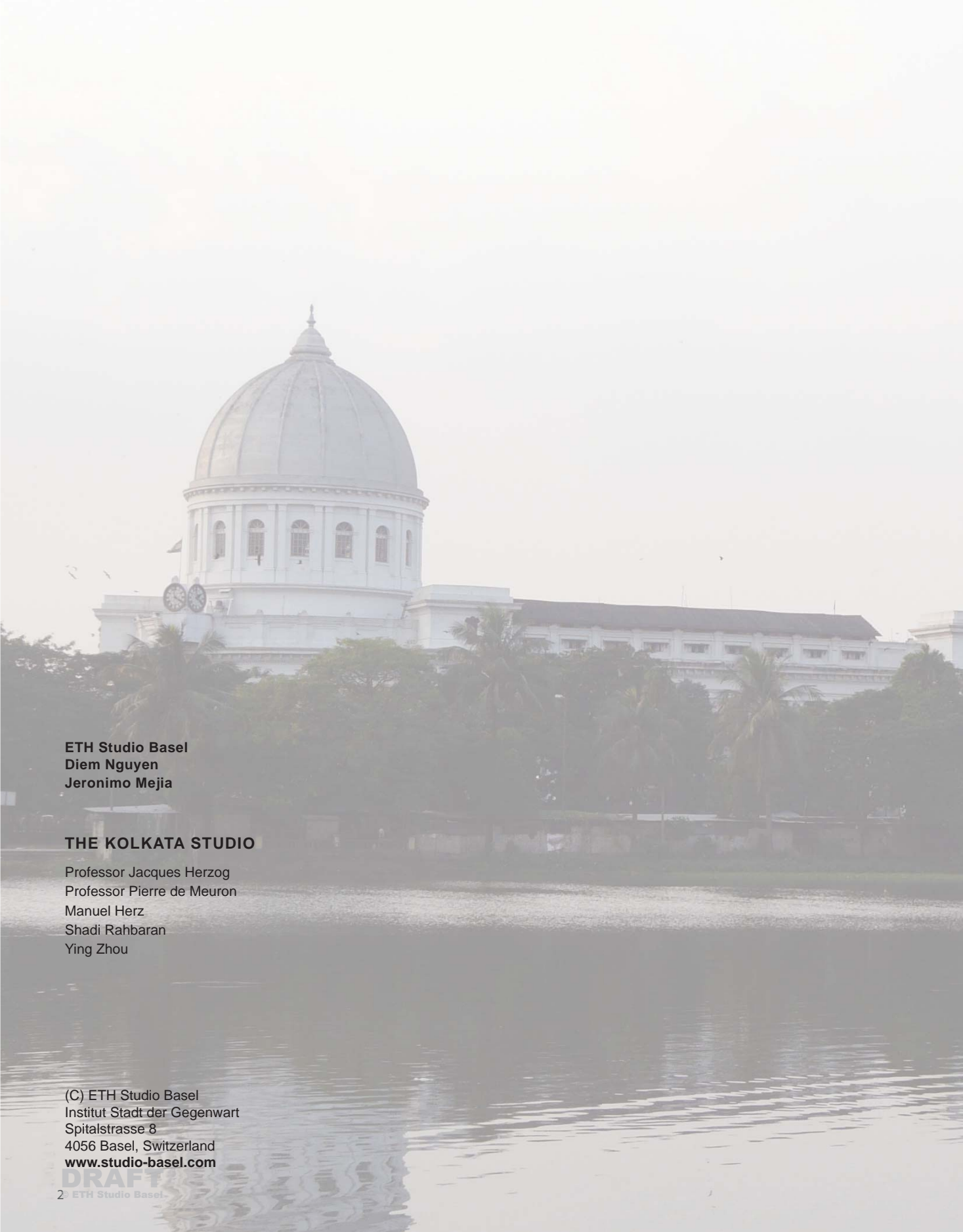


KOLKATA'S ARCHITECTURE LEGACY AND THE QUESTION OF IDENTITY





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Aerial View of North Kolkata



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Aerial View of North Kolkata and Hooghly River

An aerial, black and white photograph of a city, likely Mumbai, India. The city is densely packed with buildings of various heights and styles. In the foreground, there are several large, rectangular industrial or commercial buildings with flat roofs. A wide road or railway line runs through the middle of the city. In the background, a large body of water, possibly the Arabian Sea, is visible under a cloudy sky.

1_HISTORY OF ARCHITECTURE

1.1_Residential vs. Representative Architecture

1.2_Representative Architecture Examples

1.3_Residential Architecture Examples

1.4_Indian Architecture Influence in Europe

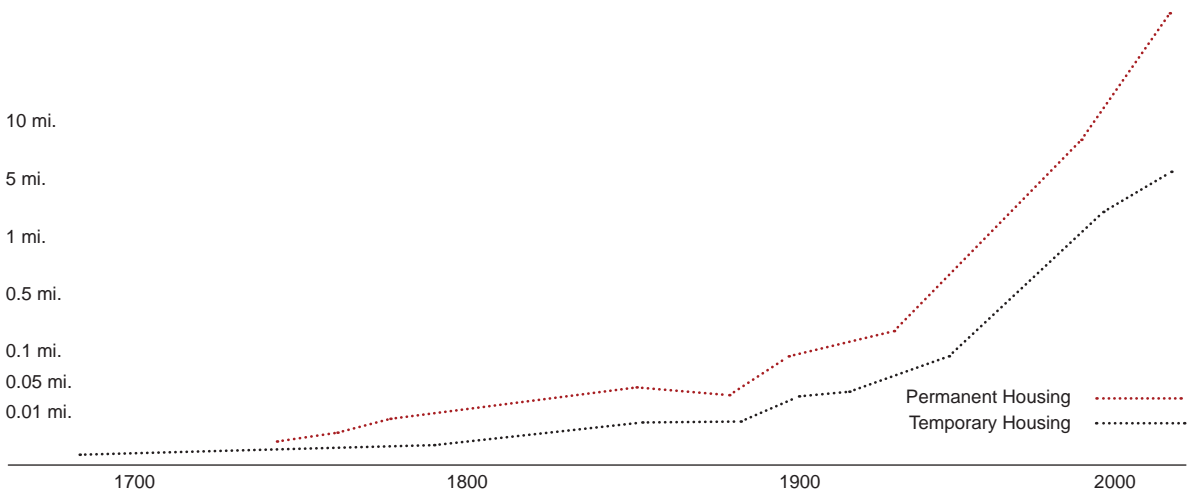
1.1_RESIDENTIAL VS. REPRESENTATIVE ARCHITECTURE

Within Kolkata's architecture evolution we find two different pattern developments, one on the residential realm and another on the representative one.

In the residential realm, before the arrival of the British only temporary dwellings had emerged in the three villages that led to the creation of Kolkata (Sutanuti, Kalikata and Govindapur). The European arrival was followed by an Indian merchant one; this led to the creation of the first permanent houses in the area. This split was observed in the past and the classification of Kachha (temporary) and Pukka (permanent) was established. This division continues today in the form of slums and well built residences. A great degree of style fusion emerged in this architecture realm since the colonial origin of the city. Examples of this phenomenon include the courtyard houses of the Black City and the bungalows of the White City.

Regarding representative architecture, a clearer style division was initially the norm. Indian styles existed in form of representative buildings in the area before the British arrival. These styles were initially discouraged by the new rulers, but continued till our times. The European representative structures flourished specially after the proclamation of Calcutta as the capital British India in 1772. Specially towards the end of British rule in India the clear style division was blurred on representative structures; clear examples of this are the Victoria Memorial and Indo-Sarcenic structures.

Residential Architecture
Housing units in Millions



Representative Architecture
Influential Styles



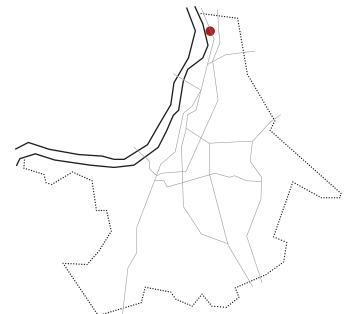
Influence ●●●●●●●●
Strong Influence●●●●●●●●

1.2 REPRESENTATIVE ARCHITECTURE EXAMPLES

The following representative architecture examples should give a visual compensation to the previously mentioned architecture palette from the timeline. The examples cover the length of both the time and style spectrums. They should also portray the greater lesser degree of style fusion that occurred on representative architecture, speciality towards the beginning of Kolkata's history.

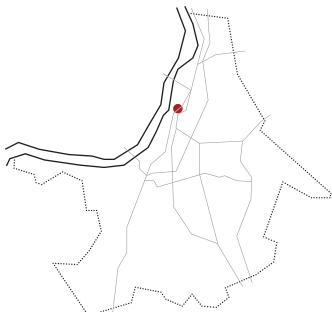


Govndaram Mitra's Temple in Chitpur
Built: 1730



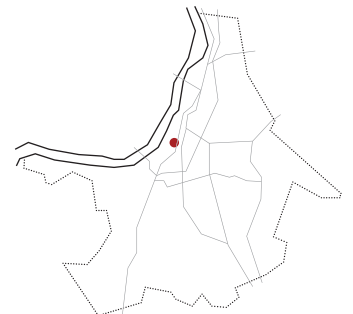


Dalhousie Square in BBD Bagh
Built: 1760's



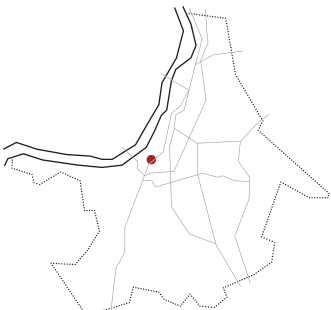


Esplanade in Chowringhee
Built: 1790's



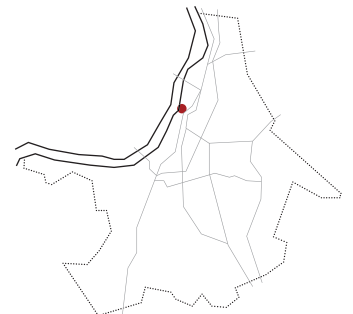


Victoria Memorial in Chowringhee
Built: 1921



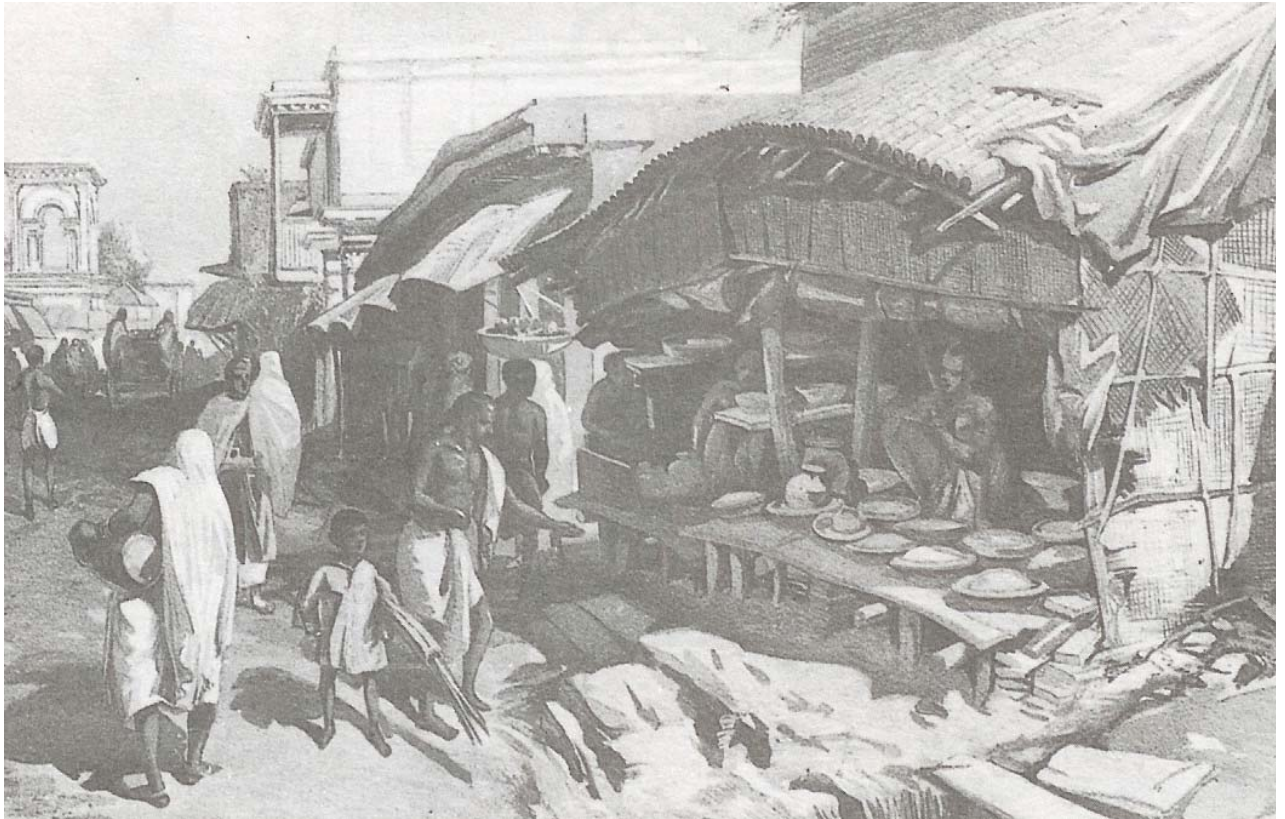


Reserve Bank of India in BBD Bagh
Built: 1960's

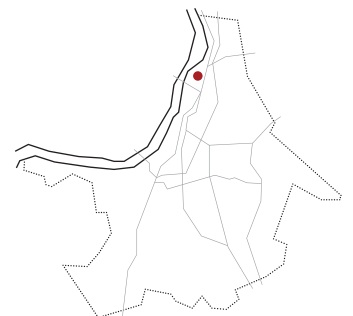


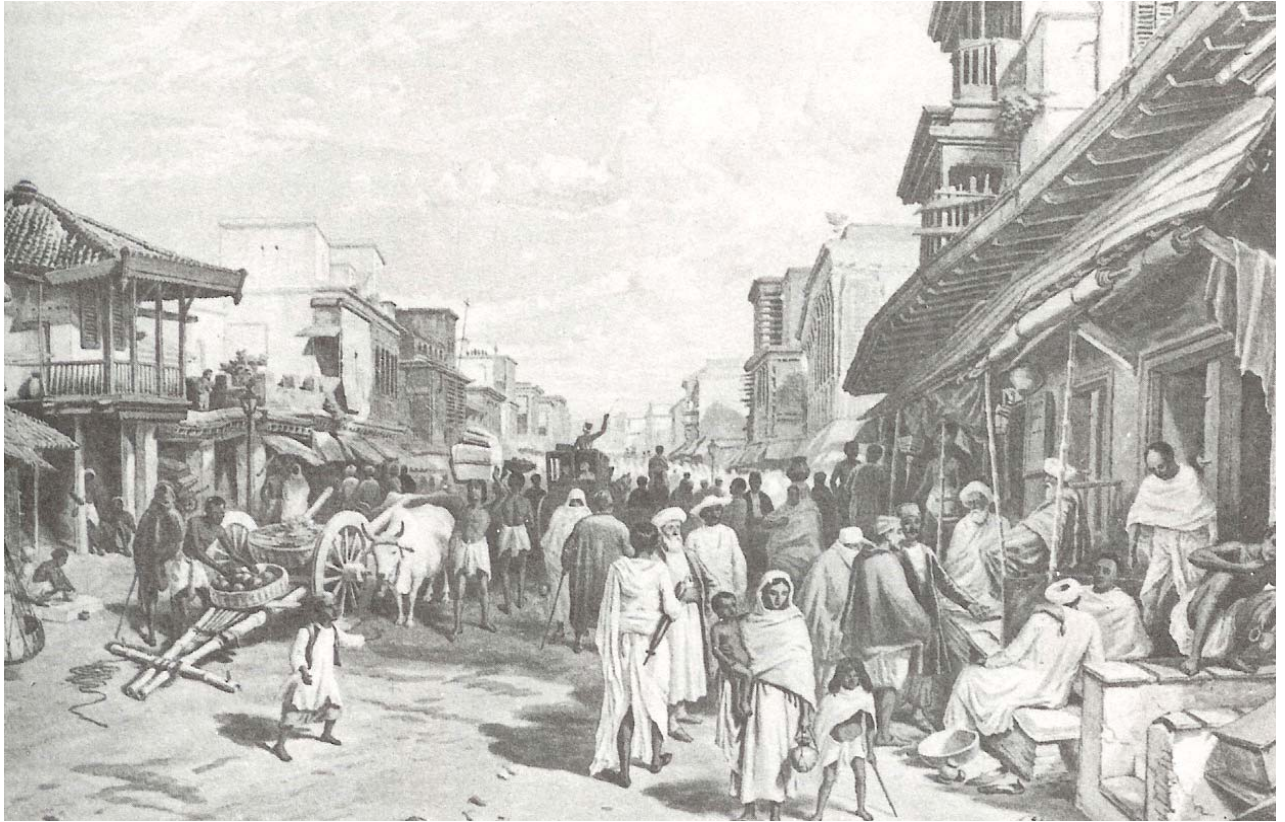
1.3_RESIDENTIAL ARCHITECTURE EXAMPLES

The following representative architecture examples should give a visual compensation to the previously mentioned architecture palette from the time-line. The examples cover the length time dimension but concentrate on the permanent housing typologies. They should also portray the greater extend of style fusion that occurred on residential architecture.

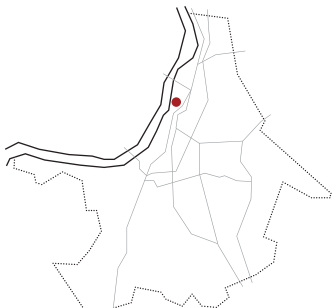


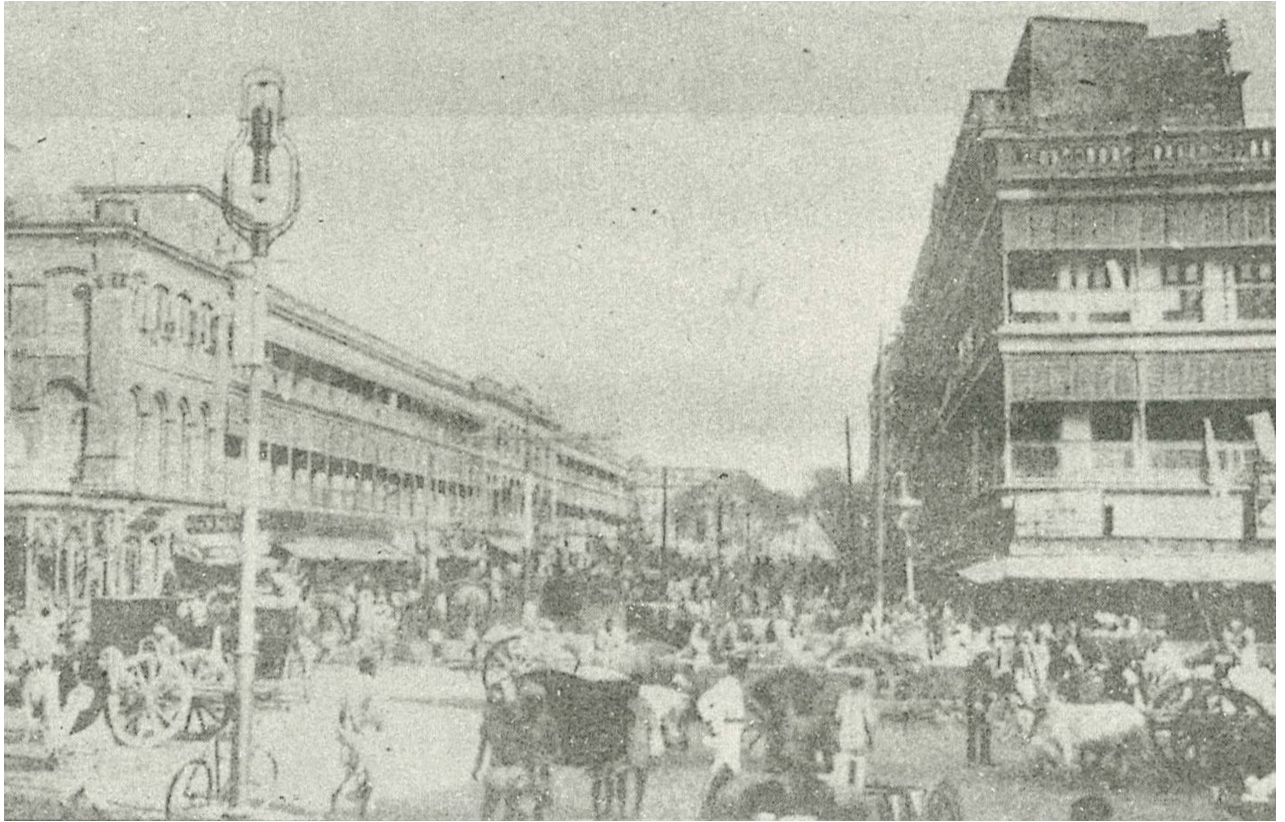
Katcha Houses in Janbazar
Built: 1700's



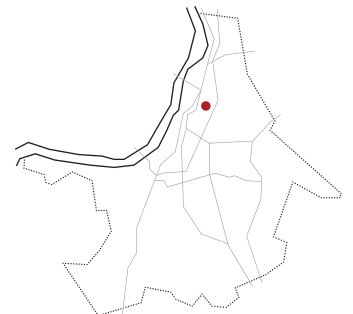


Hybrid Houses in Sutanuti
Built: 1800's



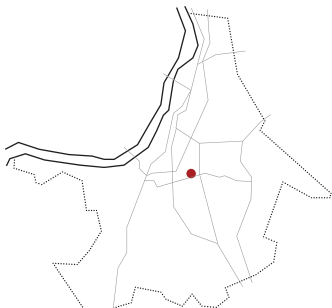


Merchant Houses in Burrabazar
Built: 1850's



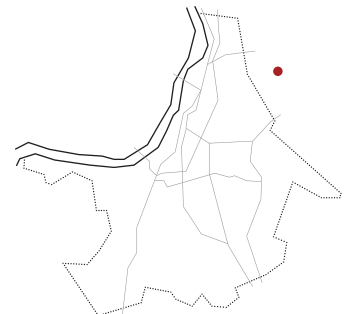


Modern Housing Developments in South Kolkata
Built: 1960's





Salt Lake City Residential Township
Built: 1980's



1.4 INDIAN ARCHITECTURE INFLUENCE IN EUROPE

A large number of British who made their careers and fortunes abroad returned home full of memories. However, most of these home-comers, also known as nabobs in England, were not keen on drawing attention to their Indian experiences. They tried to conceal the origins of their wealth and take their place, as high as possible, in British society. As a result, there are only a few instances of Indian forms being adopted in Britain and elsewhere in Europe.

This did occur in at various occasions in the 18th and 19th century in England, but it was not in the sense of a learning experience but one of exposing the exotics of the tropics. Additionally, this initiative was in many case undertaken by architects that were not much exposed to Indian architecture, such as John Nash and Joseph Paxton. Landscape complexes were also built, some of the most picturesque by King Ludwig II of Bavaria.



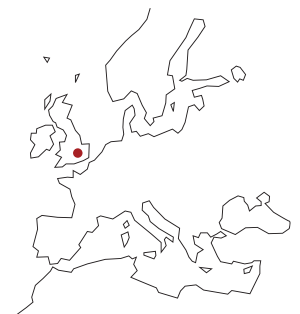


Royal British Pavilion in Brighton
Built: 1815





Crystal Palace in London
Built: 1851



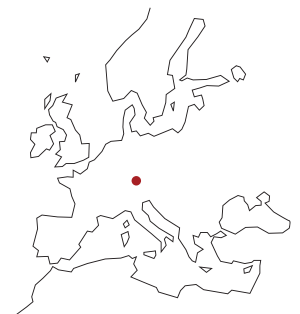


Moorish Kiosk in Bavaria
Built: 1867





Indian Landscape in Munich
Built: 1860's





IN A NUTSHELL

Residential architecture was quick to fuse Indian and European styles, representative architecture would start this process only till the last periods of British India.

Indian architecture emerged in Europe in a small scale and not in a learning-from fashion but more as a fascination with the exotic.

Due to the sensitive nature of the residential sector our analysis will remain within this realm, in order to better understand the city's preservation and identity issues.





Aerial View of North Kolkata

2_HYBRID HOUSES

2.1_Hybridity Origin

2.2_Hybrid Houses Examples

2.3_Characteristic Hybrid House Elements

2.4_North Kolkata Restoration Potential

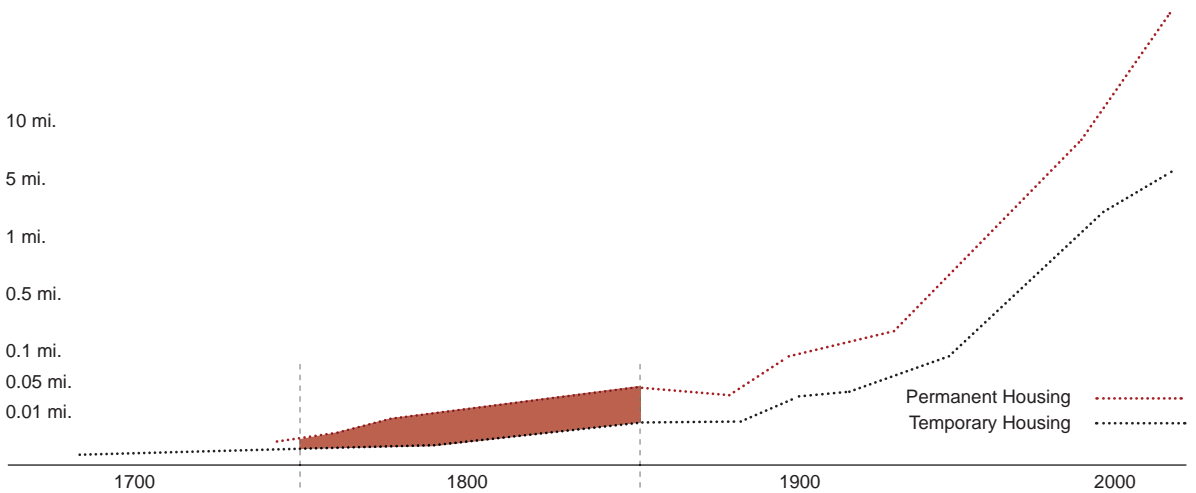


1.1_HYBRIDITY ORIGIN

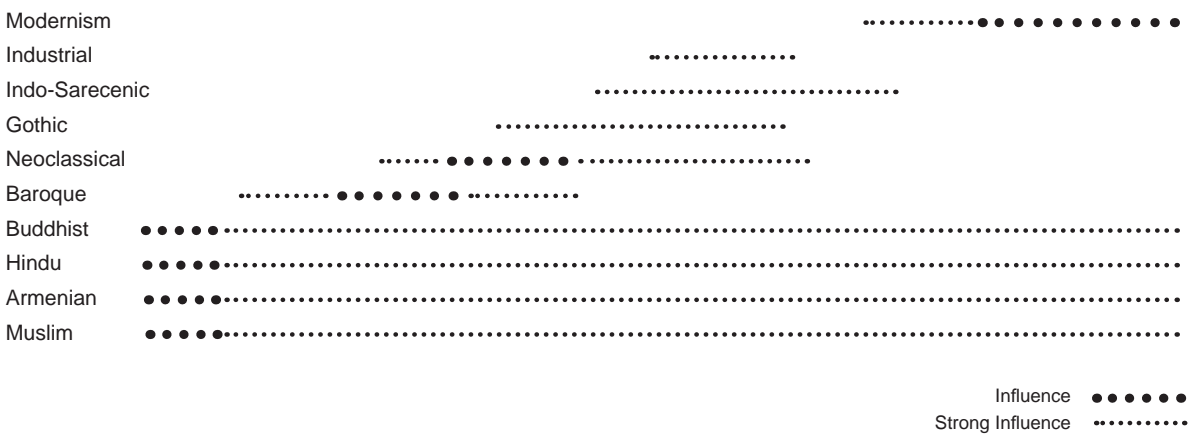
Colonial Kolkata was divided in Black and White Cities. These cities more or less maintained the styles of their representative structures that corresponded to the origin of their inhabitants. A greater mix of styles emerged in the residential architecture. This phenomenon was very present between 1750 and the late 19th century.

The British fused western lifestyle and climatic appropriate building principles to create the bungalow. An even greater degree of hybridity emerged with the houses of the wealthy Indian families who continued to live in courtyard houses with many western features. These houses went on to be called "The Great Houses" and their dwellers the Babus, who served the British upper class. Due to the high degree of hybridity, we will continue with analyzing this typology.

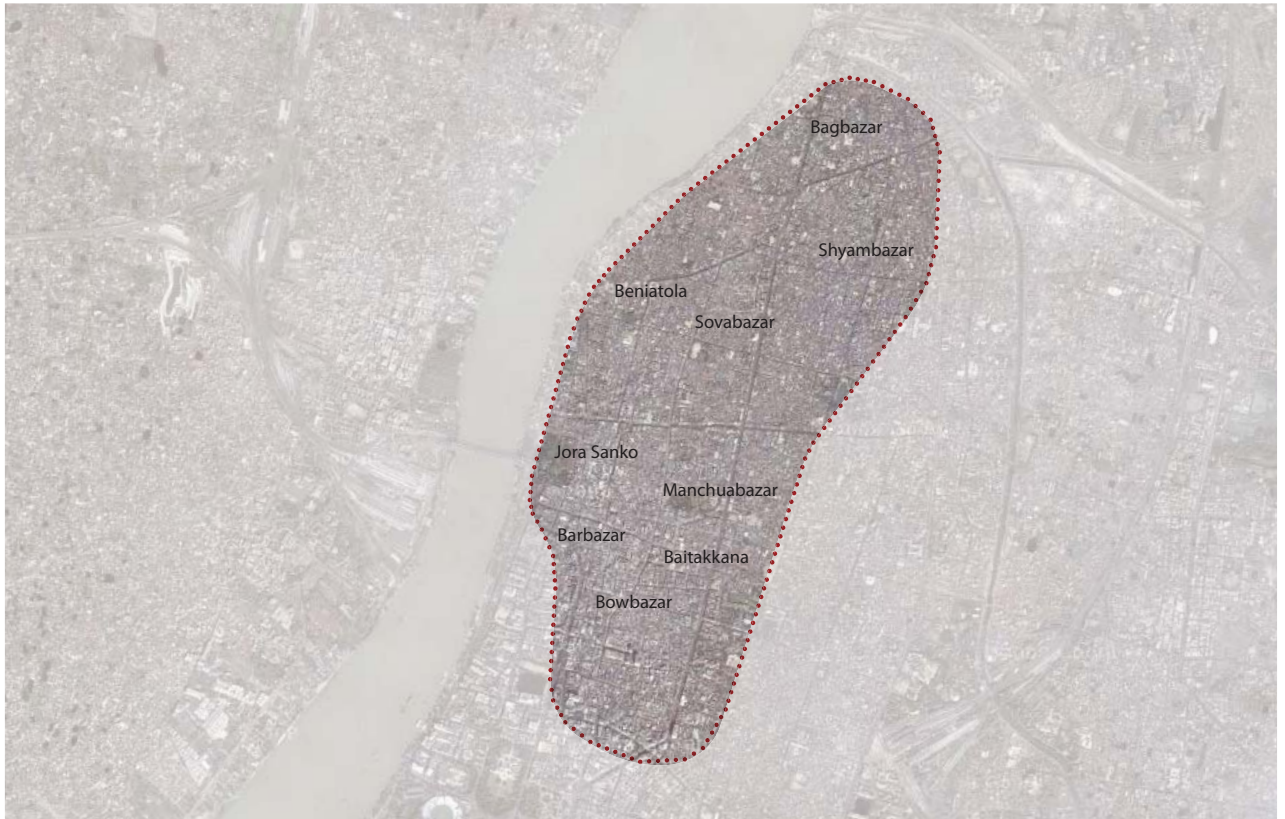
Residential Architecture
Housing units in Millions



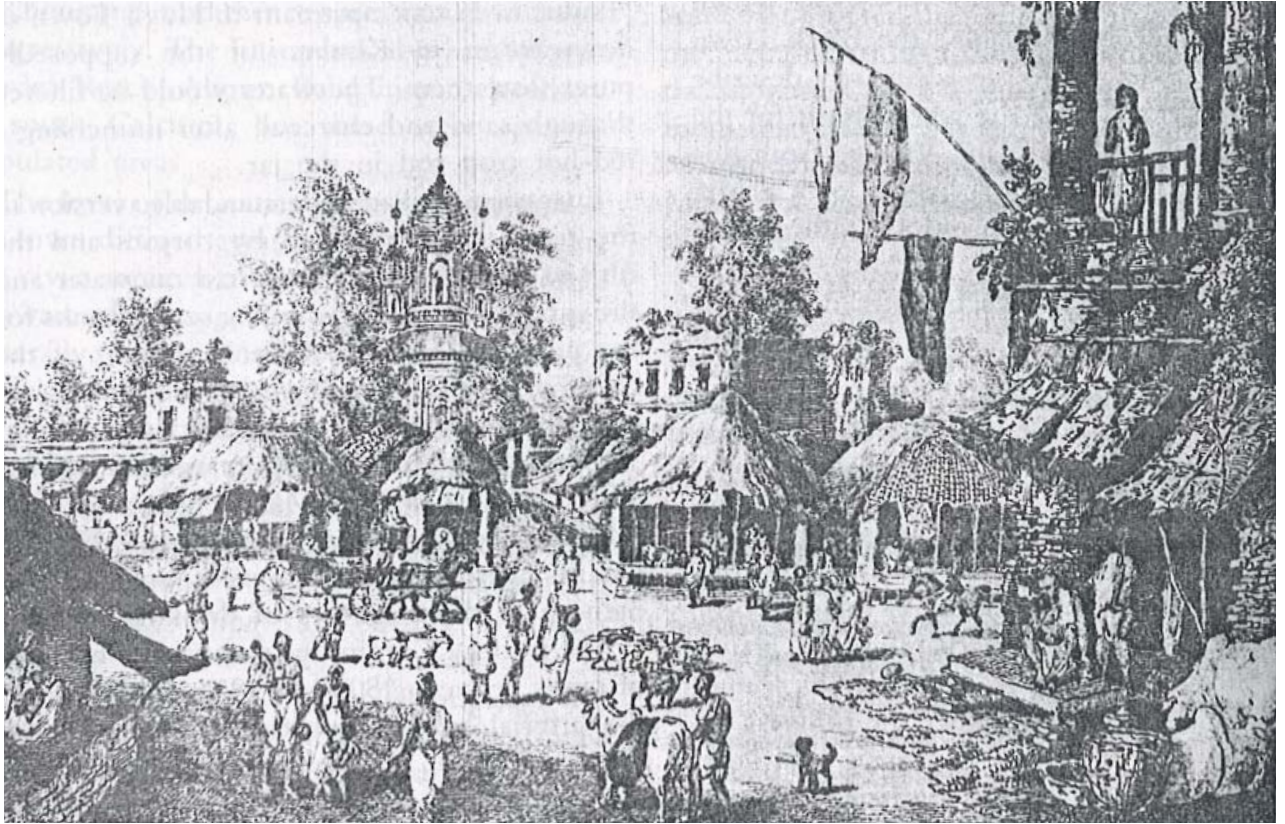
Representative Architecture
Influential Styles



Influence ●●●●●●●
Strong Influence●●●●●●●



Area of the Hybrid Houses



Social and Urban Context of the Hybrid Houses

ARCHITECTS FROM DIFFERENT NATION BUILT SAME HOUSES

The hybrid houses of Kolkata were inhabited by wealthy Indian families. These structures share common features and life-styles. However the architects as well as their materials came from different nations, as can be seen on the examples on the left. Macintosh Burn was a British architect who practiced in India, while Isha Musha Khan was Indian educated and the grandson of the Taj Mahal architect.



Isha Musha Khan
Indian Architect



Sovabazar Rajbari
Built 1785



Macintosh Burn
British Architect



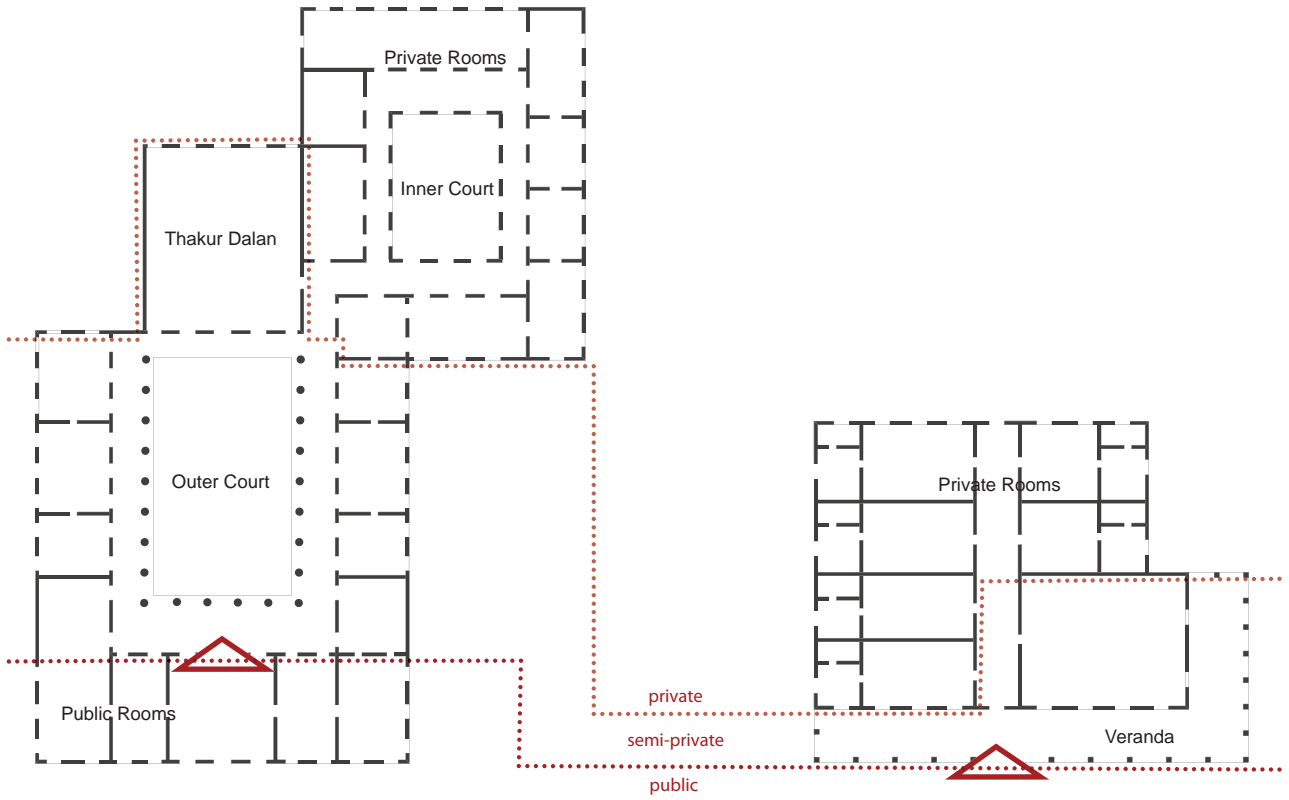
Raja Nabakrishna Deb
Built 1863

SPATIAL COMPARISON

To understand the spacial layout of the hybrid houses we have compared this typology to the western layout of a bungalow.

The characteristic hybrid house as a public office domain as well as an outer courtyard with surrounding functional rooms and a thakur dalan used for religious gatherings. Additionally, the family rooms surround the inner courtyard. The typical bungalow has a veranda that can sometimes completely surround the house, a semi-private domain and close laying family rooms.

By comparing them it is possible to conclude that public and semi-private areas are larger in proportion and pushed further into the houses in hybrid houses compared to western typologies.



Characteristic Hybrid Courtyard House

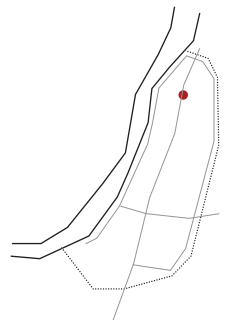
Characteristic Bungalow

1.2_HYBRID HOUSES EXAMPLES

The following images show examples of hybrid houses that portray their previously represented characteristic, shows their city location and builds a platform for their architectural analysis. They are shown in chronological order.

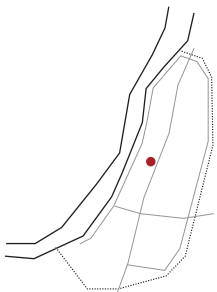


Sovabazar Rajbari
Built: 1785



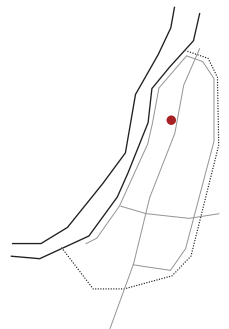


Marble Palace
Built: 1785



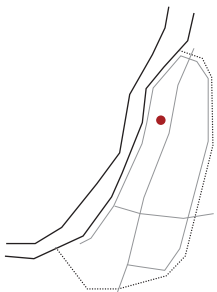


House of Khelat Ghosh
Built: 1860's



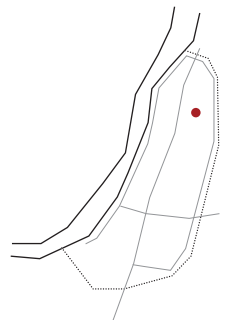


House of Jadulal Mullick
Built: 1863



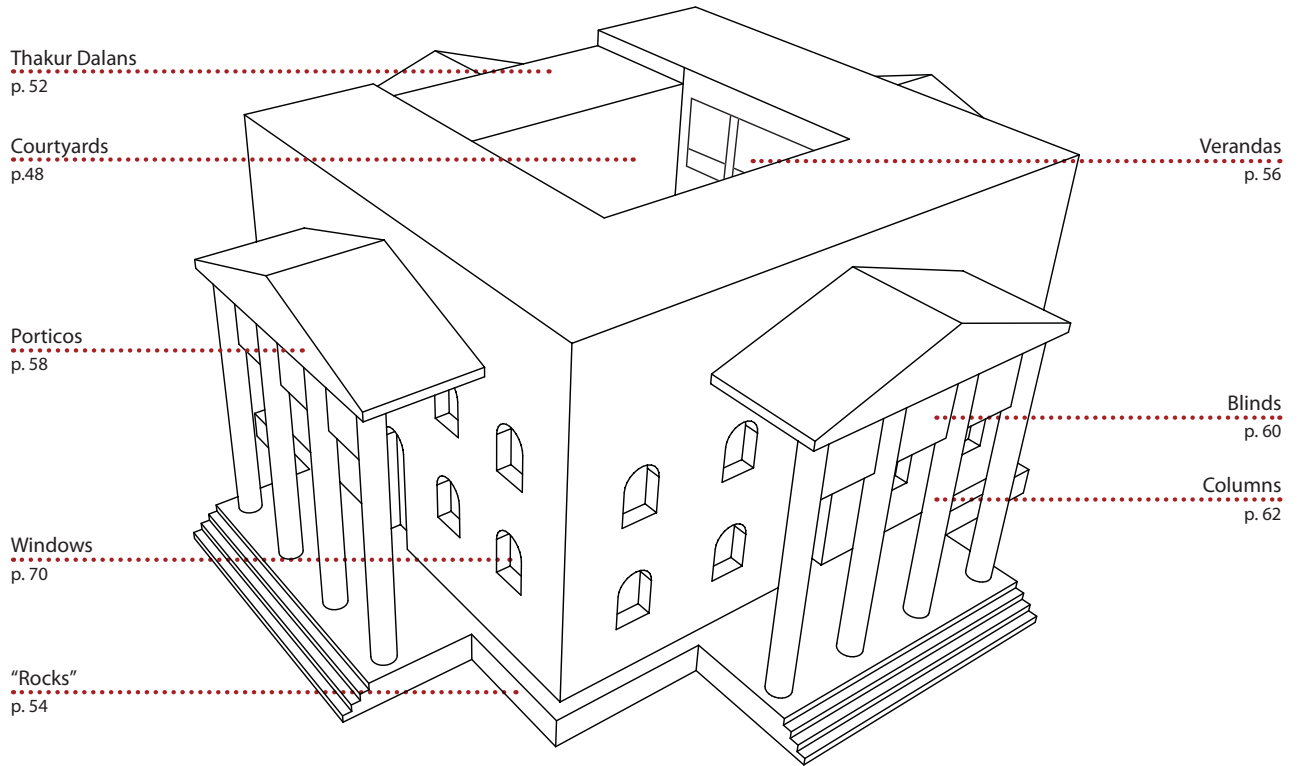


House of Mitra Family
Built: 1880's



1.3_CHARACTERISTIC HYBRID HOUSE ELEMENTS

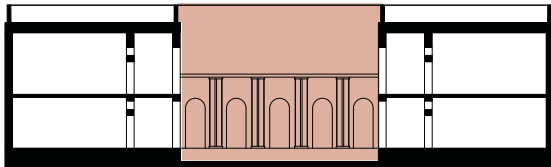
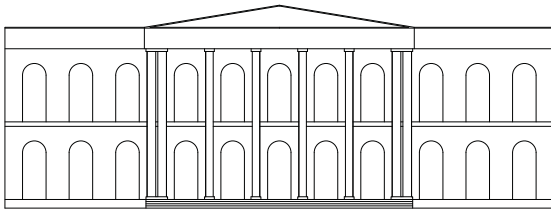
The following described architecture elements, namely thakur dalans, courtyards, porticos, windows, "rocks", verandas, blinds and columns, represent the hybridity phenomenon of this constructions on the architecture and usage level. Typology representations have been further created for those elements where this phenomenon is representable.



COURTYARDS

Definition

A court or courtyard is an enclosed area, often a space enclosed by a building that is open to the sky.





Origin

Courtyard houses are the original residential typology of most Indian houses. They are still used and built due to their cultural and climate appropriateness.



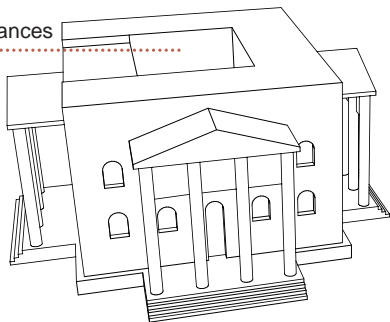
Usage

Courtyards are a central point of the house where a multiple range of activities were open space is needed can take place. They can be daily and special activities.

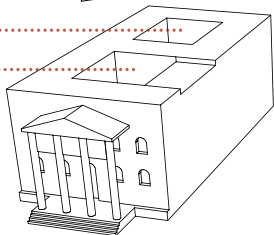
COURTYARD TYPOLOGIES

Courtyard houses in kolkata can be categorized in single and double courtyard houses. A single courtyard house was usually owned by an extremely wealthy family; well of families would own a double courtyard house, where the function are split in the inner and outer courtyards.

Living
Working
Large Performances



Living
Public Uses





Single Courtyard House

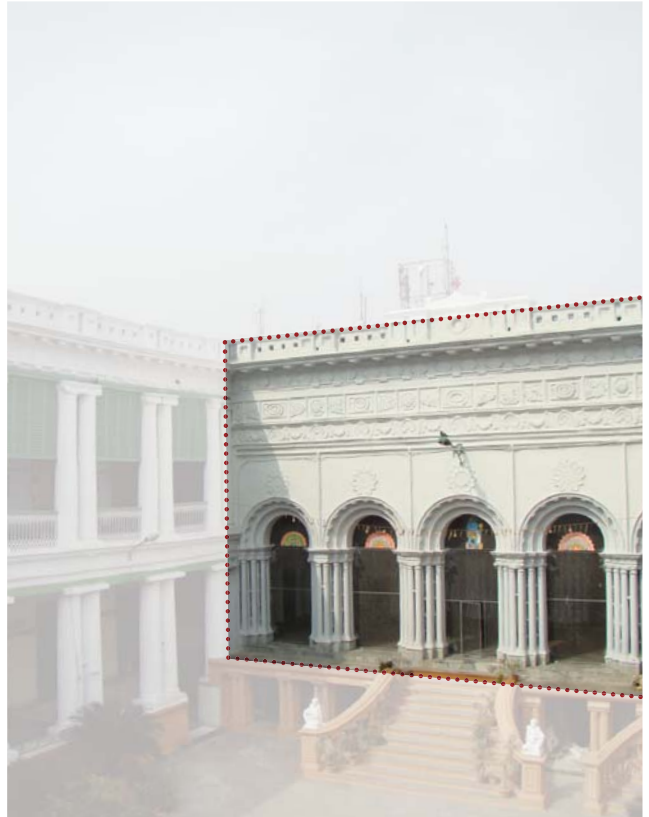
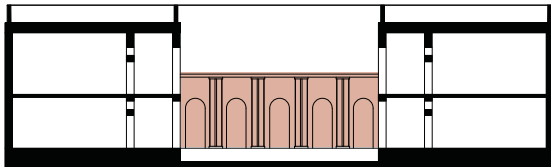
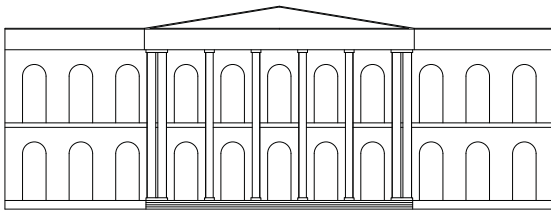


One Courtyard of a Double Courtyard House

THAKUR DALANS

Definition

Thakur Dalans are shrines where Durga Puja celebrations take place.





Origin

The tradition to built Thakur Dalans into houses emerged after the establishment of British India, before they were only done in open public spaces.



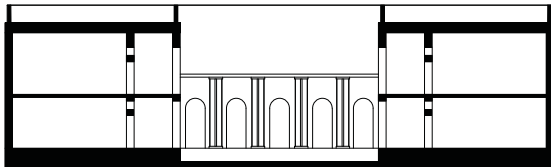
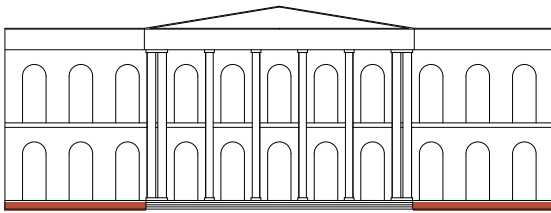
Usage

The Thakur Dalans are specially built to celebrate Durga Puja. However, other uses such as performances, conferences and plays also take place here.

“ROCKS”

Definition

“Rocks” is a local name for sitting elements at the courtyard or at the entrance of a house.





Origin

“Rocks” are built due to the natural conditions of Kolkata. In the once swampland soils of the city a solid based that was elevated was necessary against floodings.



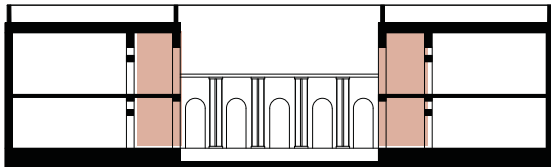
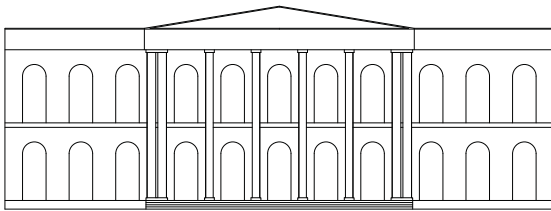
Usage

They are used by street dwellers as well as general passersby to take a sit or nap at any time of the day.

VERANDAS

Definition

A veranda is a roofed opened gallery or porch.





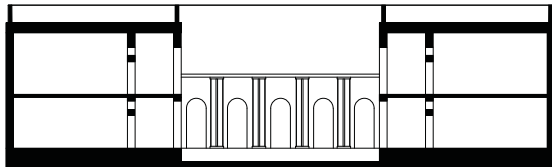
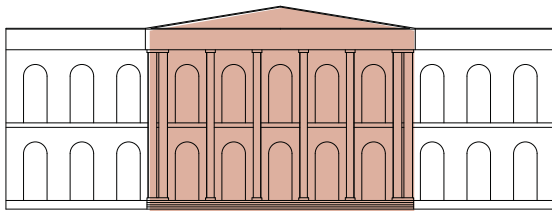
Usage

They are considered an extension of living and private areas. They are mostly used if facing south .

PORTICOS

Definition

A portico is a porch that is leading to the entrance of a building, or extended as a colonnade, with a roof structure over a walkway, supported by columns or enclosed by walls.





Origin

This origin of porticos is rooted in Ancient Greece temple entrances. They have been imposed on many non-western cultures, including Indian construction styles.



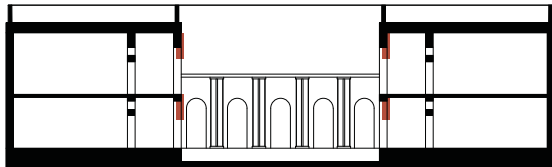
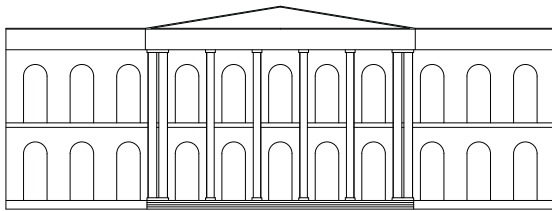
Usage

The imposing gesture of a portico towards exterior spaces has been usually taken over by informal activities and settlements in North Kolkata.

BLINDS

Definition

A blind is a covering composed of long strips of fabric or rigid material.





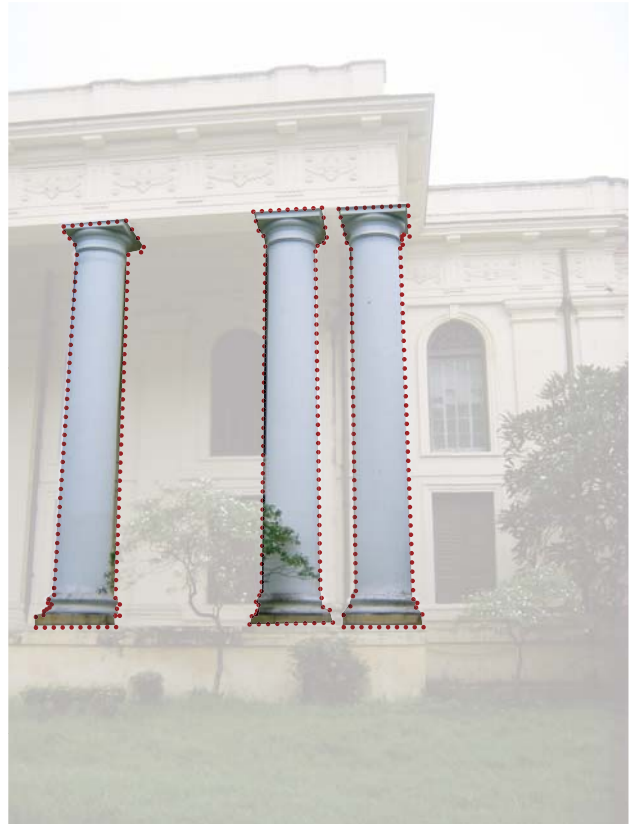
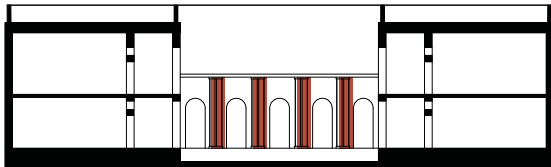
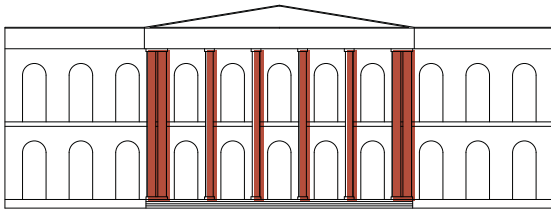
Usage

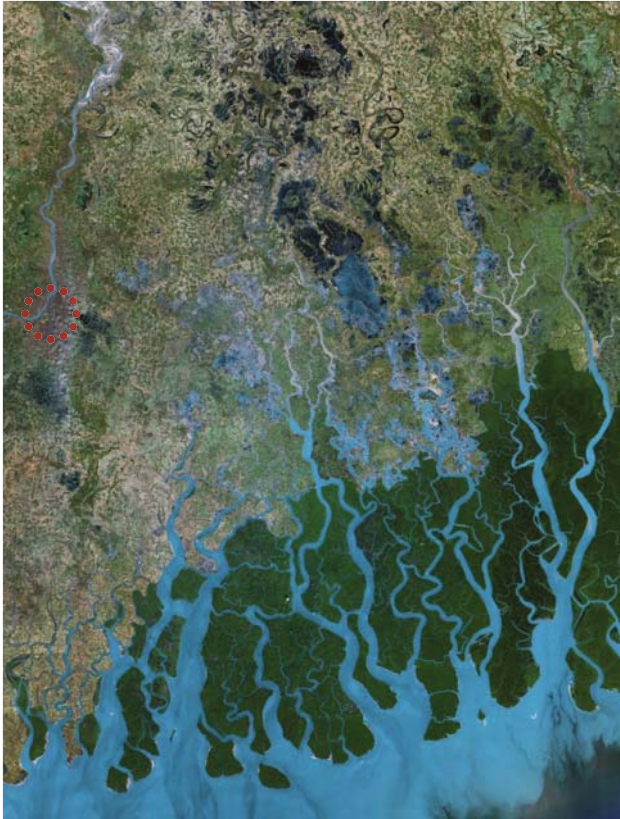
Blind use has two purposes in Kolkata. Once to screen for privacy (placed on top of balustrades) and to screen the sun (placed below the ceiling).

COLUMNS

Definition

A column in structural engineering is a vertical structural element that transmits, through compression, the weight of the structure above to other structural elements below.





Origin

Duplication of European columns styles was not possible due to the lack of stone in the area. As a result they were made from less durable materials, such as stucco, which gave them an abstracted style.

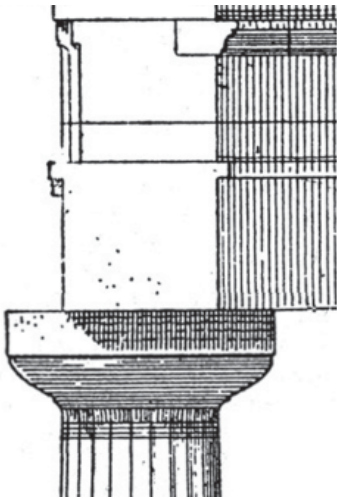


Usage

The original elegant gesture of columns has been usually taken over by informal activities in Kolkata.

DORIC COLUMN EVOLUTION

The Doric order was one of the three orders in the classical architecture. Doric columns stood directly on the flat pavement of a temple without a base; their vertical shafts were fluted with 20 parallel concave grooves; and they were topped by a smooth capital that flared from the column to meet a square abacus at the intersection with the horizontal beam that they carried.

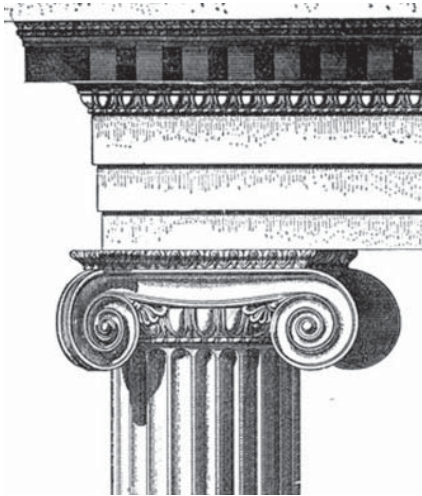




Doric Diversity in Kolkata

IONIC COLUMN EVOLUTION

The Ionic order was one of the three orders in the classical architecture. Ionic columns normally stand on a base which separates the shaft of the column from the stylobate or platform. The capital of the Ionic column has characteristic paired scrolling volutes that are laid on the molded cap of the column, or spring from within it.





Ionic Diversity in Kolkata

CORINTHIAN COLUMN EVOLUTION

The Corinthian order was one of the three orders in the classical architecture. A Corinthian capital is an enriched development of the Ionic capital. The Corinthian column is almost always fluted.



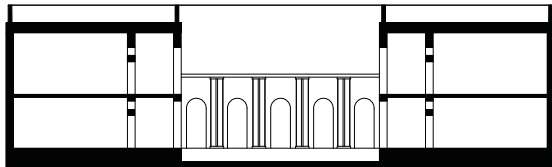
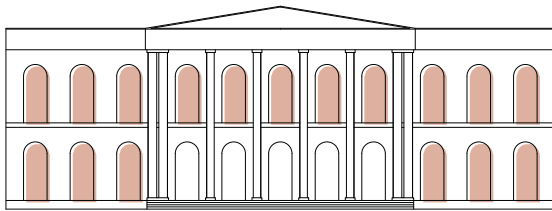


Corinthian Diversity in Kolkata

WINDOWS

Definition

A window is an opening in a wall (or other solid and opaque surface) that allows the passage of light and, if not closed or sealed, air and sound.





Origin

Large openings towards the outside of residential structures are uncommon in Hindu and Muslim homes. This is due to the traditional protection of women in this society, a phenomenon which is decreasing.

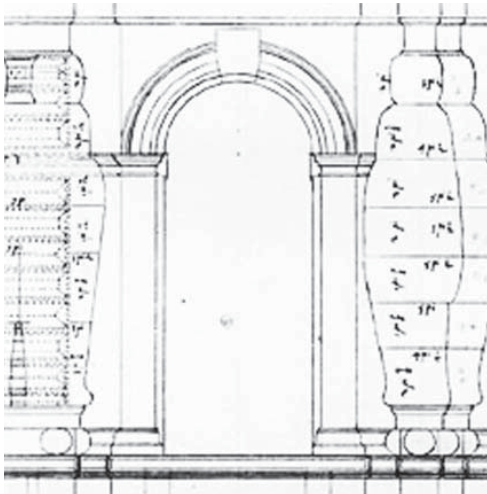


Usage

As a result of this protection many colonial homes' large openings were hardly opened or walled-in.

NEOCLASSICAL WINDOW EVOLUTION

Romanesque windows are characterized by having a round arch top, no further structural divisions and 1 or 3 corbels at the top and sides respectively.





Romanesque Window Diversity in Kolkata

ROMANESQUE WINDOW EVOLUTION

Romanesque windows are characterized by having a round arch top, one structural divisions in the middle and an usually round theme above this partition.





Neoclassical Window Diversity in Kolkata



IN A NUTSHELL

The architectural phenomenon that occurred in Kolkata between 1750 and the late 19th century, was a fusion of Indian life-styles with European construction styles.

Statue at House of Jadulal Mullick





U.N. Brahmachar House



3_RESIDENTIAL TRANSFORMATIONS

- 3.1_Residential Transformation Scenarios**
- 3.2_Case Study Continuation Scenario**
- 3.3_Case Study Rent Scenario**
- 3.4_Case Study Division Scenario**
- 3.5_Urban Evolution**
- 3.6_North Kolkata Restoration Potential**

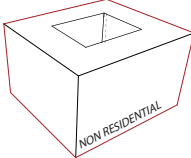
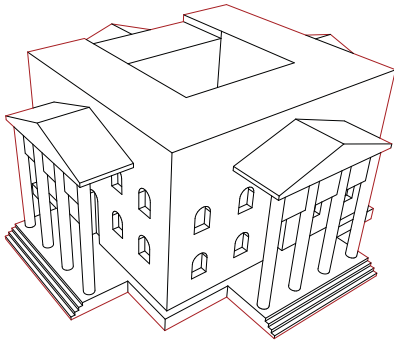
3.1_RESIDENTIAL TRANSFOR- MATION SCENARIOS

During our stay in Kolkata we encountered many changes to the hybrid houses. We classified these transformations in six scenarios for a better understanding. Additionally, we created three case studies for the most interesting scenarios.

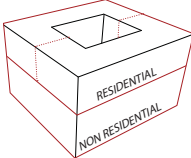
The Conversion scenario is characterized by having an investor acquiring rights to transform the function to a non-residential function. If these new functions were public services, government subsidies in form of wages were sometimes present. The sharing scenario is based on the creation of a fund to manage all house matters. The Continuation scenario is characterized by having the descendants living in a similar manner as the original family who built the house. The Rent scenario occurs when non-descendants start to rent spaces in the house. The Division scenario is based on the departure of most of the descendants and a partitioning of the house. The Abandonment/Demolition scenario was present often and partially taken over by informality. We also encountered cases where there was a direct development from a Rent scenario to an Abandonment/Demolition one.

Ownership/Usage Diagram
Current Conditions

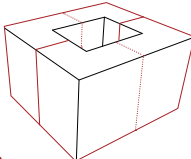
Original Hybrid House
Original Condition: Good
Ownership: Single Family
User: Single Family
Dates: 1750 - 1850



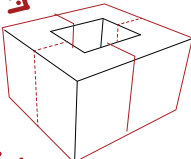
Conversion
Maintenance: Good
Ownership: Non Residential Investor
User: Non-Residents
Government Subsidy: Sometimes in Form of Wages



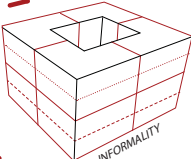
Sharing
Maintenance: Good
Ownership: Fund and Descendants
User: Descendants, Staff and Non-Residents
Government Subsidy: None



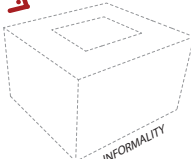
Continuation
Maintenance: Good
Ownership: Descendants either Fragmented or Single
User: Descendants and Staff
Government Subsidy: None



Rent
Maintenance: Fair
Ownership: Descendants either Fragmented or Single
User: Descendants and Tenants
Government Subsidy: None



Division
Maintenance: Poor
Ownership: Fragmented, Illegal
User: Descendants, New Owners and Tenants
Government Subsidy: None



Abandonment/Demolition
Maintenance: Bad
Ownership: Unknown
User: None
Government Subsidy: None

- Non-contract Owner Partitions
- ⋯ Rented Partition
- Contract Owner Partitions

3.2_CASE STUDY CONTINUA-TION SCENARIO

Sovabajar Rajbari

Heritage Classification Grade: A

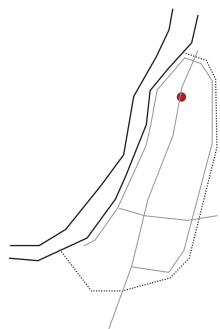
The house has a large central courtyard with a thakur dalan at the northern end. This shrine is supported by compound columns and has a cornice. The double story wings have no verandas and the street facade contains no openings.

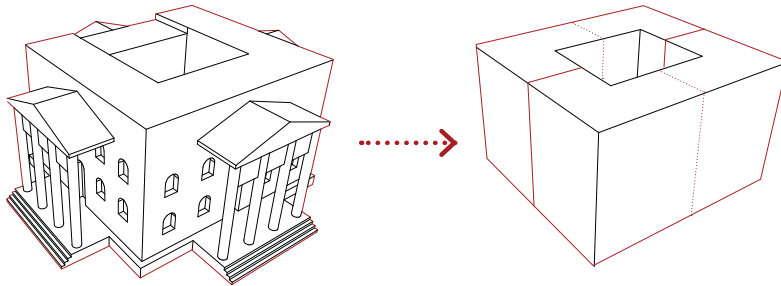


House and Context in Scale 1:4000



House Exterior and Surrounding Buildings





CONTINUATION

Sovabajar Rajbari 1785

Ownership: Raja Nabakrishna Deb
 User: Deb's Family and Servants
 Architect: Isha Musha Khan (Indian)
 Materials: Local

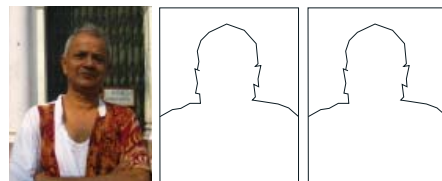
Sovabajar Rajbari 2008

Ownership: Alok Krishna Deb and Other Descendants
 User: Deb's Extended Family and Servants
 Maintenance: Good
 New Constructions: New Rooftop Building
 Government Subsidy: None
 Government Burdens: Tax Increase and Building Restrictions
 Courtyard Situation: Private
 Courtyard Activities: Durga Pujas, Sports and Gatherings

Raja Nabakrishna Deb



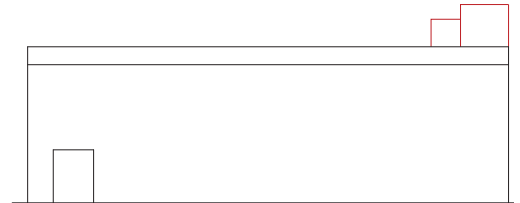
Alok Krishna Deb and Other Descendants



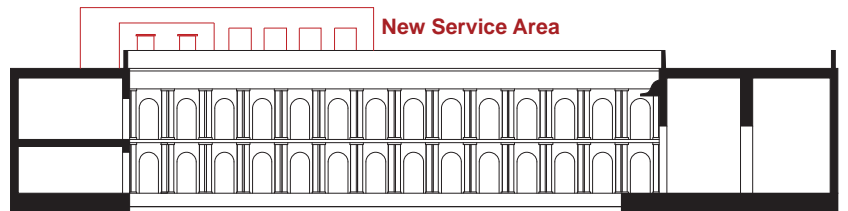
"Neither we seek any help from the government, nor it helps voluntarily. Any help from the Government would mean more bindings on us. We are happy with our building being enlisted in the list of heritage buildings of Kolkata."

ARCHITECTURE CHANGES IN CONTINUATION SCENARIO

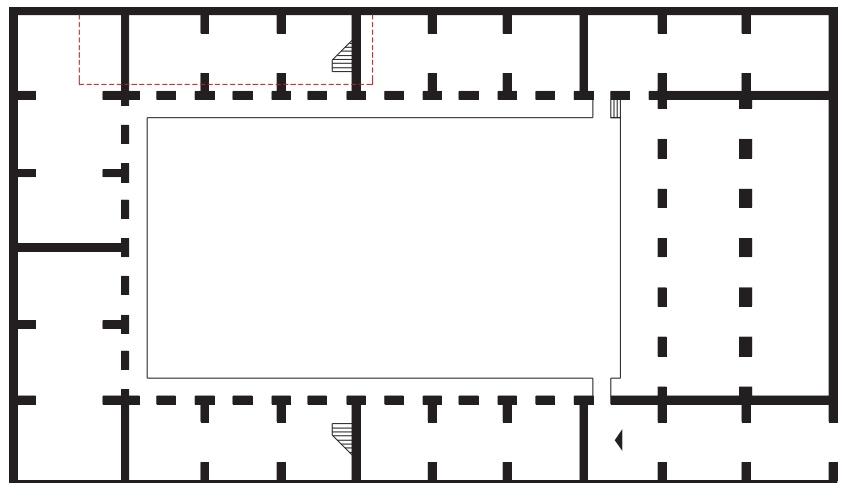
The house remains in a very similar state as once built. Only one rooftop addition that is also shared with neighboring houses has been made. This addition is not built in the same style as the house, but is not visible from the many courtyard and serves as area.



Elevation 1:500



Section 1:500



Floorplan 1:500

- ▲ Original Points of Entry
- ▲ New Points of Entry
- Original Condition
- New Additions



Thakur Dalan



3.3_CASE STUDY RENT SCENARIO

House of Jadulal Mullick

Heritage Classification Grade: B

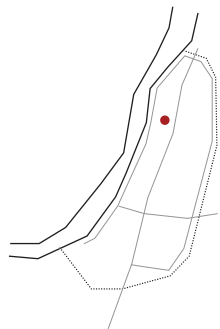
The central courtyard is has a cast iron fence and is flanked by a thakur dalan. The veranda on the remaining three sides of the courtyard has Tuscan columns in ground floor and plain columns with Corinthian capitals in the upper floor.

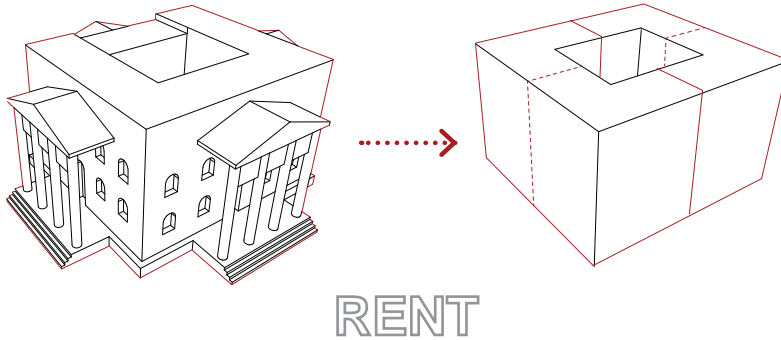


House and Context in Scale 1:4000



House Exterior and Streetscape





House of Mullick 1863

Ownership: Jadulal Mullick
 User: Mullick's Family and Servants

Architect: Macintosh Burn (British)
 Materials: Imported and Local

House of Mullick 2008

Ownership: Rajat Mullick
 User: Mullick's Extended Family, Tenants and Servants

Maintenance: Fair
 New Constructions: New Rooftop Building, Arcade Partitions

Government Subsidy: None
 Government Burdens: Tax Increase and Building Restrictions

Courtyard Situation: Private and Public
 Courtyard Activities: Gatherings and Service Tasks

Jadulal Mullick



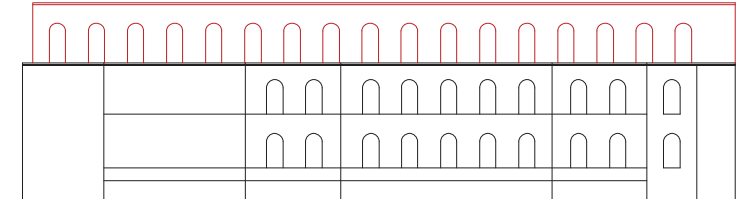
Rajat Mullick



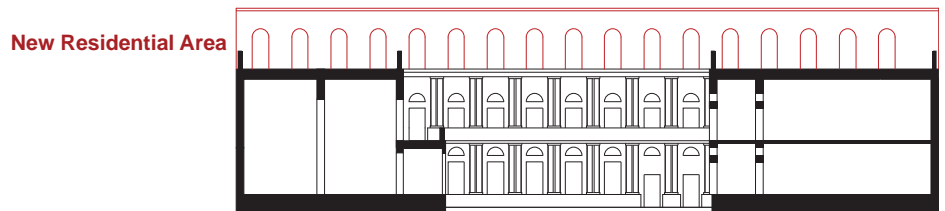
"We do not receive any government assistance. On the contrary, they have raised our taxes due to the large house size."

ARCHITECTURE CHANGES IN RENT SCENARIO

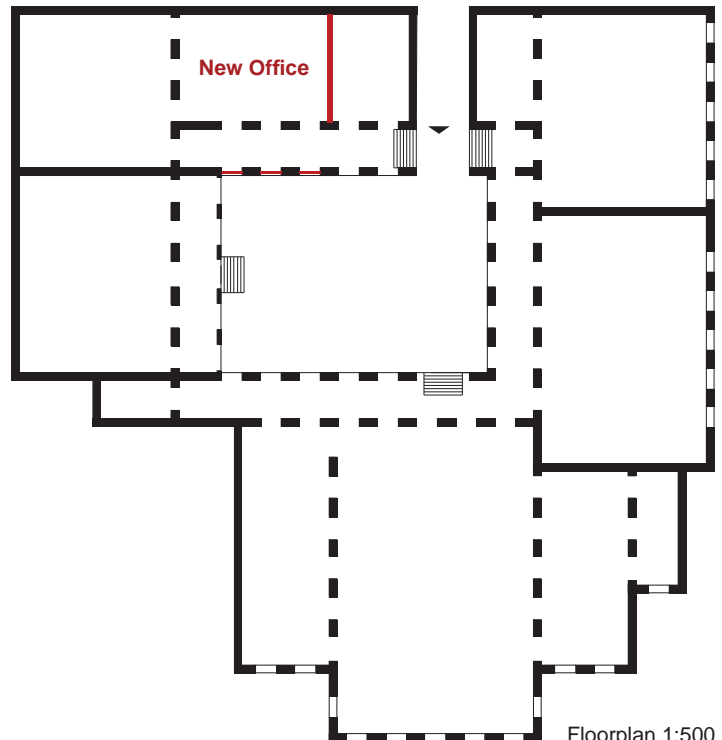
This house has witnessed to typical architectural changes, namely a rooftop addition and new arcade partitions to create new rooms. The rooftop is for residential purposes and the partition on the ground floor for the creation of a new office. Both of these additions were done in the same style and materials as the existing house, making them not so easy to identify at first glance.



Elevation 1:500



Section 1:500



Floorplan 1:500

- ▲ Original Points of Entry
- ▲ New Points of Entry
- Original Condition
- New Additions



New Rooftop Addition



New Addition on Rooftop and New Arcade Partitions

3.4 CASE STUDY DIVISION SCENARIO

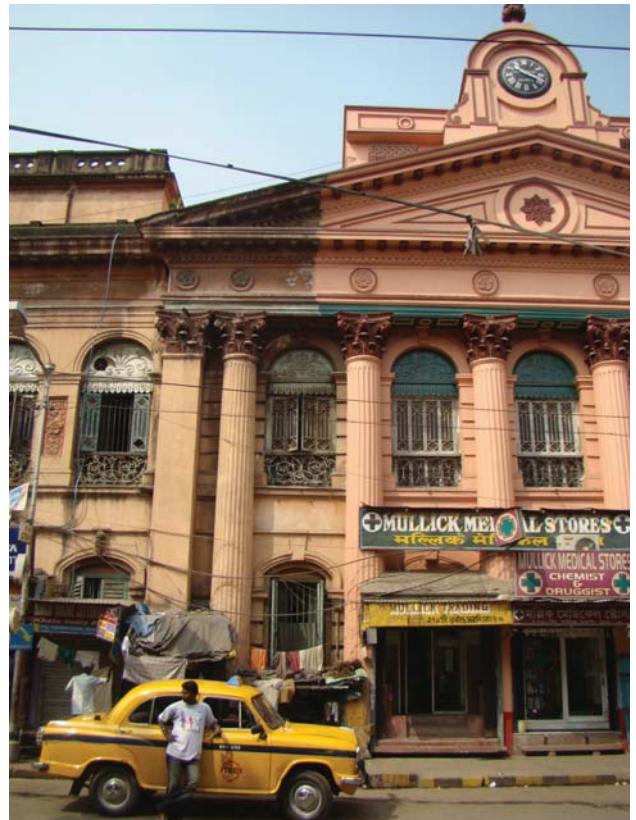
Ghari Bari

Heritage Classification Grade: B

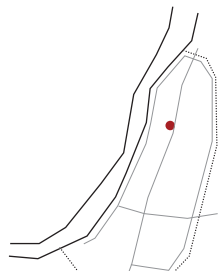
The houses has a frontage with Corinthian columns holding up a large triangular pediment. Set above the pediment is the clock which gives the house its name. It was the venue of the first performance of Nil Darpan, the play of the plight of indigo workers.

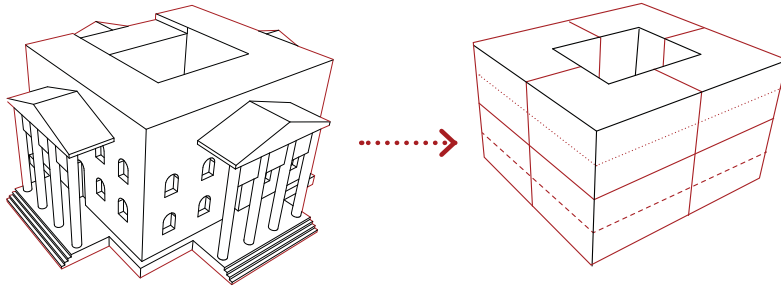


House and Context in Scale 1:4000



House's Exterior Facade





DIVISION

Ghari Bari 1850's

Ownership: Ashutosh Mallik
 User: Mallik's Family and Servants

Architect: Unknown
 Materials: Imported and Local

Ghari Bari 2008

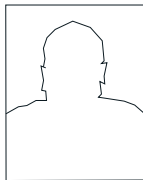
Ownership: Unknown
 User: New Owners, Tenants and Illegal Users

Maintenance: Poor
 New Constructions: New Rooftop Building, Courtyard Partition

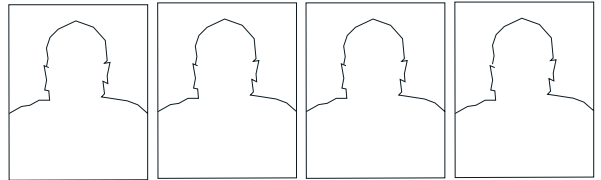
Government Subsidy: None
 Government Burdens: Building Restrictions

Courtyard Situation: Private
 Courtyard Activities: Service Tasks and Leisure

Ashutosh Mallik



Unknown



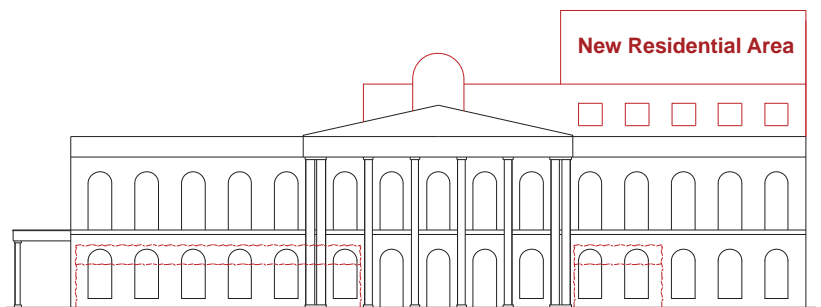
Nobody would talk to us.

ARCHITECTURE CHANGES IN DIVISION SCENARIO

The house has undergone many ownership divisions and consequently many architectural changes. Some of these are rooftop additions, new inner walls, a courtyard partition and informal shop on the street side. Except for the new unit facing the street which has become commercial, as other partition are for residential purposes. This has led to the creation of new entries, different maintenance conditions and a style mix. Informal stands have taken up most of the front facade.



Section 1:500



Elevation 1:500



Floorplan 1:500

- ▲ Original Points of Entry
- ▲ New Points of Entry
- Original Condition
- New Additions



House Exterior with Rooftop Addition



3.5_URBAN EVOLUTION

After looking into in architecture transformations we tried to understand what changes also occurred on the urban scale. While doing so, we encountered three phenomena, namely a densification process, consequently a strong contrast between old and new structures as well as a programme diversification within the hybrid houses. Some of these aspects are visible in the Sovabazar streetscape comparison. We will continue with explaining the reasons behind these processes.



Shobhabazar Streetscape 1900's



Shobhabazar Streetscape 2008

DENSIFICATION AND STRONG CONTRAST BETWEEN OLD AND NEW

The area of North Kolkata was originally a wealthy Indian residential area part of the city, namely the Black City. After independence from Britain feudalism laws were abolished and everyone who could afford to buy or build a house could do so. Additionally, refugee waves pounded the city, many of these made this area their home. This factors changed the urban landscape of North Kolkata, many new houses were built where previous green spaces used to be. In other words, an urban densification process took place. Today Kolkata is one of the densest cities in the world reaching a 9920 people per square kilometer. Another social effect of this phenomena was that many of the wealthy families that inhabited the area moved to live in other parts of the city, mostly in the south.

Consequently, a great contrast between the colonial and post-independence building waves can be seen in today's North Kolkata streetscapes.



Shobhabazar Aerial View 1850's



Shobhabazar Aerial View 2008



Contrast Between Old and New Structures



Contrast Between Old and New Details

HYBRID HOUSE USE DIVERSIFICATION

The migration waves which lead to many wealthy families leaving North Kolkata, imposed also lifestyle changes. New programmes were needed and incorporated into the once mostly residential courtyard hybrid houses. The houses became schools, workshops, hospitals, banks, shops, amongst many others. This social and architectural changes are documented in the following images.



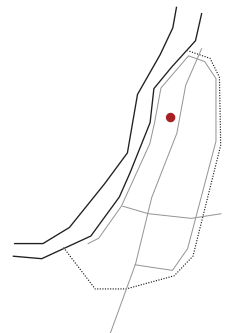
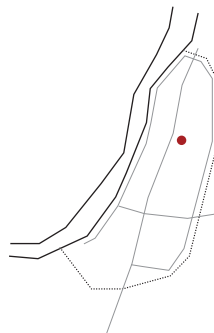
Sevak Hall

Before: House After: Community Hall and Restaurants



Sourindramohan Tagore

Before: House After: School and Residences

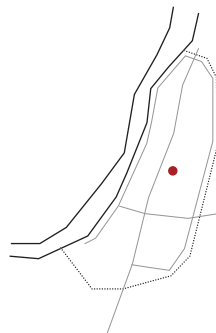
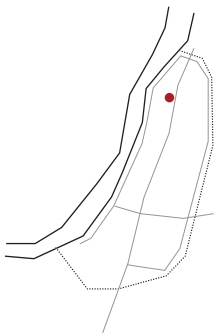




House on Shobhabazar Street
 Before: House After: Shops and Residences



House on Gandhi Road
 Before: House After: Instrument Workshop and Residences

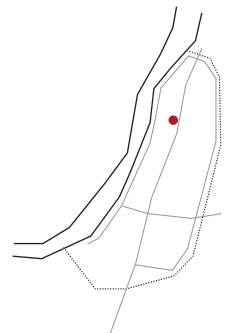
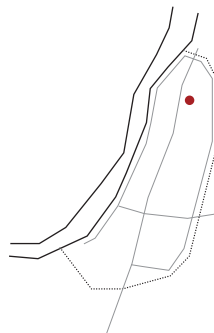




House in Shyambazar
Before: House After: Print Shop



Lohia Matri Seva Sadan
Before: House After: Hospital



3.6_NORTH KOLKATA RESTORATION POTENTIAL

The programme transformation was possible due to the flexibility of the housing structures. However, these recent transformation has also taken a burden on the house owners. This phenomenon also makes us question wether the area has potential for future developments, and this becomes very apparent when listing the architectural, urban, sociocultural and climatic conditions of North Kolkata For a deeper understanding of the situation a closer look at Kolkata heritage preservation matters is necessary.

North Kolkata Conditions



Architectural

- Large Setback Flexibility
- Large Courtyards Flexibility
- Age and Poor State of Buildings



Urban

- Verticality Flexibility
- High Density Economic Benefits



Sociocultural

- Gathering Spaces (Durga Puja)
- Private-Public Spaces for Interaction
- Secure Playing Environments
- Programme Inadequacy due to Population Changes
- Reference to Social Housing
- Reference to the Independence Movement
- Difficulties for the Handicapped
- Distance from Chaotic Street Life

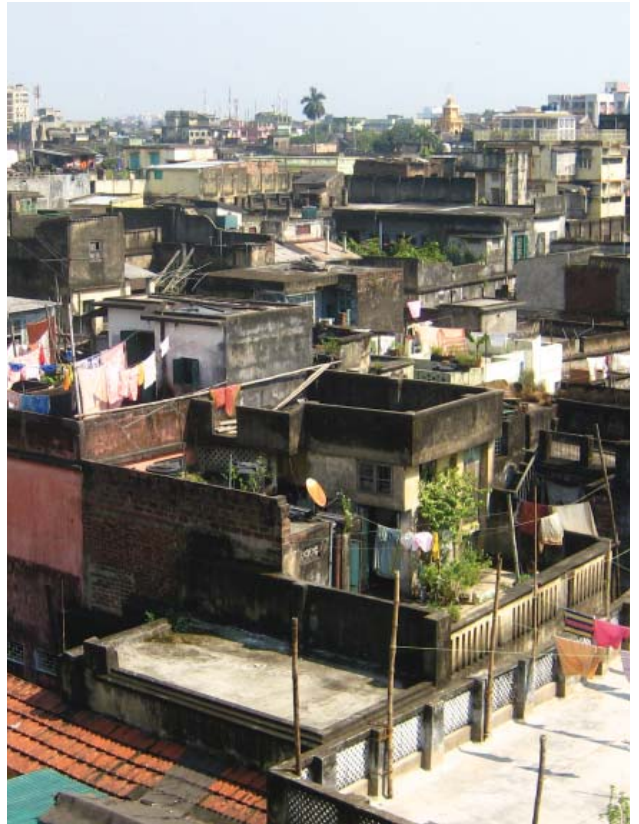


Climatic

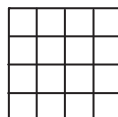
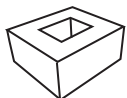
- Room Temperature Range due to Verticality
- Year-Round Ventilation due to Proportions and Courtyard
- Large Shade Range due to Courtyards and Verandas
- Strength of Kolkata Nature
- Inadequate Use of Materials in Colonial Architecture



Large Setback Flexibility

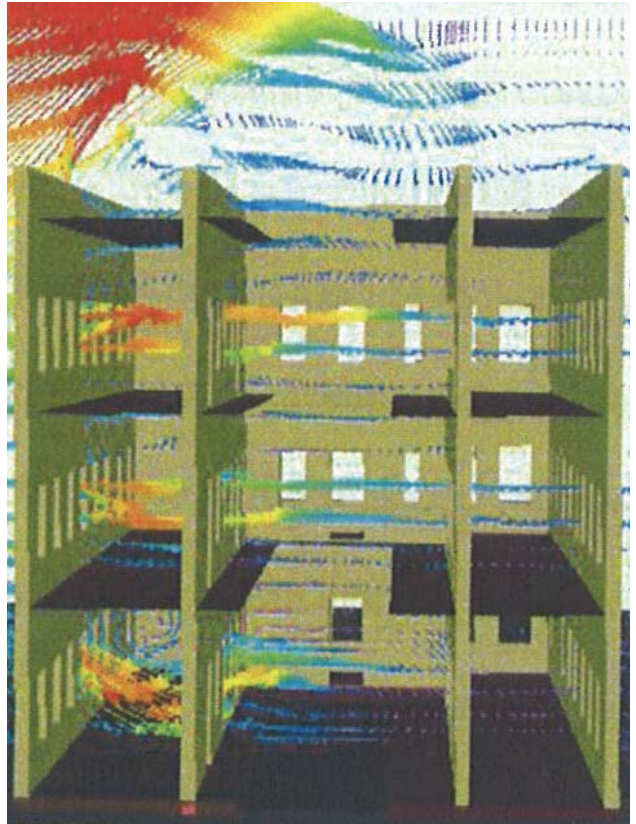


High Density Economic Benefits



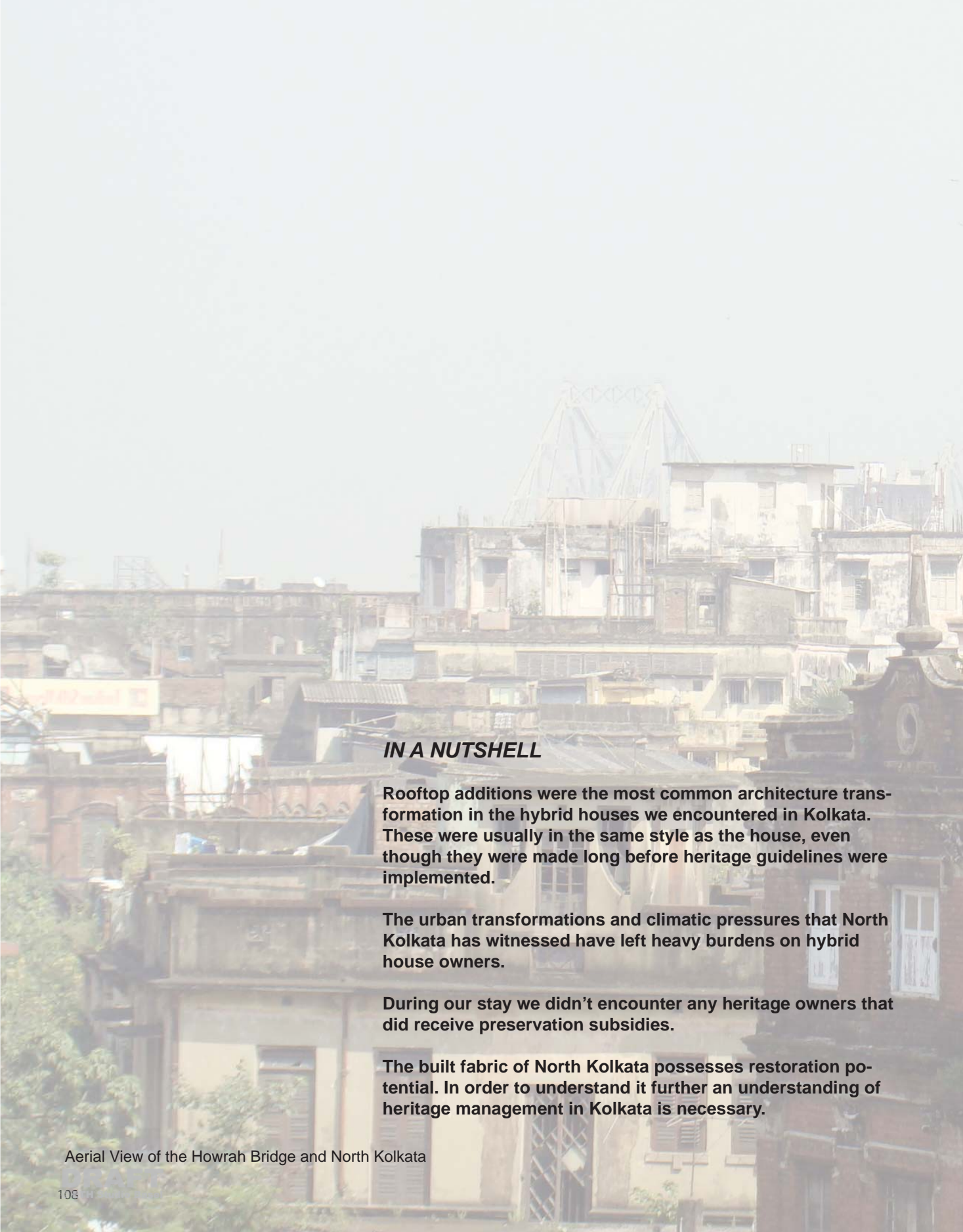


Reference to the Independence Movement



Year -Round Ventilation





IN A NUTSHELL

Rooftop additions were the most common architecture transformation in the hybrid houses we encountered in Kolkata. These were usually in the same style as the house, even though they were made long before heritage guidelines were implemented.

The urban transformations and climatic pressures that North Kolkata has witnessed have left heavy burdens on hybrid house owners.

During our stay we didn't encounter any heritage owners that did receive preservation subsidies.

The built fabric of North Kolkata possesses restoration potential. In order to understand it further an understanding of heritage management in Kolkata is necessary.





House in Burrabazar



4 HERITAGE CONSERVATION

4.1_Heritage Conservation Origins

4.2_Heritage Conservation in Kolkata

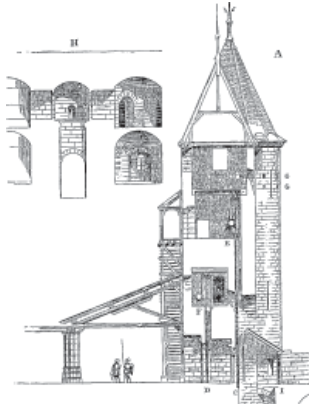
4.3_Asian Heritage Conservation Models

4.4_North Kolkata Potential

4.1_HERITAGE CONSERVATION ORIGINS

The invention of building preservation has a western European origin. Architect Piranesi was one of the first architects to attract attention to old structures. With the ideology transformations of the French Revolution a Commission for Art and Monuments was created in Paris. Viollet-le-Duc's Carcassonne project wanted to implement artistic restoration, while 50 years later Ruskin tried to expand the idea of passive restoration. The 2 founding documents of the modern preservation movement include the Athens Charter of 1931 and the Venice Charter of 1964.

These ideological inputs have transformed the concept of preservation throughout time. The blatant transformation is the incorporation of new programmes. Starting with ancient monuments in the 1800's, preservation now incloses a much wider range of programmes including highway as well as concentration camps. Other transformations include the scale of preservation and the growing idea of heritage as something almost contemporary.



Heritage Development Events

..... Piranesi, The Sights of Rome

French Commission for Art and Monuments

1800

..... Viollet-le-Duc, Carcassonne Restoration
Ruskin, Stones of Venice

British Society for the Protection of Ancient Buildings

1900

..... Athens Charter

..... UNESCO Foundation
Venice Charter

NARA Preservation Conference

2000

Conservation per Typology

Ancient Monuments

Religious Buildings
Historic Town Centers

Houses

Bridges, Light Houses
Cemeteries
Railways, Office Buildings, Amusement Rides

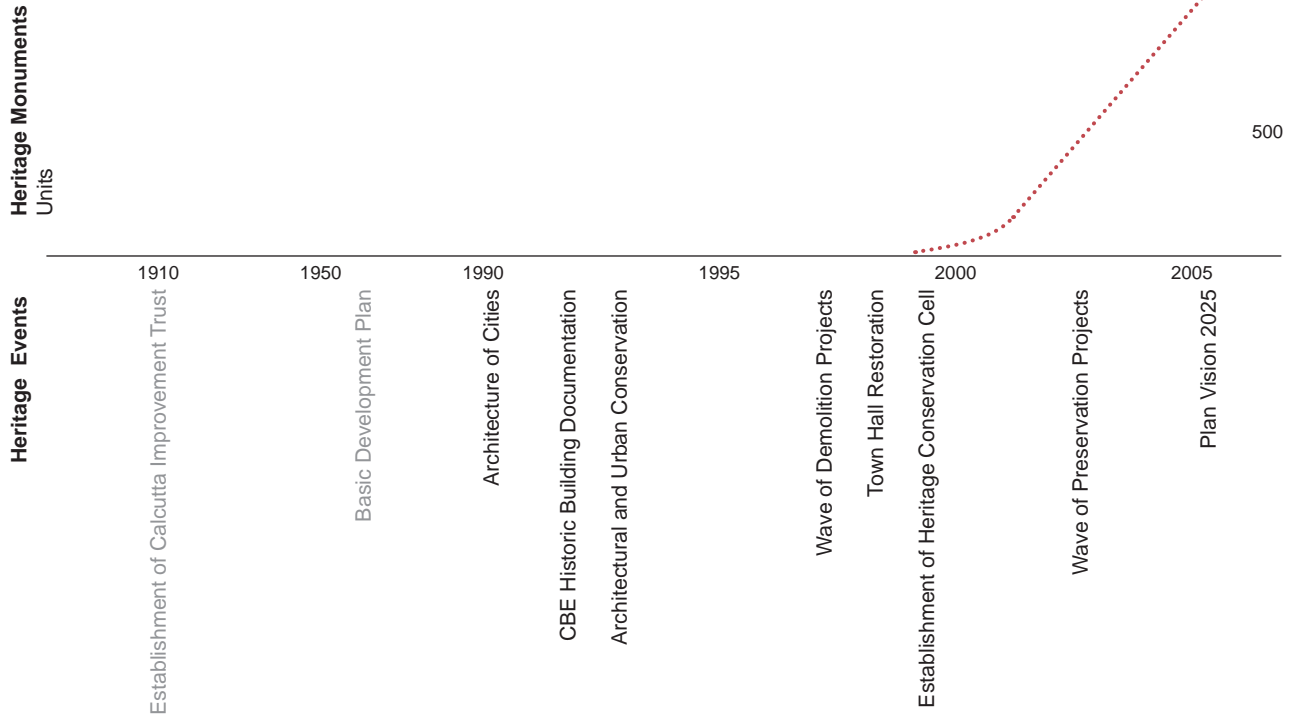
Casinos
Department Stores, Factories
Cultural Landscape, Concentration Camps
Highways

4.2 HERITAGE CONSERVATION IN KOLKATA

The idea of preservation is something relatively new in Kolkata. Previous planning efforts such as the Calcutta Improvement Trust and the Basic Development Plan didn't take the matter into consideration. Since the 1990's the Media and NGOs, with European backup, have put pressure to raise heritage awareness in the city. This phenomenon together with a wave of demolition led to the establishment of the Heritage Conservation Cell within the Kolkata Metropolitan Corporation. Since then this authority has been managing heritage matters in the city, mostly in the form transactions and maintenance matters as well as heritage monument declarations. This heritage monument list now incorporates more than 1300 structures.

Since the establishment of the Heritage Conservation Cell a wave of preservation projects, mostly representative buildings, have been undertaken. Additionally, the latest perspective plan, namely the Vision 2025, has incorporated this heritage management matters into its structure.





Non-Heritage Related Event
 Heritage Related Event

SEQUENCES OF HERITAGE CONSERVATION EFFORTS

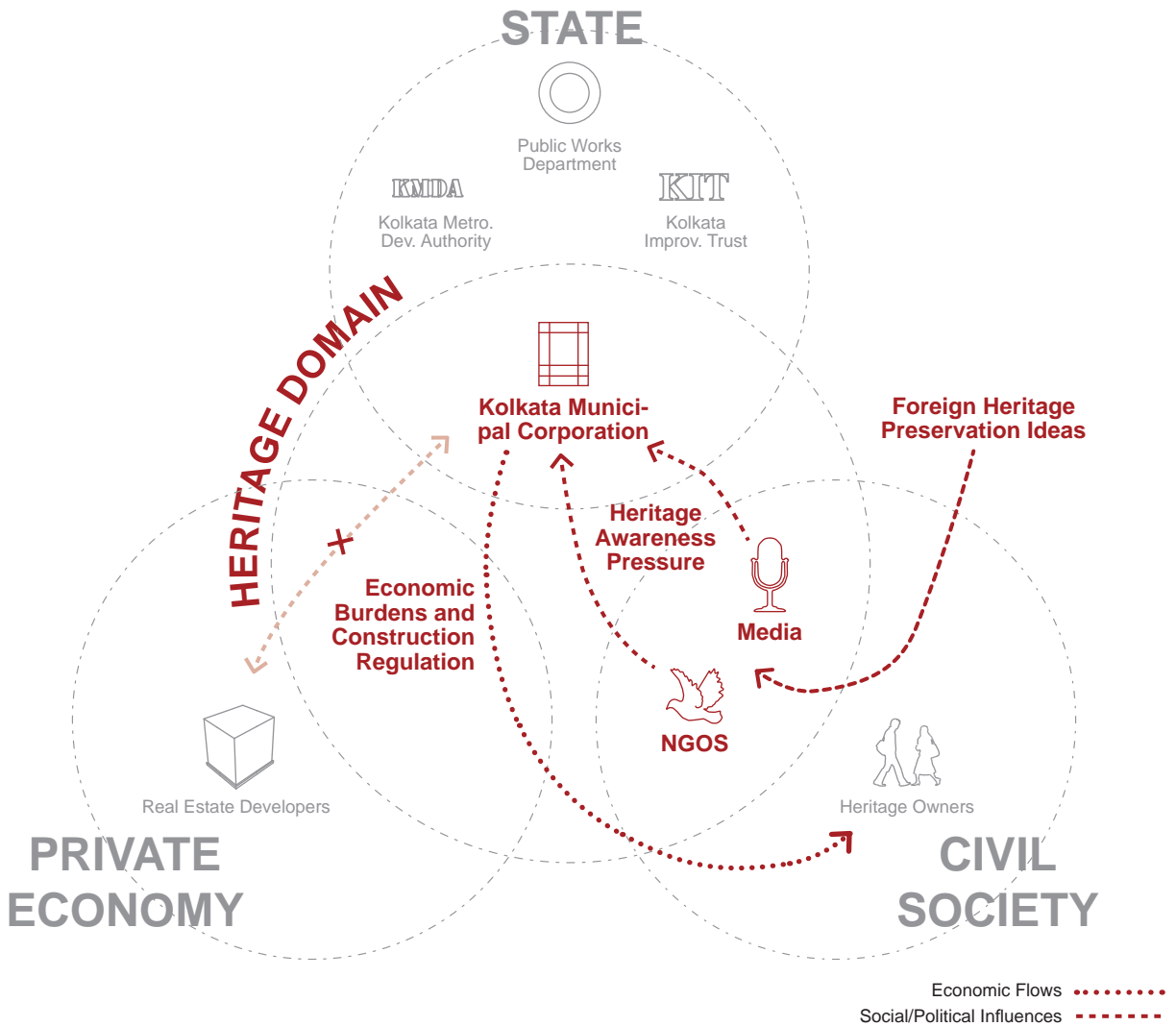
After the NGOs and media's success of pressuring the government to create the Heritage Conservation Cell their focus has turned towards trying to involve the general public into the matters. The Heritage Conservation Cell is the only Kolkata city improvement authority that is involved with heritage issues. This is a difference compared to other Asian cities, where heritage preservation responsibilities are distributed on different authorities. The Archeological Survey of India is a nationwide player and has an importance at this level. In Kolkata this authority has declared four buildings within their list. Their presence in Kolkata is not expansive.

HERITAGE

DRAFT

116TH Studio Basel





KMC'S HERITAGE CONSERVATION CELL ACTIVITIES

The Heritage Conservation Cell produced heritage definition regarding architectural issues, process sequences and owner matters. These have help to settle heritage definition in the city. The document Guidelines for the Owners of Heritage Buildings where all rules are defined ends with a list of monument owner benefits. However, these benefits are still to be witnessed and the KMC definitions have created new economical burdens for heritage owners, mostly in the form of building restrictions.



KMC Definitions



Heritage Building and Precinct



Criteria for Heritage Selection



Signal Restrictions



Material Restrictions

Architectural Issues



Processes of Selling, Leasing and Change of Use



Processes of New Constructions, Demolition and Additions



Processes of Preservation, Restoration and Reconstruction

Process Sequences



Owner Responsibility



Owner Benefits

Owner Issues

HERITAGE PLANNING AND MANAGEMENT COMPARISON

In order to understand how Kolkata has dealt with heritage issue in this short time we have compared it to a European model on a planning and budget management level.

While the KMC uses three different documents to define heritage, restrict land use and construction sizes, in Basel all this matters are all concealed in the Zoning Plan. While this situation can create a larger spectrum for construction possibilities within the expanding city, it can also create unwanted bureaucratic situations in this growing economy.

During our research in Kolkata we were unable to find a privately owned heritage monument that received subsidies from the government. We were also unable to find out the KMC's preservation budget total. In Basel, this information is publicly available. In order to better allocate money within governmental authorities and create a better dialogue between the government and heritage owners, a more transparent budget handling might be helpful.

HERITAGE

DRAFT

120TH Studio Basel



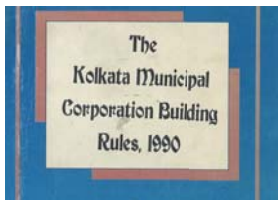
Kolkata



KMC Heritage Classification
Heritage Guidelines

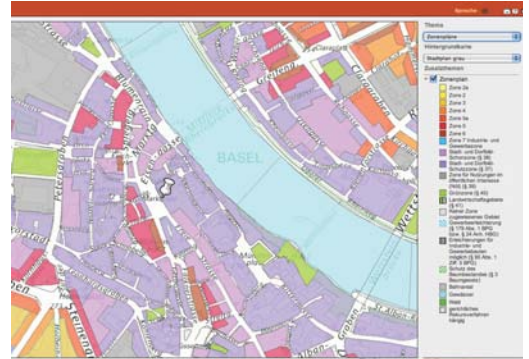


KMC Land Use Map
Land Use Restrictions



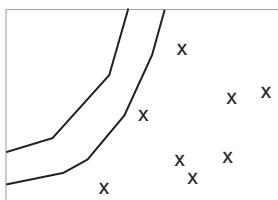
KMC Building Rules
Size Restrictions

Basel

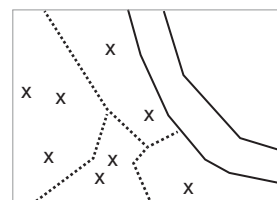


Basel City Zoning Plan
Heritage Guidelines
Land Use Restrictions
Size Restrictions

Planning Documents



KMC Heritage Strategy
Object-Based



Basler Denkmalpflege Strategy
Object- and Area-Based

Heritage Strategies

Budget Management

KMC Heritage Conservation Cell's budget is not openly known.

KMC Heritage Conservation Cell's budget cannot cover private subsidies.

Basler Denkmalpflege's budget is posted in e-reports

Basler Denkmalpflege spends 2/3 of its budget for preservation subsidies.

HERITAGE CONSERVATION OPPOS- ING FACTORS

It has only been 9 years since authoritarian heritage matters have started to take effect, however factors playing against conserving building have been present since their origins. These have mostly their origins in society changes, the climate, infrastructure and real estate developments. We have visualized these factors in the following slides.

Factors



Roads, Fly-Overs and Metro Developments



Large Scale Real Estate Developments



Lack of Old Building Construction Knowledge

Development Factors



Urban Neglect and Vandalism



Lack of Private Wealth for Maintenance and Renovation Works



Fragmented Ownership and Tenancy Sometimes with Legal Disputes



High Taxes and Low Rents



Social Inadequacy of Structures due to Population Changes

Social Factors



Climate Factors

External Factors

Use of European Construction Materials Without Climatic Consideration

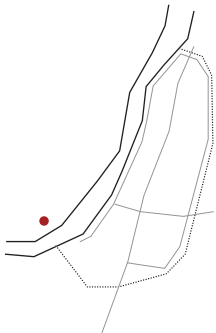
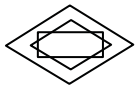
Strength of Kolkata Climate and Nature

Contrast Between Kolkata's Nature and European Construction Styles



Large Scale Fly-Over in Howrah

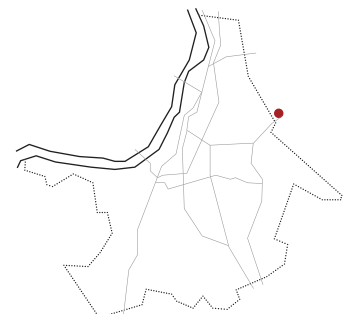
In the last 15 years traffic improvement programmes have put much effort in creating large scale fly-overs in order to decongest the city's traffic. These constructions have changed the streetscapes of the oldest neighborhoods of Kolkata.





Residential Development on the E. Bypass

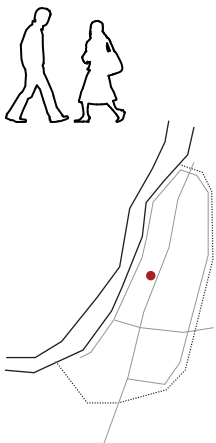
Real estate developers in Kolkata show very little interest in heritage conservation. As a result their projects end up replacing older structures. North Kolkata hasn't witnessed much transformation due to this factor.





Inadequate Urban Use On Gandhi Road

The programme transformation of North Kolkata took place due to the population change. Now many new lifestyles use the urban fabric in a different manner than it was originally intended. People in this situation are more interested in change the current urban situation than preserving it.



Kedleston Hall, Derbyshire

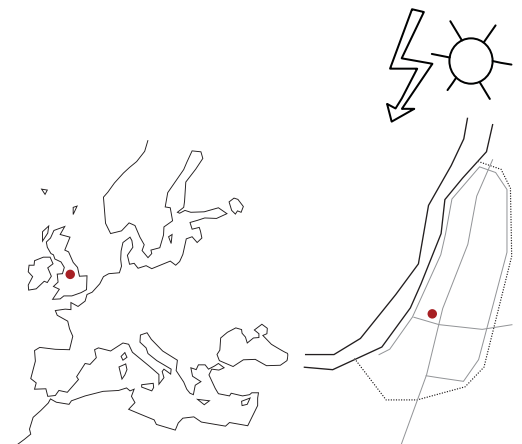


Government House, Kolkata



No Climatic Considerations

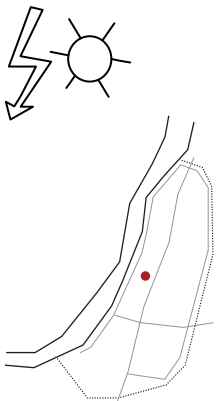
British colonial architects hardly ever took climatic considerations into their designs. The process that usually occurred was a copy paste of materials and building layouts. On the picture comparison we see Kedleston Hall in Derbyshire on top and the Government House in Kolkata. Their material are very similar and their layout almost identical.





Strength of Weather on BBD Bagh Buildings

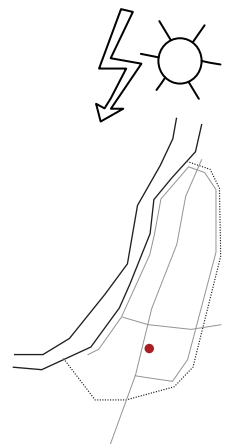
The combination of constant sunshine, seasonal rain storms and an extremely fast growing nature, make the climate conditions of the city extremely adverse to building preservation.





Nature and Style Contrast on Indian Museum

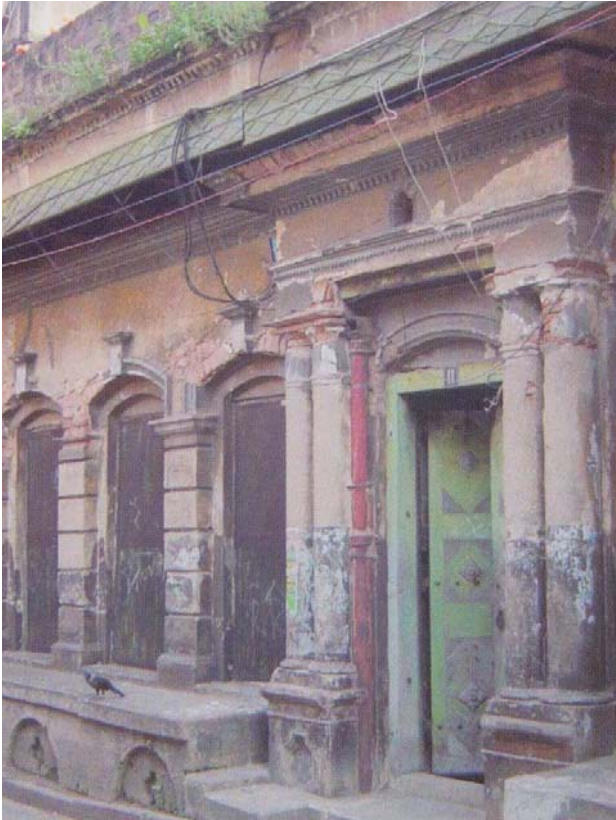
The wild and fast growing nature of Kolkata contrasts greatly with the clean cut European colonial construction ideologies. Making the preservation efforts of these structures a constant battle between the style and the surrounding natural context of Kolkata.



RESULTS ON THE URBAN FABRIC OF KOLKATA

During our stay in Kolkata we visited many of the heritage monuments of the city. We found a great diversity of maintenance conditions as result of the pro and contra heritage factors which has influenced the urban fabric. We have visualized and classified some of these case regarding their changes since the 1990's when the first heritage law and declarations were made.



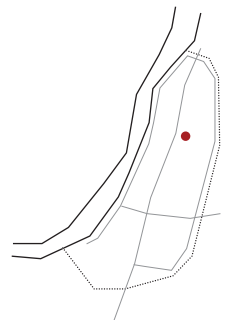


Sikdar Bagan Street 11
Built: Unknown State: Late 1990's



Sikdar Bagan Street 11
Built: Unknown State: 2008

POOR RENOVATION



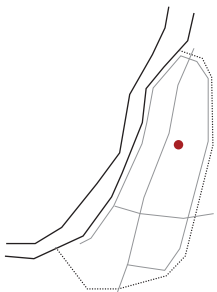


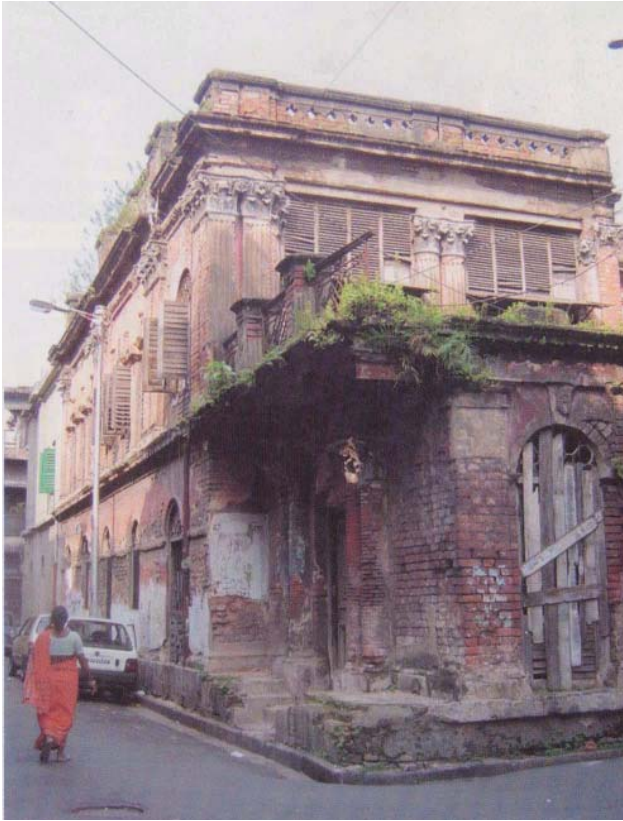
House of Bhowse Family
Built: 1894 State: Late 1990's

RENOVATION



House of Bhowse Family
Built: 1894 State: 2008



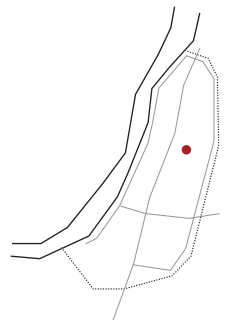


34 Mohan Bagan Row
Built: Early 1810's State: Late 1990's



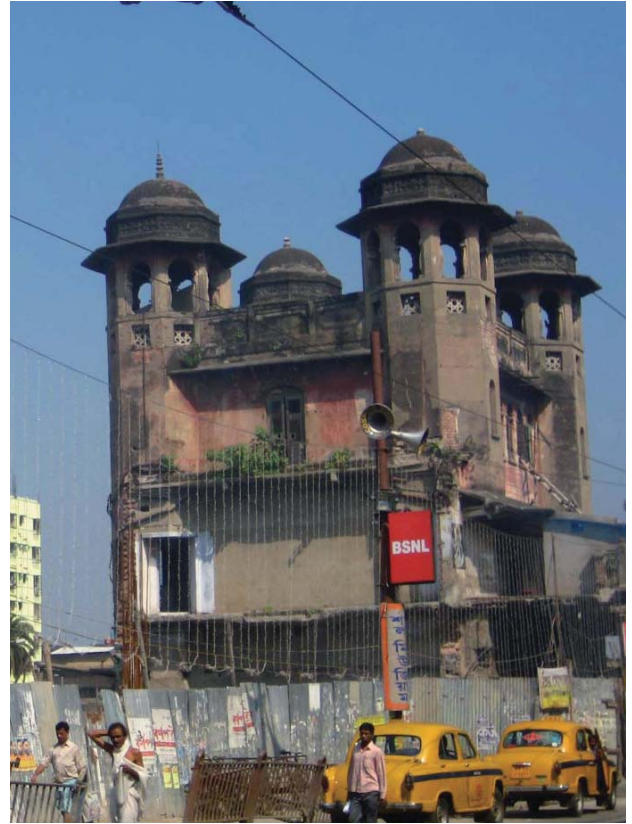
34 Mohan Bagan Row
Built: 2008 State: 2008

DEMOLITION



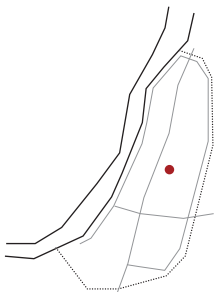


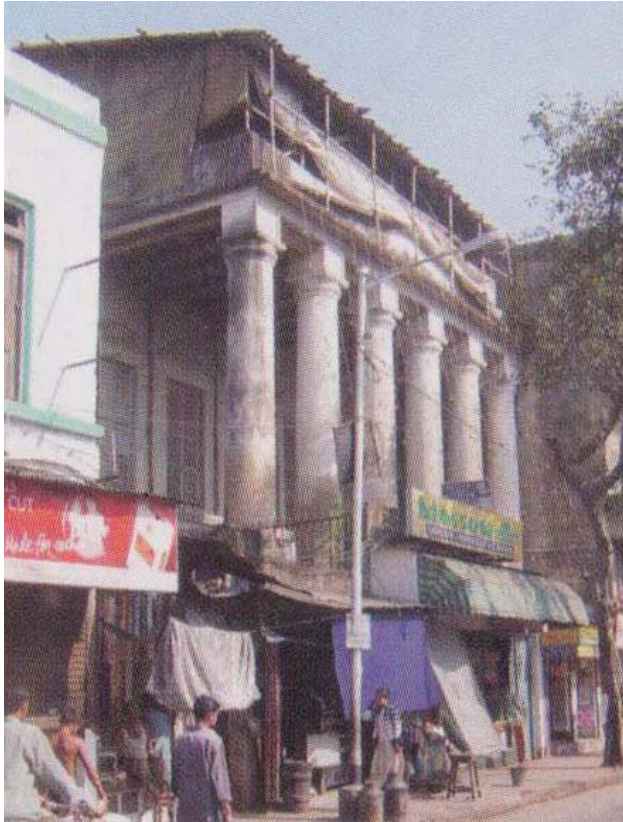
College Street Market
Built: 1917 State: Late 1990's



College Street Market
Built: 1917 State: 2008

RENOVATION / DEMOLITION



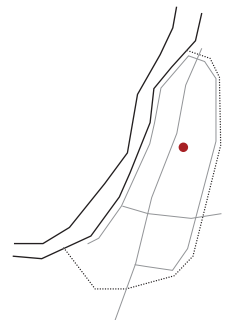


Sevak Hall
 Built: 1850's State: Late 1990's



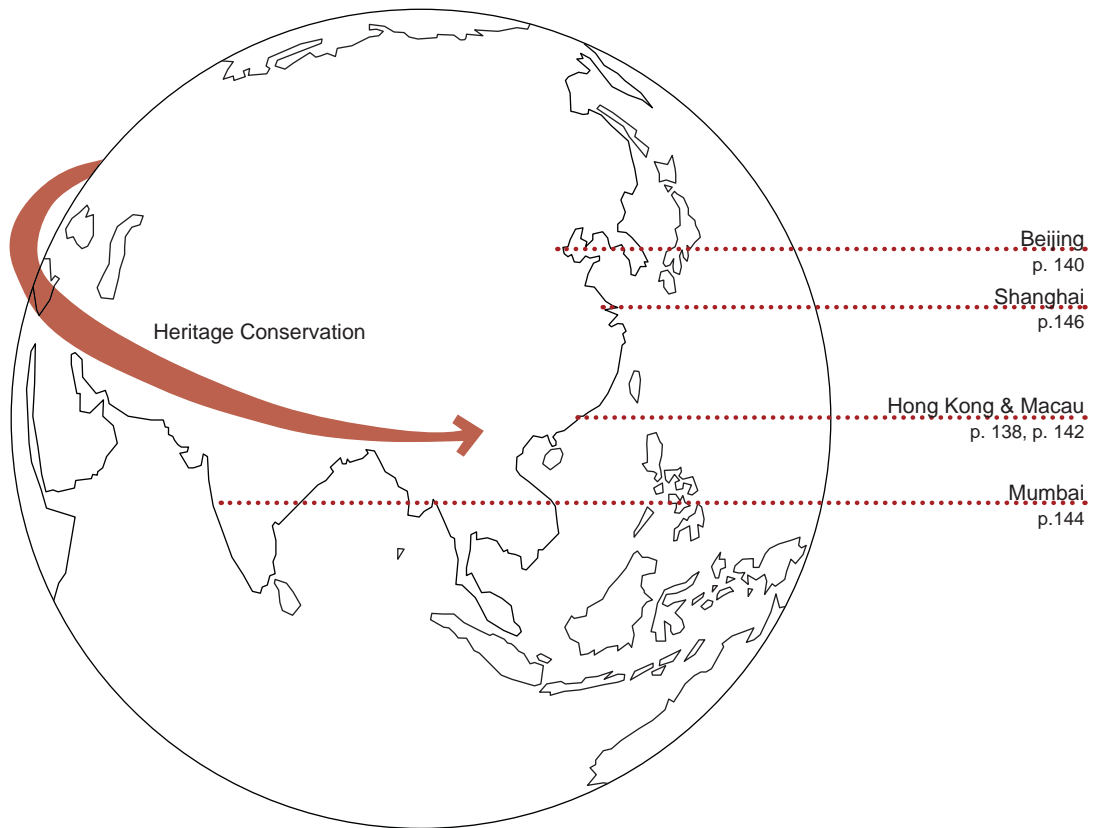
Sevak Hall
 Built: Early 1850's State: 2008

CHAOS



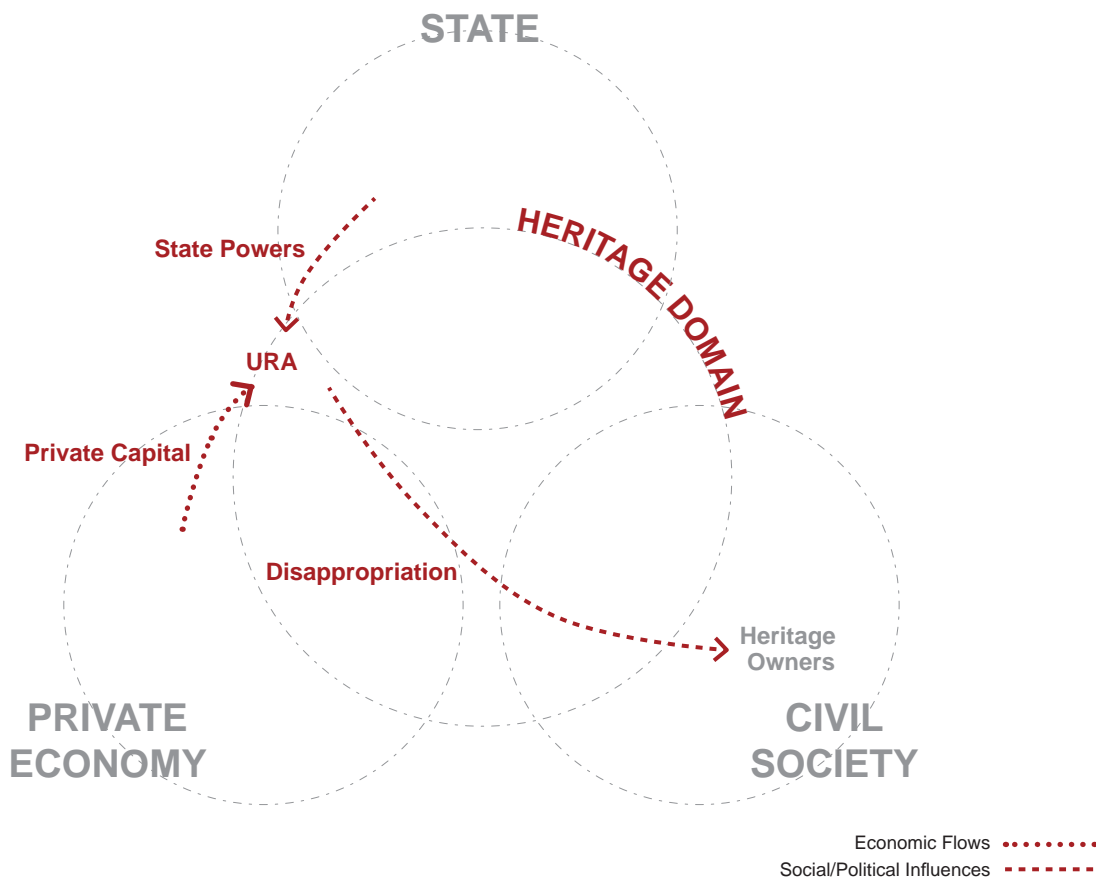
4.3 ASIAN HERITAGE CONSERVATION MODELS

In order to understand Kolkata's heritage preservation possibilities we have taken a look at other Asian preservation projects where innovative steps have been taken regarding this originally western architectural field.



HALF STATE HALF PRIVATE, HONG KONG

The Urban Renewal Agency of Hong Kong is an entity which emerged from the private sector. It is a development agency that over their years and their apparent concern for heritage has gotten state powers to take ownerships away from heritage and non-heritage owners. In many cases and due to this state power in development hands, it has been the heritage and its owners who have been put aside in urban decision.

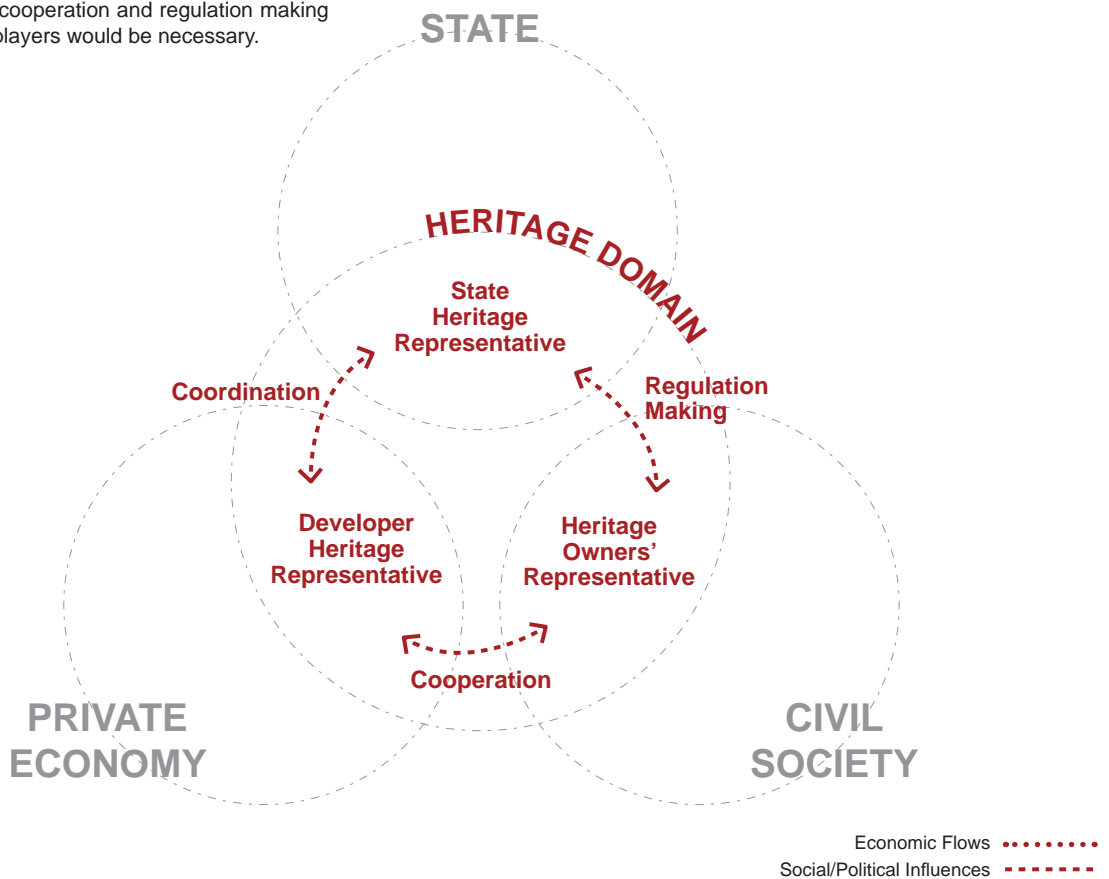


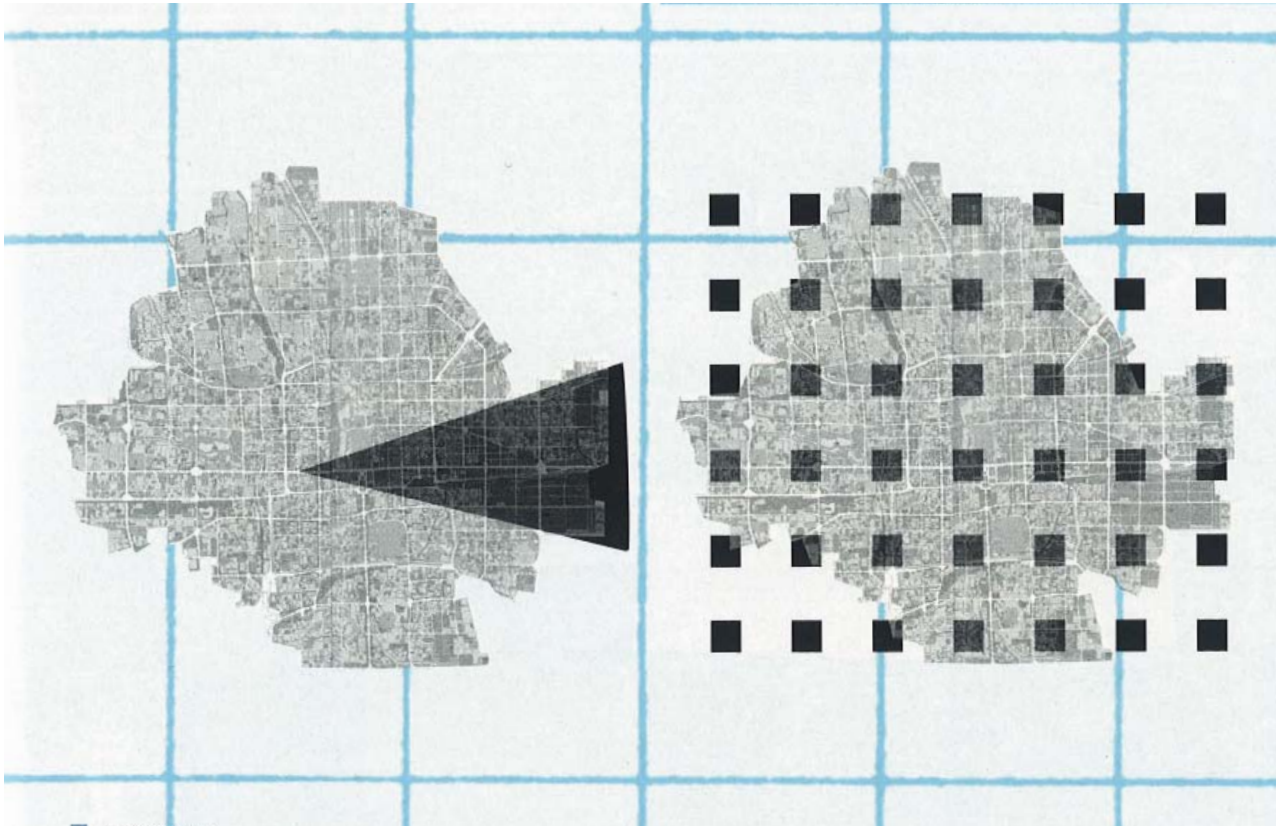


URA Publicity Trying to Show a n Urban Beauty Concern

PRESERVATION AS CROP ROTATION, BEIJING

OMA was one of the first office to encounter potential of challenging the western models of preservation in eastern cities. In their Beijing study they proposed a heritage preservation strategy that leaves the center and without aesthetic biases. It is a prospective and not retrospective strategy that temporarily declares city areas as heritage zones, in a crop rotation-like fashion. Due to the complex regulation, if such a study would be carried out, a great degree of coordination, cooperation and regulation making between urban players would be necessary.

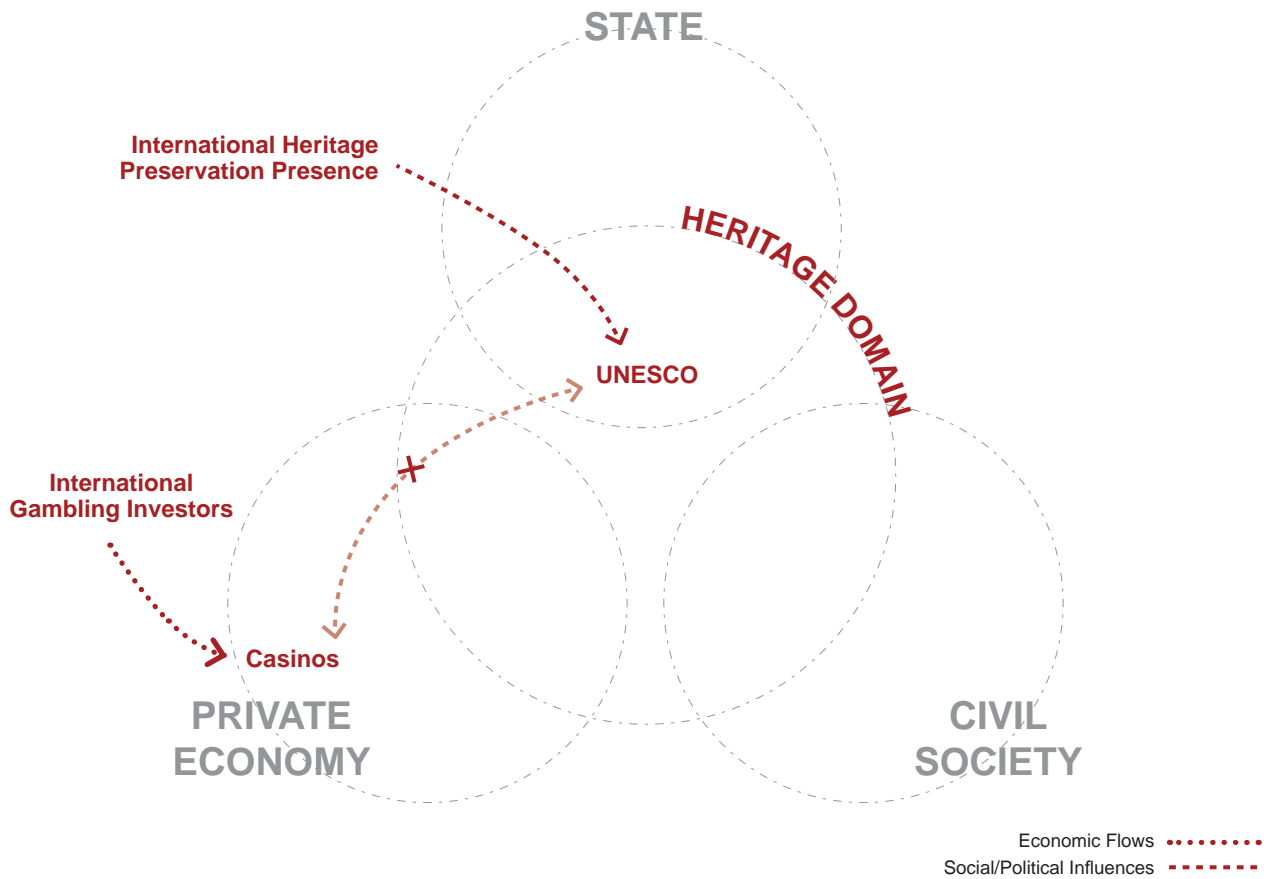




OMA's Spread-Out and Fragmented Preservation Concept

HELP FROM ABROAD, MACAU

Throughout its history, Macau has had many foreign influences and it continues to be a land of immigrants. Preservation and transformation forces have individually continued the foreign involvement in the area by bringing in heavy international players of their fields, namely the UNESCO and many American Gambling Investors. As a result Macau has turned into a place of strong conservation and development projects that emerged organically and uncoordinated.

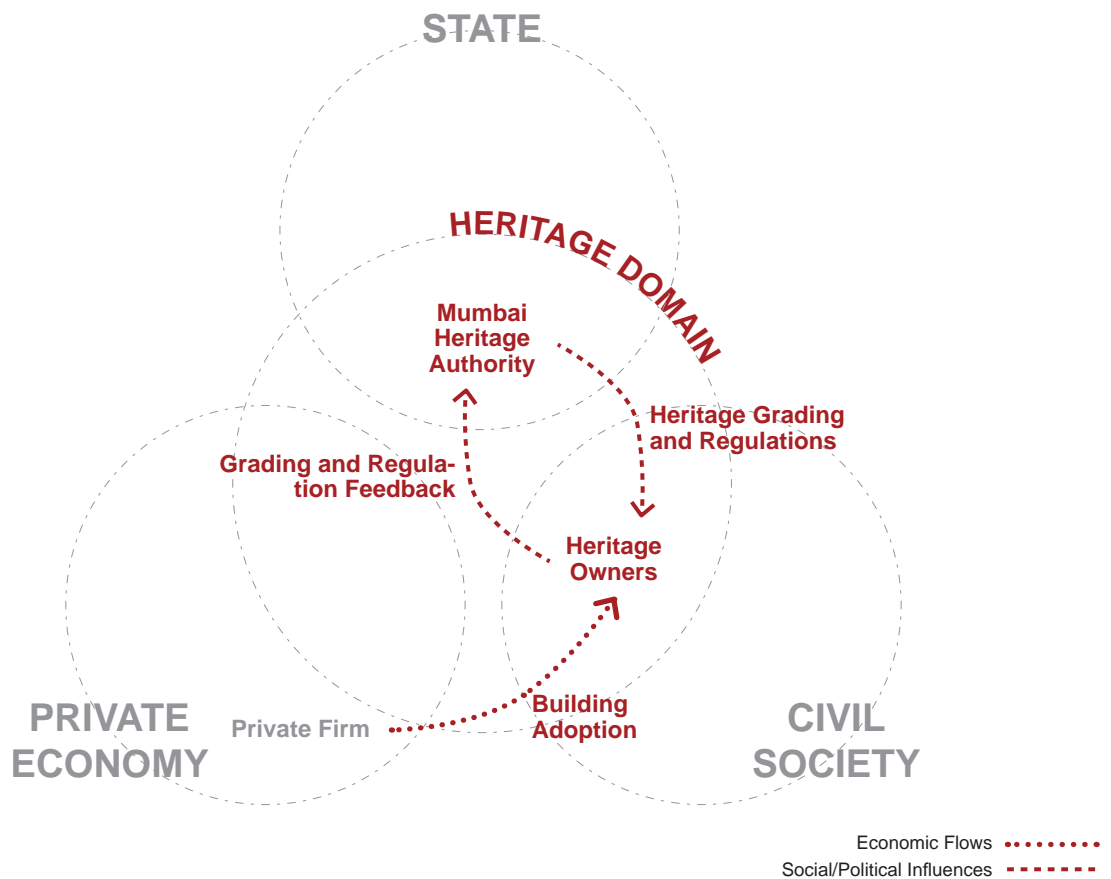




Casinos and UNESCO Heritage Corridor

HERITAGE OWNERS INVOLVED, MUMBAI

In Mumbai like in the rest of India, preservation is a new field. But it seems as if the first steps have been taken taking the owners more into consideration than in others part of Asia. Heritage owner groups have been organized and some dialogues between them and the heritage authorities of Mumbai have taken place. Owners have further been helped by private firms who have adopted buildings.

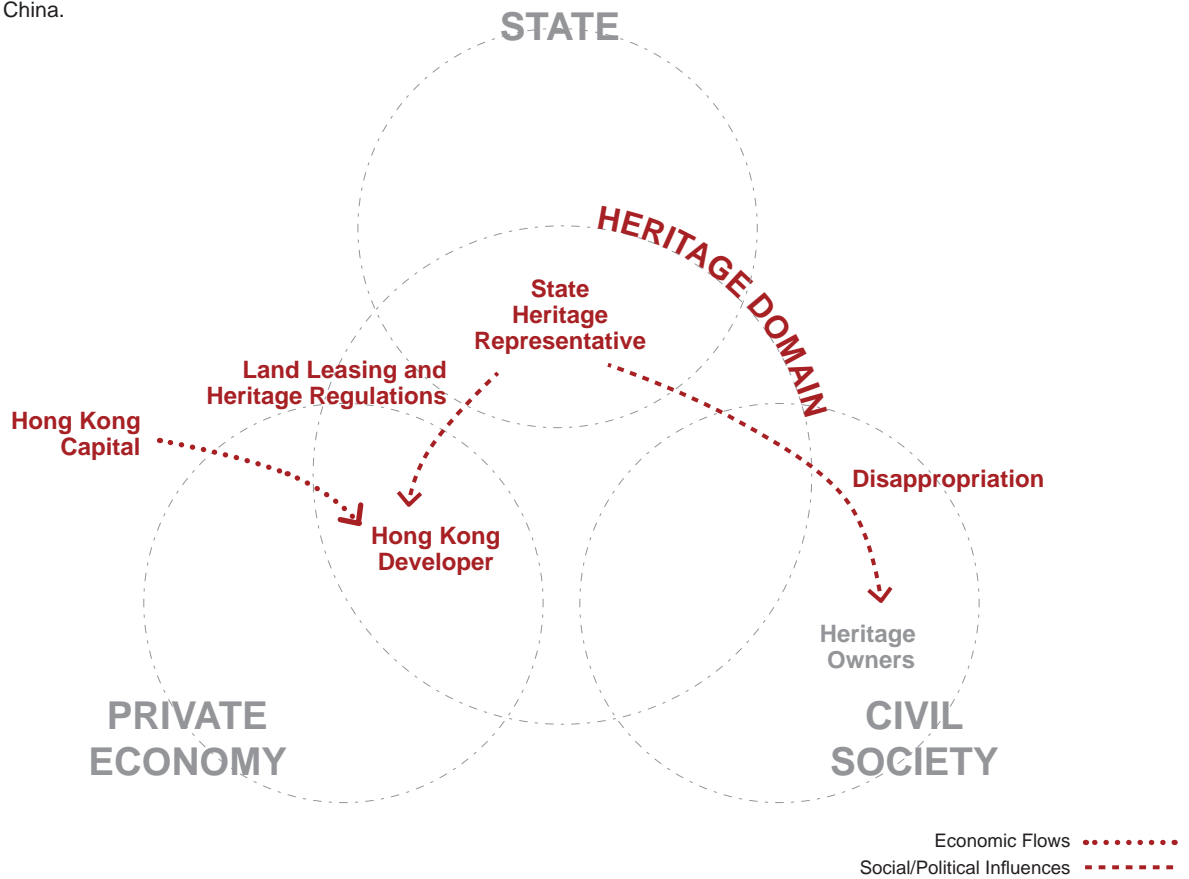


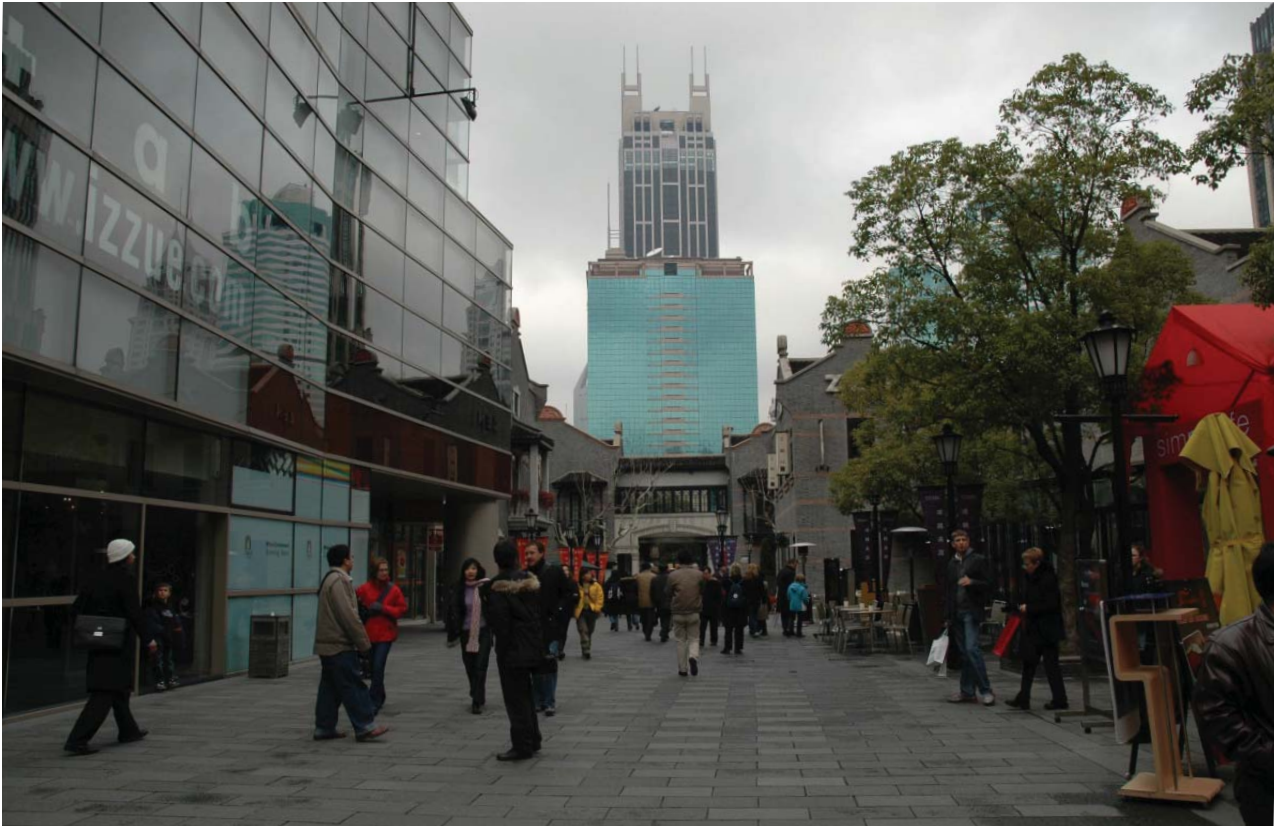


Mumbai Heritage Owners Meeting

STATE ORCHESTRATES AND LAND LEASING, SHANGHAI

The Xian Tiang Di redevelopment project was completed in 2003 and is the first phase of a larger Shanghai city center master plan. The once mostly residential area was leased to the Hong Kong real estate developers Shui On Group with heritage preservation commitments in order to convert it into a life-style center. Land was not sold, due to the fact that land always belongs to the state in communist countries like China. This project is the first of this scale in China.



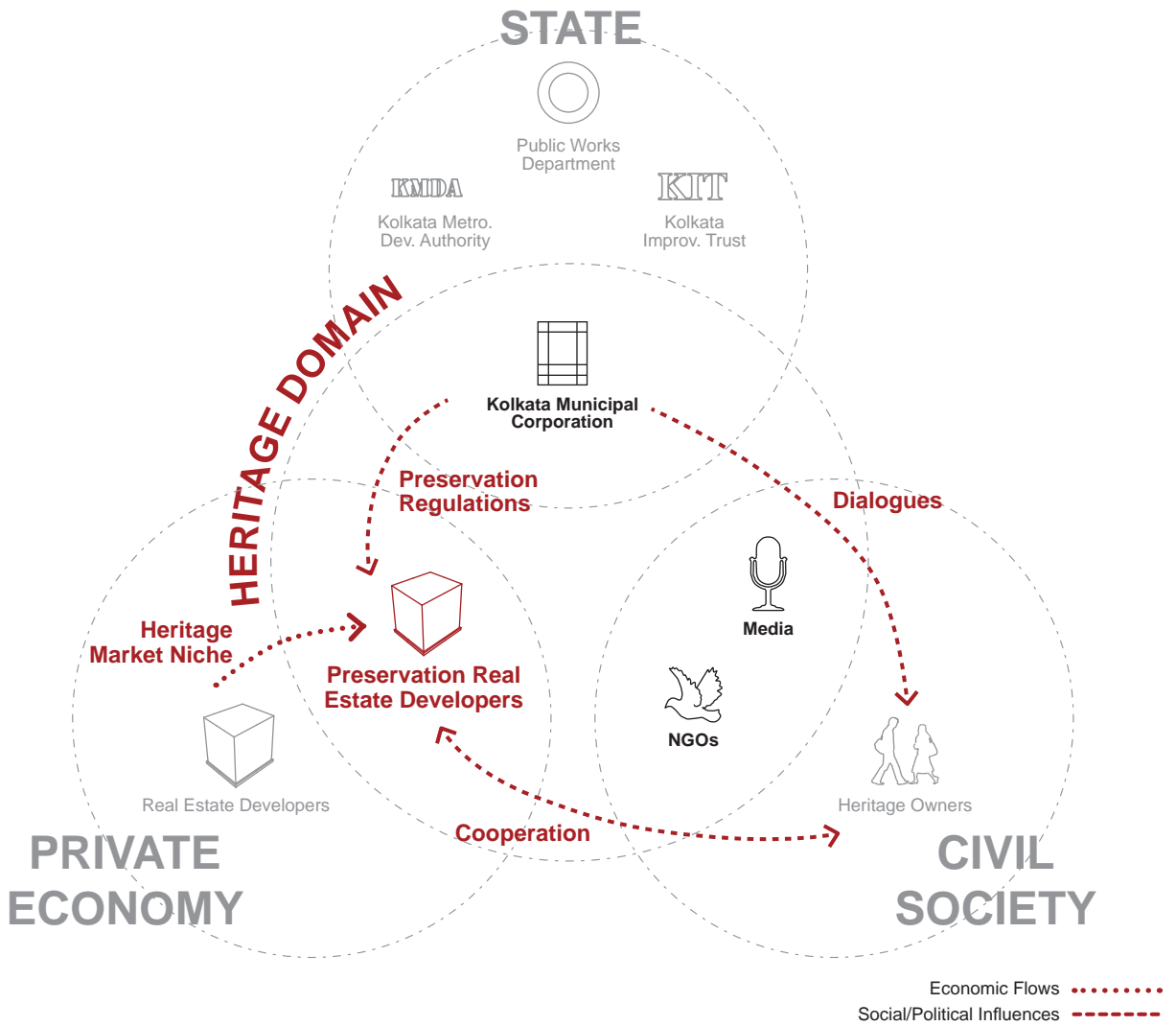


Xian Tiang Di Heritage Preservation Project

4.4_KOLKATA PRESERVATION POTENTIAL

In Kolkata interaction has occurred between the civil society and the state. This has left a burden on heritage owners and we could not find any sign of dialogues from them back to the state. This leaves a lot of room in the private economy for possibilities.

Real estate developers could find a market niche in this area in order to promote their firms. If such a move was made, a positive decision of the state would be to enforce preservation regulations for such player and promote a dialogue between them and heritage owners, in order to avoid civil isolation and resentment common in other Asian cities.





IN A NUTSHELL

The Heritage Conservation's Cell strategy attempts to rescue the most relevant heritage structures with little interaction between them and the owners, who are also the ones who carry its economic burden.

Asian cities today provide a platform to challenge the western concepts of preservation in an innovative manner.

Due to Kolkata's relative recent heritage awareness and thus small amount of heritage players, the potential for innovative models is vast, specially in the private developer economy. North Kolkata provides a enough fertile ground for such experimentation. A positive move in this direction should identity into consideration.





Indian Museum on J. L. Nehru Road



5_IDENTITY

- 5.1_Consequences of Basic Demands**
- 5.2_Colonial Identity's Mixed Feelings**
- 5.3_Contemporary Identity's Acceptance**

5.1_CONSEQUENCES OF BASIC DEMANDS

Heritage awareness is a phenomenon of society that have met basic demands and starts to look back at itself. Due to the difficult postcolonial history of India, which has included wars, waves of migration and famines, other demands had first to be met.

With the recent economic expansion of India and its new role as international economic player, heritage awareness is starting to occur. Nevertheless, heritage discussions are still today held mostly only in educated circles and it is a topic that most Kolkatans would not understand.



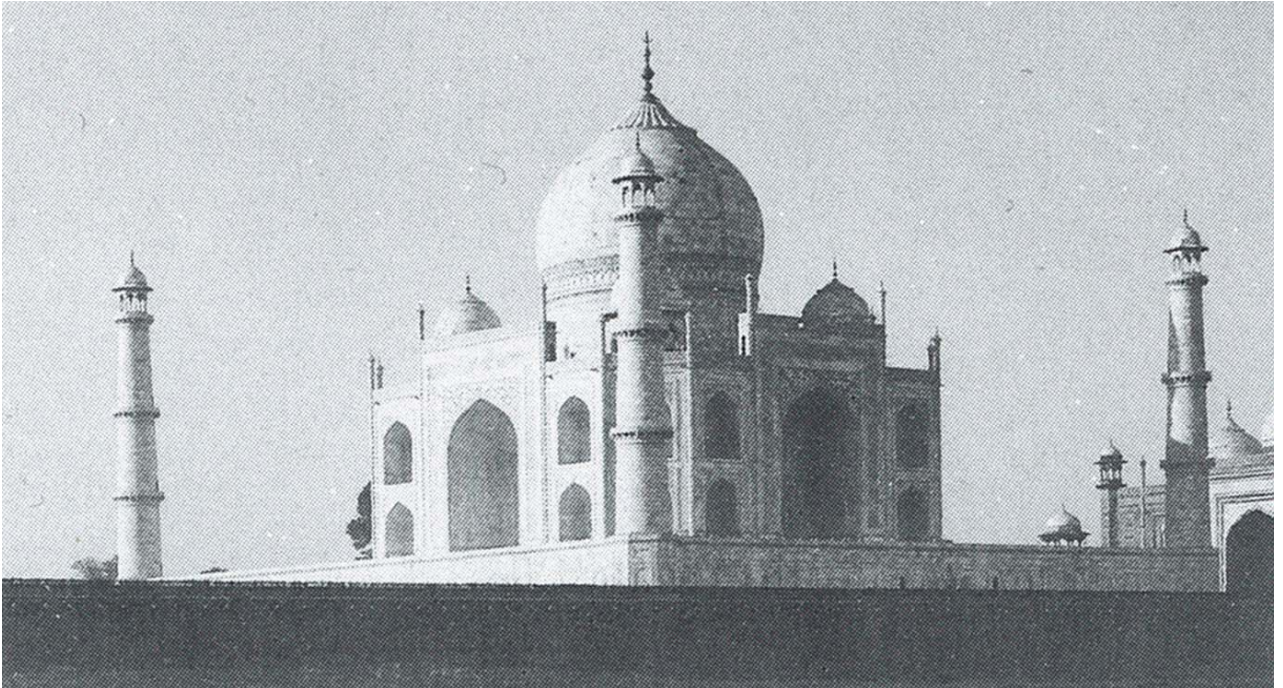
Heritage is Still a Topic Most Kolkatans Would not Understand

5.2 COLONIAL IDENTITY'S MIXED FEELINGS

The British colonization of India is only one of the many colonial processes in India's history, Leaving architectural biases behind. But it is one that has left a huge architectural volume in its territory, specially in Kolkata. This phenomenon has led to a great deal of style hybridization.

Hybridity in a colonial context incorporates elements from the rules and from the locals. In the Kolkata context British styles incorporated the local ones to show that they were the rules of India following the Mughal and due to fascination. The local styles incorporated European elements as to improve the status of their houses.

As a result of mixed feelings about the structures did occur on both sides. In Kolkata these feelings have been described with the words: affinity and rejection, love and hate as well as appreciation and rejection.



Taj Mahal Built by the Mughal in 1653

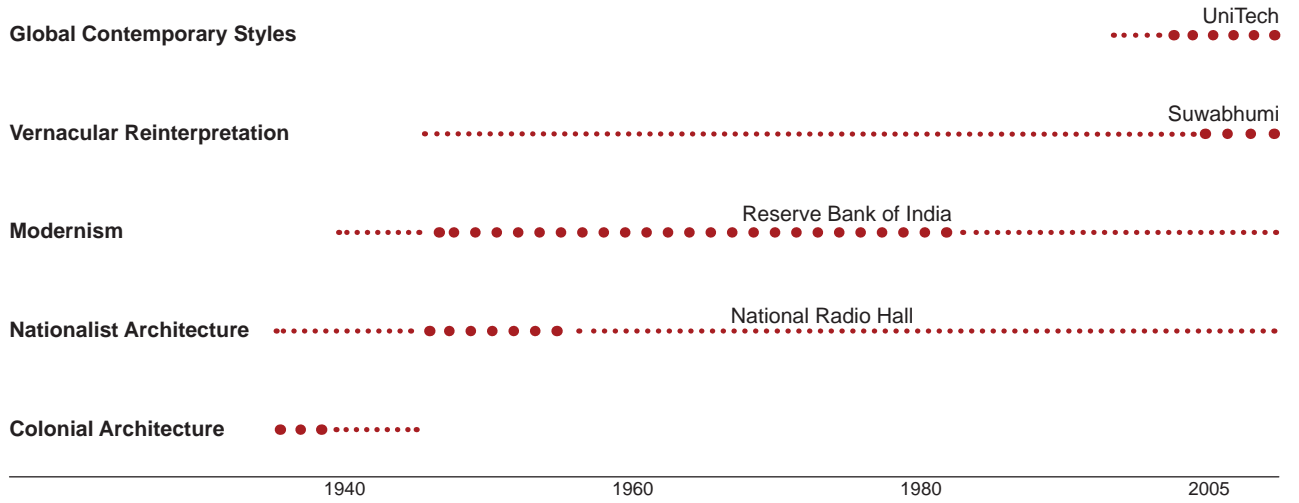


Victoria Memorial Built by the British in 1921

5.3 CONTEMPORARY IDENTITY'S ACCEPTANCE

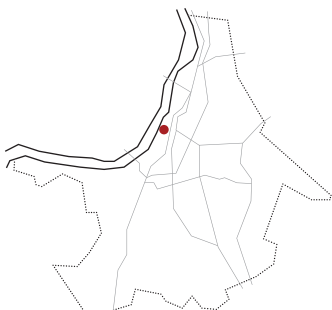
After the Indian Independence three architectural styles emerged in Kolkata, as well as in India, namely Modernism, Nationalist Architecture and Vernacular Reinterpretation. Modernism was the one that lead the way during the following years, due to its link to development.

In recent times many structure have been built by international developers in contemporary styles and others by local contractors using many vernacular hybrid elements, such as the new shopping center in Suwabhumi. This leads us to question if this means that Kolkata and India want to by part of the international community and at the same time have learned to accept its hybrid condition.



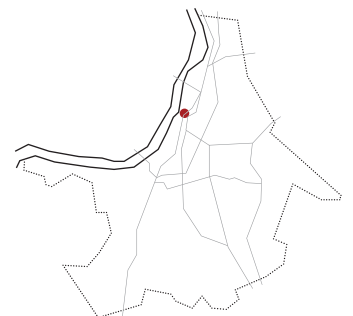


National Radio Hall, Maidan
Built: 1960's



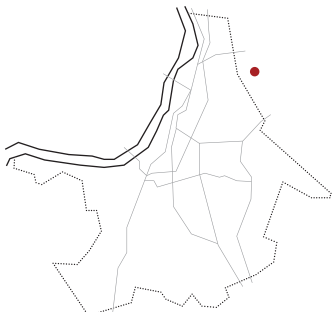


Reserve Bank of India, BBD Bagh
Built: 1960's



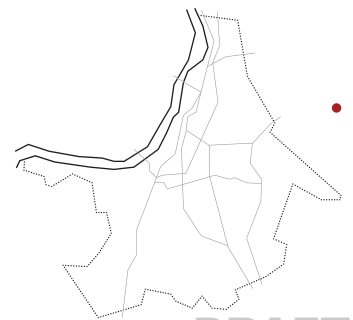


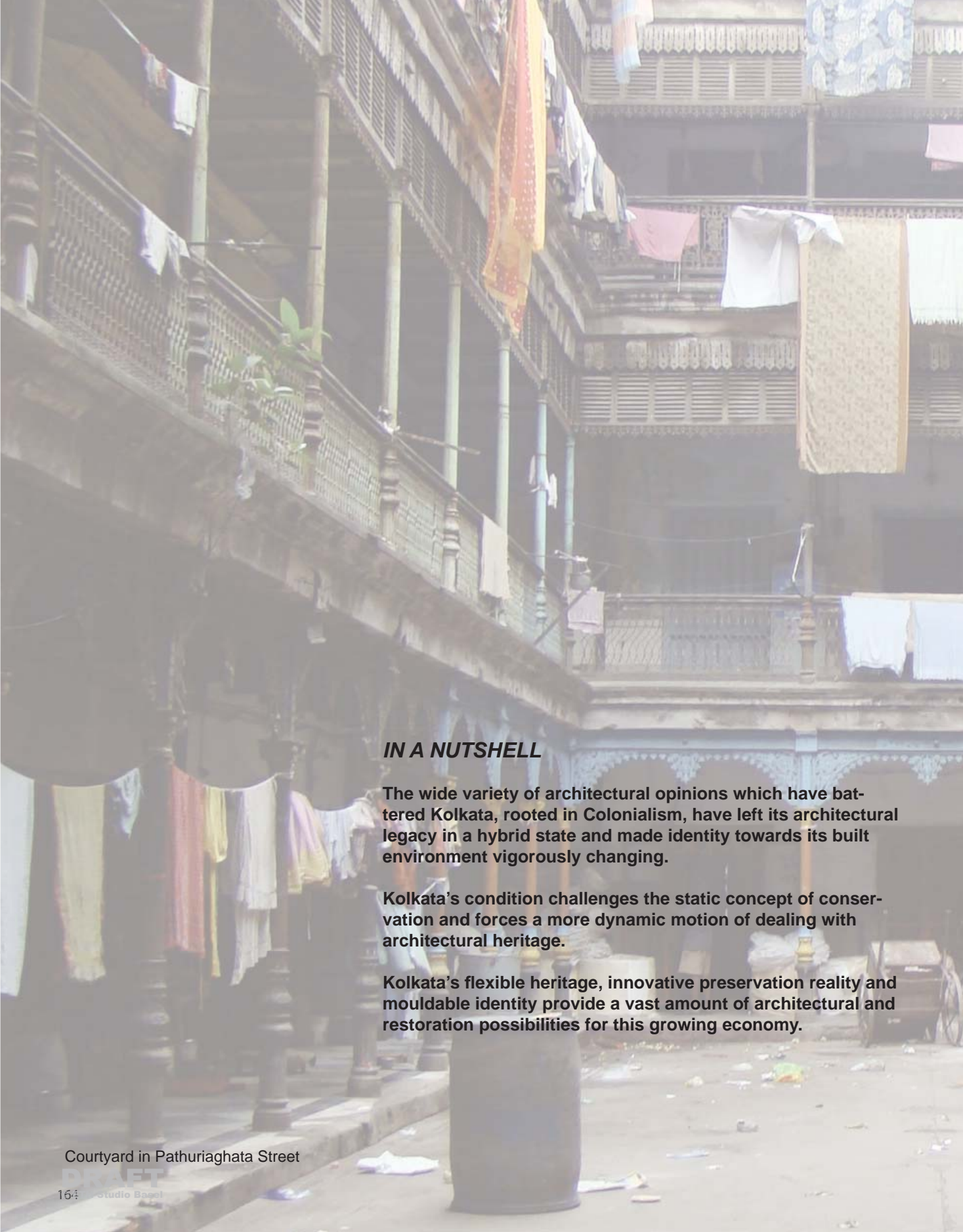
Suwabumi Shopping Center, Suwabumi
Built: 2007





UniTech, Rajarhat
Built: 2008





IN A NUTSHELL

The wide variety of architectural opinions which have battered Kolkata, rooted in Colonialism, have left its architectural legacy in a hybrid state and made identity towards its built environment vigorously changing.

Kolkata's condition challenges the static concept of conservation and forces a more dynamic motion of dealing with architectural heritage.

Kolkata's flexible heritage, innovative preservation reality and mouldable identity provide a vast amount of architectural and restoration possibilities for this growing economy.



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- Architecte, Henrike Donner, 1.12.2008
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Our thanks go to Deepanjan, Prithu and Arpan, the three Jadavpur University students. With their engaged collaboration, availability and contribution to making our stay in Kolkata to a special experience.

Further, we would like to thank our many interview partners, namely: Manish Chakroborti, Shivashish Bose, Alok Krishna Deb, Rajat Mullick, Raja Rajendralal Mallik, Partho Das, Ayan Sen and Henrike Donner.

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