be run by the 'hijras'.

Example: Pharmacy subsidized by the pharmaceutical companies as a part of the 'corporate social responsibility' (CSR).

While there may be other pharmacies on the street, the idea is to give people the 'choice' while providing added incentive for the preferred.

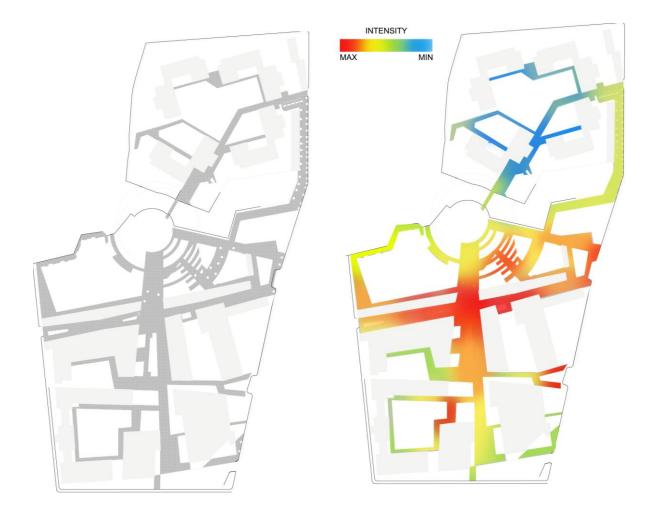


Fig. 29: Connectivity and intensity map Source: Abonee, 2012

The above diagram shows the connectivity's creating opportunities for different degree of 'events'.

# **6.3 Strategies**

Bringing in Sympathetic Groups: Artists, Performers, Activists, Students > Gallery, Theatre,
 Conference / Meeting facility, Multi-Purpose Event Spaces.



Fig. 30: Street Art Source: School Of Everything Else, 2012

• For indifferent or unsympathetic public: creating such festive events: so that they forget their hatred > Cricket or Football world cup in big screen or concert:



Fig. 31: Live telecast Source: www.boston.com

- Opening-Up to the World: Employment through the Internet. (Anonymous or otherwise)
- Billboard: TV Channel: making more acceptance of taboo not an ideal example though.



Fig. 32: Billboard Source: www.onepennysheet.com



Fig. 33: Billboard Source: www.onepennysheet.com

• Program-Sandwiching: in section > "different" function in one floor "normal" function in others:



Fig. 34: Shop House Source: www.welcometosingaporeblog.com



Fig. 35: Shop House Source: www.uwsu.com

• Blurring Boundaries: Water or level change in section:



Fig. 36: MP Hostels Source: www.srboydphotography.com

- Design should be similar to normal buildings; so that they do not feel like living in a zoo. But there can be subtle "security" instruments (architectural):
   Subtle changes: visibility (no dark unattended space).
- (Burnable) soft architecture > Jatra Tent; breaking the binary of soft and hard architecture. It would also keep the space flexible. Different character in different seasons.



Fig. 37: Soft Architecture

• Space Anchors: also basic power light points and sound systems



Fig. 38: Space anchor Source: www.technicallyphilly.com



Fig. 39: Space anchor Source: www. imgfave.com

• Something for the Community: Even in the form of trees which give shade. Dhaka Judge Court.



Fig. 40: Dhaka Judge Court Source: www. imgerish.com

• Foreign Guests: People in Post-colonial countries accept trends more easily when they are sponsored by Westerners. There can be guest house for foreign NGO workers.



Fig. 41: Foreign Delegates

• Shame-Culture, Guilt-Culture: Strategizing with sensitivity to the social psychology of the local community.

| Guilt-<br>culture | Other people believe:                         |  |
|-------------------|---|--|
| I believe         | I didn't do it                                | I did it   |
| I didn't do it    | No problem                                    | I protest my<br>innocence and<br>fight the<br>accusation |
| I did it          | I am expected to<br>feel guilty<br>regardless | I am guilty and am punished                              |

| Shame-<br>culture | Other people believe:               |   |
|-------------------|-------------------------------------|---|
| <b>I</b> believe  | I didn't do it                      | I did it  |
| I didn't do it    | No problem                          | I am shamed and<br>dishonoured by<br>their belief |
| I did it          | No-one knows, so<br>I am not shamed | I am guilty and am<br>punished                    |

Fig. 42: Cultural comparison www.doceo.co.uk

# 6.4 Proposal



Fig. 43: Existing site image Source: Abonee 2012

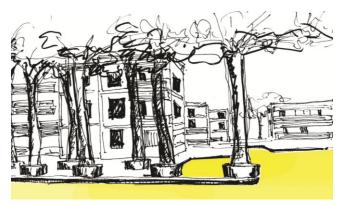


Fig. 44: Proposed idea Source: Abonee 2012

# **Existing**

# **Proposed**



Fig. 45: Existing site image Source: Abonee 2012



Fig. 46: Proposed idea Source: Abonee 2012



Fig. 47: Roof Plan Source: Abonee 2012



Fig. 48: Ground Floor Plan Source: Abonee 2012

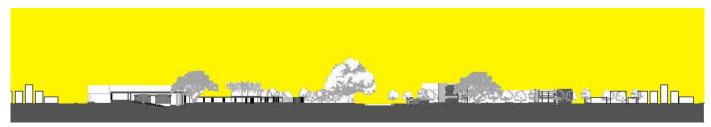
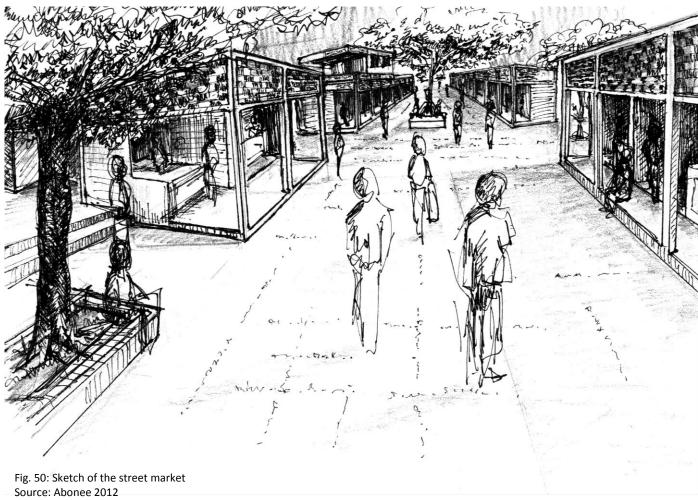


Fig. 49: Site Section Source: Abonee 2012



# Conclusion

Even though addressing a social issue like this in the realm of architecture may not be the easiest road map to change an individual's mind set but can be very effective in changing how people behave or interact collectively as groups in communities or societies. Thus central idea of the project revolved around encouraging social integration through emphasizing the **naturally occurring interaction** rather than the intervened interaction such as interaction through schools and activity in cultural center.

While these institutes will play a role in appealing to the wider audience to create awareness about such communities, the key to social integration would remain in the acceptance of this community by the immediate society of the locality to allow them to participate in the everyday social activity without any prejudice. That can only happen by breaking the barrier through 'chance interaction'. By providing spaces for 'unexpected events' to occur. These events can be catalyzed by semi-permanent objects which break the architectural binary of program and space (example-follies).

As mentioned before, the prime concern in designing this program was 'what should NOT be done' rather than 'what should be done'. Since the problem of integration of this community is a result of the society marginalizing them, the key to solving this problem lies in addressing this problem by focusing to bring change in the mindset of the society.

But it must be realized that this integration process will have to evolve slowly with careful attention so that we don't expose this already discriminated community too further threats of marginalization.

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Interviews