BEYOND SHOCK CITY: Towards a New Cultural Model of Riverfront Development

by

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To my grandfather,
for the house that he built

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Thesis Supervisor: James Wescoat
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ABSTRACT

In India, rivers hold profound meaning formed by sacred rituals, and traditions. Today, urban waterfront degradation has led to a focus on the greater good implemented through modern objectives of development, leading to a tension between past and present modes of city-river interface. In the state of Gujarat, India, the Sabarmati Riverfront divides Ahmedabad into the east and the west, the old city and the new city, characterized by populations varying in religious, social, and financial status. Due to the tension between the two sides, the river is a physical and sociological barrier between the two 'worlds'. Howard Spodek in Shock City portrays Ahmedabad stepped in shocking contradictions: a city of extraordinary economic growth and innovation, horrendous communal violence and appalling poverty.

In order to address the divide, the Sabarmati Riverfront Development Corporation (SRFDC) was formed in 1997 to stitch together both sides and create a unique global identity for the city via a modern model of riverfront development. Today, as the decade long effort comes to fruition, it has expanded the outlook of its inhabitants but can also be critiqued as a heavy handed approach that has marginalized the lower rungs of society.

In order to demonstrate a new cultural model of riverfront development that situates itself between the modern model and traditional Indian riverfront urbanism, this thesis takes inspiration from multiple perspectives via the following three analyses: Firstly, a historiography of India riverfront urbanism leads up to the analysis of the Sabarmati Riverfront Development. Secondly, a conceptual framework is created via an analysis of an alternative cultural model along the Sabarmati, the Gandhi Ashram. Thirdly, a downstream sites’ contemporary relationship with the Gandhi ashram is traced in order to propose and develop a new riverfront design framework through a cultural approach which integrates across multiple scales. This strategic focus area is developed as a contemporary embodiment of the inclusive spirit of the ashram, resulting in a landscape which is truly exemplary of the consciousness of unity, communal identity and diversity which can lift Ahmedabad beyond Shock City, beyond the current SRFD, and beyond the Gandhi Ashram today.
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CHAPTER 1: INTRODUCTION

1.1: SHOCK CITY
1.2: THESIS OUTLINE

CHAPTER 2: INDIAN RIVERFRONT URBANISM: 1ST ANALYSIS

2.1: PERSPECTIVES ON INDIAN RIVERFRONT URBANISM

I. GHATS AND GODDESSES
II. GARDENS
III. QUASI CIVIC SPACE
IV. WASTE DISPOSAL
V. PUBLIC/PRIVATE REDEVELOPMENT

2.2: THE SABARMATI RIVER
2.3: THE SABARMATI RIVERFRONT DEVELOPMENT
2.3: THE SABARMATI CRITIQUE
CHAPTER 3: AN ALTERNATIVE CULTURAL MODEL: THE GANDHI ASHRAM:

3.1: GANDHI ASHRAM ON GANDHIAN TERMS
3.2: CORREA'S POST MODERN INTERPRETATION

CHAPTER 4: SITE INTERPRETATION AND ANALYSIS

4.1. SITE INTERPRETATION AND ANALYSIS
4.2. APPROACHING THE SITE
4.3. ACCESSING THE SITE
4.4. MOVING THROUGH THE SITE

CHAPTER 5: DESIGN DEMONSTRATION

5.1: PROGRAMMING
5.2: OVERALL CONCEPT
5.3: PROGRAM INVENTORY
5.4: THE SITE PLAN AND ITS' ELEMENTS

CONCLUSIONS

BIBLIOGRAPHY
CHAPTER 1: SHOCK CITY

INTRODUCTION

Howard Spodek labels Ahmedabad as Shock City and attributes the coining of the term to British Historian, Asa Briggs. Spodek says, for Briggs, a shock city is, "a centre of problems, particularly ethnic and social problems, which provoke sharply differing reactions from visitors."1

Howard Spodek attributes the roots of Ahmedabad's shocking state to being in the front line of national problems. He divides Ahmedabad's socio-political and cultural history into three segments in the last century in which Ahmedabad was a shock city, an arena in which developments of national importance took place first and most intensely. Below each segment is called out and relevant events highlighted.

1. Gandhian Era (1915-1950)
   -The Sabarmati Ashram
   -The Freedom Movement

   -An Industrialized World Class Company Town: The Calico Mills
   -Building Civic Institutions:
     Louis Kahn, Corbusier

3. Creativity and Chaos (1969-)
   -Closing of the Mills: Early 90's
   -Ahmedabad 2000: A Capitalist City out of Control
   -The Gujarat Pogrom: 2002

1 Howard Spodek, Ahmedabad: Shock City of Twentieth-Century India (Indiana University Press, 2011), 5.
Ahmedabad
Shock City of Twentieth-Century India

Howard Spodek

Figure 1: Book Cover: Shock City by Howard Spodek
In the Gandhian Era (1915-1950), the Independence movement was led by Gandhi as he started his salt march from his ashram, his home, on the outskirts of Ahmedabad. Its' industrial reputation grew as the Manchester of the East. (1950-1980) Its' textile moguls impacted national economies by delving into entrepreneurial areas such as chemicals and pharmaceuticals. With their profits they brought both the best civic and educational institutions to Ahmedabad such as the Indian Institute of Management, the National Institute of Design, and the Physical Research Laboratory. These industrialists worked together with the Gandhian Textile Labor Associations enabling workers' rights. India's foremost women's labor organization, SEWA, was also born from this effort. As the city kept westernizing, due to internal domestic restructuring of the textile mill industry, virtually all mills had shut down in the 1980's, leaving the east side of the city highly industrial but in decline. The civic leaders attuned to a Gandhian legacy also faded, and later in the twentieth century, Ahmedabad looked to establish a new political center as India was forced to establish a new liberalized economic regime. Chaos ensued.

Ahmedabad was in the center experimenting with a series of political strategies. Meanwhile, due to the loss of jobs of the laid off textile workers from the industrial decline, communal segregation had increased. Political coalitions built on class and caste interests caused social and cultural conflicts. The Bharatiya Janata Party (BJP), and its militantly Hindu allies attempted to garner support for a Hindu National State, merging militant Hinduism and politics. The politics led to deadly consequences, and turned Ahmedabad into India's epicenter of political-religious violence.

The segregation occurred in part due to the closure of the mills, leading the segregation of Ahmedabad's population on a communal basis. With the mills in place, there were reasons for workers to live intermingled in workers' housing, and not in separate neighborhoods. However, occupational segregation due to mills being divided in subsectors, were reflected in the neighborhoods. Spinners were of the lowest castes, and skilled weavers were known to be Muslim. The mill closures only exasperated the situation, along with

2 Ibid., 12.
BEYOND SHOCK CITY: A LANDUSE DIVIDE

INSTITUTIONS AND CIVIC SPACES

Residential
Educational Institutions
Industrial
Commercial
Open Space
Agricultural Land

Figure 2: A Landuse Divide

Image Source: Ahmedabad Municipal Corporation - Representation by Author

13
the riots of 85-86 leading to more spatial segregation for the sake of safety. (Figure 4) In 2002, the worst riots were experienced since India’s partition in 1947. Howard Spodek writes, “Approximately 2,000 people, overwhelmingly Muslims, were killed, about half in Ahmedabad. Some 140,000 were rendered homeless, about 100,000 in Ahmedabad”.

These riots intensified segregation, and led to communal, social and geographical divisions. By 2011, 2.5 million lived in the eastern industrial part, and most were middle management personnel. One the West, in contrast, only 675,000 people lived within the city limits, and private builders kept constructing luxury apartments, malls, cinemas and posh cultures. Due to these demographic, morphologic, and economic divisions, Ahmedabad in the 21st continues to be fractured in terms of inter communal and inter religious accommodation. The only thing that remains constant is its dynamic ability to change. The violence of 2002, did not stall Ahmedabad from its’ growth. Development became the new agenda, to attempt to go beyond shock city.

Beyond Shock City?
The Sabarmati Riverfront Development

One such mega development was the Sabarmati Riverfront Development Corporation. Sabarmati, originally a non-perennial river, turned into a year-round body of water in 2004. The waters of the Narmada River were diverted into the Sabarmati river bed, leading to the redevelopment of the eleven km stretch along both sides of the river bed, providing a public walkway, amenities for recreation and private land development that would pay for the project and enhance Ahmedabad’s commercial use.

Noted as an environmental improvement, social upliftment, and urban rejuvenation project that will renew Ahmedabad, one must wonder, whose Ahmedabad? The project having led to a marginalization of the lowest rungs of society, who were moved to the outskirts of the city in order for global branding, has led to mixed feelings. As Gujarat chief minister Narendra Modi seeks to promote “Brand Ahmedabad,” “in an attempt to reinvent,

3 Ibid., 13.
4 Ibid., 14.

Figure 5: Towards a Modern Development

Image Source: by Author

Figure 6: Marginalization of the Poor

Image Source: by Mariana Felix Paisana
rediscover and repackage the 600-year-old city, the narrative becomes skewed towards modern ideals of development, at risk of exclusivity. So even though the riverfront development is seeking to lift Ahmedabad beyond Shock City, it can only partially succeed. As Ahmedabad's economic and physical development continues to be impressive, its communal violence and segregation remain lurking in the shadows. Spodek presents a vision, quoting SEWA, Self-employed Women's Association, a leading women's advocacy organization, in his concluding chapter as a means of looking towards a hopeful future.

The real task of tomorrow is the rehabilitation of "hearts and minds," of getting people to live and work together in the same occupations, and to study together in the same schools. We have to organize and join hands in the same organization. That is the India to which we belong. That is our tomorrow.

-Self Employed Women's Association, Shantipath (2002) 

This vision by SEWA is truly one that can take Ahmedabad beyond shock city. This thesis seeks to contribute to this vision via the demonstration of a cultural model of riverfront urbanism, not by being declarative that it will solve the immense problems laid out above, but as a step towards a more hopeful future. A small ripple can create echoed effects, and there must be a start to this process of the rehabilitation of "hearts and minds." The Sabarmati Riverfront Development has become a model for future riverfront developments, and as mentioned in Shock City, has received national attention. The thesis narrative will weave SEWA'S vision downstream in the eastern banks of the Sabarmati Riverfront Development, which as it exists currently remains a partially successful attempt to lift Ahmedabad towards a better future.

In order to arrive at a cultural model, three analyses will take place and are laid out as follows:


7 Spodek, Ahmedabad, 248.

8 Ibid., 5.
1.2 THE THESIS OUTLINE

Chapter 2: Historical Analysis: Indian Riverfront Urbanism

Chapter 3: Precedent Analysis: The Upstream Exception: The Gandhi Ashram

Chapter 4: Site Interpretation + Analysis: The Downstream Exception

Chapter 5: These analyses help shape a schematic cultural waterfront design concept that is demonstrated in this chapter.

Below, each chapter is briefly described.

Chapter 2: Historical Analysis: Indian Riverfront Urbanism

2.1: Perspectives on Indian Riverfronts

Firstly, through a historiography of Indian riverfront urbanism through selected case studies of river Yamuna, Gomti, and Sabarmati, one discovers five themes.

1. Ghats and Goddesses
2. Garden
3. Civic Space
4. Waste Disposal
5. Public/Private Redevelopment

Methods:
Methods include literature review of academic theses, and books on sacred water architecture and landscapes in India in the span of the last twenty years. The fourth theme, Public and Private Redevelopment leads to the analysis of the Sabarmati Riverfront Development in Ahmedabad.

2.2: The Sabarmati Riverfront

The fourth theme leads to the Sabarmati, the river on which this thesis is situated. In order to address the waste issues, where cities originally had their back to the river, they have been now been redeveloping and returning to the waterfront. The Sabarmati Riverfront Development is a partnership between the Ahmedabad Municipal Corporation, and HCP, an urban design and service firm. It is also the most frequently consulted as an example for future projects involving public and private redevelopment. Three main objectives emerge: making the riverfront accessible to the public, creating riverfront parks, promenades and ghats to enjoy the water, and creating a memorable identity for Ahmedabad. In order to create a
memorable identity for Ahmedabad, the project runs the risk of losing authenticity while manufacturing heritage.

Methods:
The method for analyzing the Sabarmati is through a photo essay with captions. A temporal perspective is important to situate the objectives of the riverfront development in a culturally sensitive context, and thus create a before and after narrative. For an appraisal of the current situation, a rapid overall assessment of the project via a site visit between Dec '12 and Jan '13 is conducted. This section creates a narrative using photographs and captions to illustrate the goals of the development and illustrate some of the tensions apparent. The lenses for analysis are divided between goals and objectives and associated weaknesses.

2.3: A critique

The weaknesses of the project are brought out in prose via a critique of the Sabarmati Riverfront Development. The methods for this essay include a literature review scanning a variety of sources. Firstly, reports published by the salient organizations involved in the making of the project are consulted. Next, journal articles that present varying opinions of the project are used for understanding the project via a critical eye. Lastly, interviews with architects, NGO's and academics are conducted to illustrate a wide range of perspectives. As a conclusion to this section, an exception to the current riverfront redevelopment is identified upstream which leads to the next chapter, an analysis of the precedent, the Gandhi Ashram.

Chapter 3: Precedent Analysis: The Gandhi Ashram

A postmodern Gandhian framework is generated as ideals for planning and design. This framework is then applied to a downstream site along the river resulting in a landscape that will decrease vulnerability and increase civic awareness through an integrative cultural model. This thesis creates a methodology that studies the Gandhi ashram on Gandhian terms, then studies Charles Correa's museum within the ashram as a post modern interpretation of Gandhian ideals.
3.1: Gandhi Ashram in Gandhian Terms:

While at the ashram during the early 1900's, Gandhi formed a school that focused on manual labor, agriculture, and literacy to advance his efforts for self-sufficiency. The Sabarmati Ashram, otherwise known as the Gandhi Ashram, forms the basis for the theoretical framework. This framework re-visits Gandhi's ideals of settlement in order to distill contemporary ideals for development that exemplify a spirit of community and inclusion. The methodology for distilling Gandhian ideals of settlement includes a primary literature review, and secondary literature review.

The primary literature review is conducted by doing keyword searches of the words, City (ies), Ahmedabad, Village, Sabarmati Ashram, and settlement in Gandhi's online Collected Works Database. Through his quotes, articles and letters, one can trace an ideology of inclusive planning that if revisited and reinterpreted can help create a new model of development in the Sabarmati context. The secondary literature review focuses on what others have said about Gandhi's views on the city and the village, as well as his planning ideals. A critique of his approaches is laid out; in order to distill a set of ideals that translate from Gandhi's views of settlement during his times, to a set of ideals for the current riverfront development.

The following research methodologies are used:
- Site Visits to the Gandhi Ashram that focus on mapping spatial qualities. Current site survey and illustrations of the original site map portray how the physical state of the Ashram has evolved over the years.
- An interview with the director of the Gandhi Ashram, Dr. Tridip Suhrud sheds light onto Gandhi’s past and present relevance in his view. As a result, a postmodern Gandhian framework was generated as ideals for planning and design.

  i. Sustainable
  ii. Empowerment
  iii. Sanctuary
  iv. Equity
  v. Civic-ness

3.2: Gandhi Ashram on Correa’s Terms

The Gandhi Smarak Sangrahalaya was designed and built 1958-1963. Designed by Charles Correa, this museum includes
a memorial museum, and a study center. Correa interpreted Gandhi’s advocacy for the village through a postmodern lens, interpreting it through the idea of village and civic space. His museum, located within the ashram boundaries, honors Gandhi’s advocacy for the village spatially through a sense of openness and freedom. This thesis takes the stance that it can be re-interpreted again downstream on an urban scale.

Chapter 4: Site Interpretation and Analysis: The Downstream Opportunity

This third analysis traces the downstream sites’ contemporary relationship with the Gandhi ashram in order to propose and develop a new riverfront design framework through a contextual and cultural approach which exemplifies a contemporary sense of integration across multiple scales. This chapter is organized in the following parts:

4.1: Site History and Legacy
4.2: Approaching the Site
4.3: Accessing the Site
4.4: Moving through the Site

4.1: Site History and Legacy

The site’s history dates back to the Mughal era where two monuments can be found on the site including a Mosque, and a Tomb from the 1500’s. Next, in late 1800’s, the Calico Mills were founded on this site and became one of the most modern trendsetters of the Indian textile era. In the early 1900’s, Gandhi, worked with the owner of the Calico Mills, Ambalal Sarabhai, to maintain labor harmony and solve issues related to workers’ discontent. Ambalal, in return, helped fund Gandhi’s freedom movement with the profits of the mills. Since the 1980’s, the mills have shut down. Today, though the mills have been abandoned, and remain open for development. For historical research, literature review was conducted and newspaper articles were consulted for determining the Calico Mills’ contemporary heritage importance.

4.2 - 4.4: Spatial Analysis

The site is surrounded by various communities elaborated further in the thesis. One crucial surrounding community, Ram Rahim, is a site exemplary of communal harmony and a contemporary spirit of inclusion fostered by the Gandhian NGO, Manav Sadhna. Having
Figure 11: The Downstream Site Today

Image Source: Google Aerial Imagery
maintained peace throughout the riots, they were rewarded the Indira Gandhi Award for National Integration.\(^9\)
Situated upstream within the Gandhi Ashram, but with satellite activities downstream, Manav Sadhna has been building a community center for Ram Rahim ne Tekro, an informal community comprised of Christians, Muslims and Hindus. This unique harmonious community remains an exception to Spodeks’ Shock City, and surrounds the largest open space remaining on the waterfront. Methods for site analysis include rapid site analysis through site visits to the abandoned mills both in ’09, and in ’13. For secondary analysis, aerial imagery is used for creating a temporal analysis of the site through Google earth historical imagery that reveal the shifting edge of the river, along with the demolition of the calico mills.
For socio-cultural analysis, and understanding the surrounding demographics, an interview is conducted with the director of Manav Sadhna. A guided site visit to their community center in Ram Rahim ne Tekro was invaluable in relating to the existing community center, an inspiration for the design demonstration.

**Chapter 5: Design Demonstration: A Cultural Waterfront Model**

Overall, this section leads to the creation of a new model of cultural riverfront development that takes into consideration multiple layers of historical and cultural information. This alternative vision is demonstrated in the re-designed Calico Mills, the largest waterfront open space located downstream on the Sabarmati Riverfront Development resulting in a landscape that may decrease vulnerability and increase civic awareness through an integrative cultural model. The idea of inclusion is manifested spatially in the design through access from all sides, and the following elements: the maidan, the extension campus, the historic path, and the peace institute.
CHAPTER 2: A HISTORIOGRAPHY

INDIAN RIVERFRONT URBANISM

2.1: Perspectives

I. GHATS AND GODDESSES:

River Yamuna: The Braj Region
   i. Mathura
   ii. Vrindaban

Derived Relevance:
• A contemporary ritualistic path
• A porous access to water
• Layered modes of pedestrian engagement

II. GARDENS

River Yamuna: Agra
   i. Mughals
   ii. Colonial
   iii. Today

Derived Relevance:
• Open pavilions
• Waterfront gardens
• Sensorial landscape

III. QUASI CIVIC SPACE:

Gomti River:
   A. Nawabi
   B. Colonial

IV. WASTE DISPOSAL:

All rivers

V. PRIVATE/PUBLIC REDEVELOPMENT

The Sabarmati river:

2.2: The Sabarmati River

2.3: The Sabarmati Riverfront Development: A photo book

2.4: The Sabarmati Critique
INTRODUCTION

Five perspectives, portray the waters’ edge in an Indian context. The river has a latent capacity to be a major generating force for development. The ‘Indianness’ of today’s riverfront is constituted by tradition, religion, and century old settlements that have left a tangible physical heritage on city-river edges.

The unique typologies associated with the water-land interface are generated from historic relevance. The presence of the waters’ edge influences the urban grain and parcels and growth of these river towns. Today, these typologies face degradation due to water pollution, and industrialization. Due to waste disposal, the riverfront has become an open drain in many cases. Efforts are required to retain the unique urban language and character. The river edge is still an important axis for the commerce that occurs due to riverfront activities. The beggar, the florist, the peddler that takes advantage of tourists, the groceries, the street food vendors, and the sweet shops, all survive along the rivers edge. Moreover the plazas along the waterfront allow for breathing space, a transition between the open edge, and the dense grain of the traditional Indian city.

Today, discovering an identity for the Indian waterfront has been a hard task for the public agencies due to the conflicting agencies and interests, along with the propensity of the rivers edge to be a obvious choice for squatter / transitional communities.

Some waterfronts are being privatized with one dimensional commercial activities, while others are used for housing, and in some cases reserved for transportation links. Recreation has been an important force that lines waterfronts with modern parks with guards at its gates. Inclusivity has become an exception, even if the project parades itself as inclusive. To the average citizen in the globalizing world of India, the role of the river has gone through several transformations. The question remains, how can one operate within a contemporary riverfront where exclusive religious values are not the driving force. The shift from private elite use to public use can also be traced.

These perspectives are meant to give the reader an overall view of the indian riverfront landscape, in order to situate this thesis within a larger context of sensitivity, and cultural consciousness.
2.1: Perspectives

![Image of the Braj Region](https://upload.wikimedia.org/wikipedia/commons/thumb/e/e9/UttarPradesh_district_location_map_Mathura.svg/250px-UttarPradesh_district_location_map_Mathura.svg.png)

Figure 13: The Braj Region

Figure Source: https://upload.wikimedia.org/wikipedia/commons/thumb/e/e9/UttarPradesh_district_location_map_Mathura.svg/250px-UttarPradesh_district_location_map_Mathura.svg.png.

I. Ghats and Goddesses: River Yamuna

The landscape is seen as a source of divine power, and vision is subjective and complex. In order to distill the ephemeral essence of Indian Riverfront Urbanism, the Yamuna is a good case study. Yamuna is among the divine triad of river goddesses (Ganga, Yamuna, Saraswati). The two locations, Braj and Agra, along the Yamuna reveal varying traditions, significance, and typologies of the river-city interface in India.

In Braj, the river is sacred because of its purifying and divine power. The metaphor of washing away one's sins drives pilgrims all over to bathe in the Yamuna. For the Braj landscape, the Yamuna is depicted and believed as animated, divine, and idyllic pastoral setting. In Agra, the river is historically a transportation artery and played an important role for the siting of royal enclaves and palaces via its real estate value. Through the case studies of these two cities, the significance of the Yamuna and its effect on the city-river interface will be revealed.

Along the Yamuna located in the sacred region of Braj are clustered pilgrim sites, including Mathura and Vrindavan. In Mathura the ghats were the entry to the city since the river was the main artery for transportation. The public street runs parallel to the ghats connecting to the public market. Vishram Ghat is used for daily bathing rituals and festivals. Braj is a cultural zone, and within it Mathura, an ancient city forms its nucleus. Myths and legends have made Braj known for being Krishna's childhood city. Krishna is a beloved god in Hindu belief, and portrayed as god-incarnate in the epic Mahabharata and has thus made Braj a major pilgrimage spot.

The river Yamuna is a significant presence in this sacred landscape and has holy spots on both its banks. The culture of Braj, manifested in its architecture, landscape, ritual, festivals, and devotees, makes the Yamuna a part of the belief of the continuous presence of the divine. The landscape is seen as a source of divine power, and vision is subjective and complex. Here the depth of one's belief and purpose of visit informs vision.

The interface between land and water is marked by several elements:

Mathura: City

1. Steps that allow access to water for bathing.
2. Temples and Shrines for Worship
3. Porous Architecture that facilitates vision and movement in the Public Realm

Mathura, an ancient city, is located on a curve of the river Yamuna and is surrounded by other sacred centers including a few adjacent villages including Vrindavan. Today, Mathura has a population of 250,000 people. Its’ highly densified and has an edge defined by ghats located along the Yamuna. Ghats, or steps to water, at Mathura are the result of centuries of visual and tactile interaction with the river Yamuna. They make up the public landscape running for 3 km and interrupted by residential buildings and shrines. These steps generate a plethora of activities around the year that celebrate Krishna’s life. This sacred association converts the landscape into a sacred entity giving each typology a metaphysical sense. The stairscapes, stone temples, trees, and pavilions animate the divine landscape and form a platform for the adoration of the most beloved deity, Krishna. In Mathura, visual axis shifts with meandering streets as they intersect with ghats.
Rituals and festivals bring lots of visitors and commercial activity along the river. One such ghat is the Vishram Ghat. Today, this remains the central spot for pilgrims to visit. Connected by the main streets in town, Vishram Ghat occupies the center of the river front and is situated at its lowest point. The stretch of twenty two steps known as Vishram Ghat derives its significance from the legend of Krishna and Balarama having rested after killing their evil uncle Kansa. Due to this reason, the association with death has led to special rituals related to the end of physical life. The belief is that the soul can gain peace if it is laid on holy ground. Thus there are special areas where bodies are brought in procession for the performance of last rites. It is a popular spot for bathing after the performance of life-cycle rituals and at festivals. A series of arches in Vishram Ghat, frame the way to the water forming a sequence that directs gaze and movement. Though there is no large visual axis linking grand monuments, there is a heterotopic order. The Visual axes shift with the meandering streets as they intersect with the ghats. The pavilions along the river beckon those that are in the market to come to the water’s edge. The scale of the river’s edge is human and though not grand or physically vast in its scope, the spirit of occupying the ghats and engaging with the Yamuna, makes for a limitless spiritual experience where one is looking both inward and outward simultaneously. The extremities of the crowded street, to the panoramic view of the river allows for both experiences to be enhanced.

In Braj the distance is collapsed. The landscape is seen as an animated living thing meant to be occupied on various realms. The viewer seeks union between himself and the deified landscape. There are two kinds of interactions between man and landscape. One is the divine worship of the landscape, and two is the physical act of bathing in the river via ritualistic traditions. Holy dips are akin to cleansing the body of both moral and physical pollution. Thus Braj has lots of ghats that manifest architecturally as direct

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12 Sinha and Ruggles, "The Yamuna Riverfront, India," 146.
connection to water and enable access to the water as the river level changes. Having been built over time, the alignment is dependent on the urban street network and the shifting river. These ghats take people down to the river in masses. The public-private nature of the ghats is manifested in different levels. The private enclaves were the upper stories owned by the powerful, but the river and its ghats were public and supported various activities. Much of it even though it’s built in the 19th century, has retained its character today. However, due to the increasing pressures of population, maintenance has become a problem. Also, the river is being misused by washing utensils and clothes, and in some cases even for defecation.

**Vrindavan:**

While the Mathura ghats are defined by life events of Krishna, Vrindavan is associated with more romantic notions of the myths surrounding the Krishna consciousness. Krishna known for being the destroyer of evil and protector of weak, a charioteer, and a divine lover with a magic flute, is manifested in the landscape today through cultural practices of spirituality such as plays, and singing. The river interface in Vrindavan is of a softer nature, where pastoral landscapes line the edge. Their archetypal form, much celebrated in poetry and songs, is of a clearing in a grove with the Yamuna flowing close by. They invite raas-lila, singing sankirtan (devotional chanting), and storytelling during pilgrimages. Vrindavan is especially a node for devotees seeking transcendence and adoration of Krishna and his essence which is embodied in the landscape. In Vrindavan, the ghats stretch across one and a half miles and there are thirty eight points of entry in the form of steps. Out of these 38, only five have water today due to misuse and urbanization. Keshi ghat is one that gives direct access to water, and is thus used extensively. The ghats run along the course of the river and its alignment is also based on the bends of the water body. In 1790, Keshi ghat was built by the royal king for his wife. The haveli, or palace was meant for her rest and enjoyment, and the

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Figure 21: A View of pilgrims bathing at Vishram Ghat


Figure 22: Vrindavan: Krishna surrounded by Gopis in a clearing within a grove.

Figure 23: Vrindavan: Growth of the City around the river bend


Figure 24: Multiple Modes of Public Engagement: Keshi Ghat
Figure 25: The Ritualistic Path

Figure 26: The Ghat Section

Figure 27: The porosity of the Ghat
adjacent pandwala Ghat was built later by an influential leader in Varanasi. This pair of ghats is essential to the overall image of Vrindavan and constitutes the most significant element. These ghats are the only place where the river touches the steps. Beyond this ghat, the built edge of town forms a course that once followed the river, but today is silt and sand-beds. The pilgrims that do parikrama, or circumambulate around the temples, are meant to traverse these ghats. On one side are steps to water, and on the other are changing rooms. The passage in between the enclosed rooms of the ghats, and the steps is part of a larger system of parikrama, or religious path of pilgrimage.

Today, the havelis and ghats form a structure that is inseparable. The haveli is predominantly taken over by squatter communities, and the lower floors have shrines but are mostly infested by bats. The ghats remain public. Worship of the river occurs from the ghats, the pavilions that are attached to them, or in the colonnades. The porosity of the ghat architecture allows for the pilgrims the option for multiple modes of engagement with the river. Worship can occur from afar at varying heights, whether it is on the topmost step or the half immersed one that requires a dip. One can sit on the steps and rest with the river in view or climb up to the pavilions and get a framed and elevated view. The sequence is as follows:

1. The Colonnade
2. The Terraces
3. The Ghats

The Colonnade is a space that allows one to be in shade and be inside and outside. Below the colonnade, steps and terraces allow for an even closer view of the river. The Burj, or stone platforms usually octagonal in shape, occur at intervals extending out into the water. The various religious symbols surrounding these areas create a visual splendor that has made this pair of ghats into an iconic representation of the religious geography of Vrindavan attracting pilgrims year round.
II. Gardens: River Yamuna

Agra is founded by the Lodis and the Mughals and is sustained by the river Yamuna. Located on the Northern Gangetic Plains on the bank of the Yamuna, the river represents a key to cultural practices, and religious heritage. The land-water interface is marked by varying social functions and religious rituals, architectural responses and landscape symbolism.

In Agra, the Yamuna did not have such dimensions of sacrality and association. It is seen as a useful artery of transportation and a source of water for maintaining the life source of the city. Also, the real estate value of the water translated into waterfront gardens, and palaces fronting the river. The main typological elements of the Agra-Yamuna interface are as follows:

1. Walls enclosing royal gardens
2. Palaces
3. Tombs
4. Pavilions on Riverfront Terraces

The main objective was to create a private interface with enclaves and allow for the common citizens to have interstitial access to the river, if any at all. The main three objectives the Mughals had in association with the Yamuna was to use it
as a plentiful water source, an artery for easy transportation, and for its real-estate values of views and winds. There is a clear separation of the viewer and the viewed. In multiple photographs of the Taj Mahal, when looking at it from the adjacent landscape, one can sense the dominant separation. The Taj literally stands on a pedestal, separate from the realm of the landscape and is surrounded by pavilions for the elevated view of the surroundings. The ruling class craved proximity to the river as a source of aesthetic pleasure, and winds. However, they wanted to maintain the separation of the palace courtyards and pavilions from the common residents of Agra. Thus enclosure walls and raised terraces separated garden from river, protecting the palace from the floods and creating a private haven for the wealthy. At the Agra Fort, the elegant pavilion of the Khaas Mahal, the emperor lived perched high above the river, surrounded by formal gardens on one side, to the vast view of the river and gardens on the other bank. The separation between the viewer and the viewed is critical, as it leads to a sense of power and ownership of both the river, landscape, and the society below the pavilion. Aside from the palaces, dozens of gardens lined the river bank and were used as elite enclosures for informal leisure. However, they were still separated from the river by retaining walls that were high and protective. The pavilions that were on these gave the viewer a simultaneous presence of both the river and the gardens within. Balconies and screens played with the visuality enhancing the experience between the river and the viewer. Direct access to the river did exist but through boating docks that were guarded. Thus, it can be traced that the river in Agra is an important element, but as a moving element that is meant for a purpose. In order to fulfill its purpose, the river had to be controlled and separated in order for specific controlled views to emerge framed in simultaneous splendor of both river and palace. In Agra, the purpose of the Yamuna was a useful transportation artery, and aesthetic device for the gardens that lined the banks.

16 Sinha and Ruggles, “The Yamuna Riverfront, India.”
Figure 32: Aerial Imagery of the Taj Mahal
Agra like other Indian cities has gone through rapid change in its physical and cultural landscape. Historically, its glory was gained with the Mughal Empire rule when Agra was the capital city. Agra during the Mughal period was a walled city surrounding the fort and the Taj Mahal. The riverfront was lined with gardens and palaces for the royal families on both sides of the river. During the colonial period, the south of the city was allotted as the Cantonment. The historic sites were classified as "Protected Monuments" and surrounding landscapes were commercialized as roads, transportation, and population continued to evolve. In the post-independence period, expansion took place in all directions and emerged far beyond the historic fabric. The Yamuna remains neglected in all of this.  

The polluted Yamuna today has become a drain of the city. Though efforts have been made to clean it up, the results have not been significant. The overall juxtaposition of the Taj Mahal with the dry river hardly is a reminder of the splendid artery it used to be in its Mughal era. Since the water levels vary in different seasons, there is a varied experience of views from the monuments. The banks along the river have a variety of uses, users and activities. From Industrial, urban, to agricultural, recreational and touristic, the landscapes lie in a hodgepodge of sorts. In between these scattered parts, lies the river that is mostly neglected and taken over by a dense growth of vegetation. The Yamuna action plan currently is trying to clean up the river and alter the flow by building a weir further downstream which would increase the level of water and enhance the aesthetic quality of the riverfront. Agra, a city of 1.2 million people is only partially dependent on tourism, and other industries and businesses play an important part. Further development is trying to address the integration of the tourism landscape with the residents of the city. In a recent project called the Taj Heritage Corridor, the UP government tried to reclaim 30 hectares of flood plains for purposes that were not made public. The proposal was carried forward without any public discussions, but stopped due to large opposition for its impacts on the Taj Mahal.
Figure 34: Yamuna Riverfront


Figure 35: Pavilions and Gardens adjacent to the Yamuna
III. QUASI CIVIC SPACE: RIVER GOMTI

Lucknow's river was used as a transportation artery and recreational link with gardens on the south bank. Through time the riverfront went through different phases. The history of Lucknow is linked closely with the river Gomti. Lucknow as it is today was developed in 1775 by the Nawabs who belonged to the Awadh dynasty. The elite of Avadh used Lucknow as a royal playground, for the pursuit of culture and arts. However, the takeover by the British led to the Sepoy Mutiny of 1857, where the British Garrison was laid under siege by revolting Indian soldiers. After the British rule was re-established, a series of royal buildings were destroyed from the Nawabi era. Lucknow never got back its lost glory, but today it exists with remnants from the past scattered. Under the post-colonial, post-independence rule, modernization and urbanization have changed the face of Lucknow. The development of the city occurred along the Gomti, the oldest and most significant artery of the city that flows from east to west. As a tributary of the Ganges, it is considered sacred by the Hindus, but it has not been associated with religious functions, but rather, the Gomti, in the 18th and 19th century performed as a route for trade, and recreation. The palaces and nawabi complexes were found along the banks fronting the Gomti. The parties that occurred along the river involved firework displays from small platforms that went along the river, allowing the elite a direct view from their residences along the river.\(^{19}\) It was a utilitarian approach that led to the Gomti being significant and not spiritual aspects like the Mathura ghats. The river had associated with it orchards, gardens, and farms. Also, with it being the primary transportation artery for essentials and luxury goods, the river contributed to the economics of the city.

**Nawabi Period**

This elite landscape during the Nawabi period contained palace and suburban gardens, country houses and parkland. The water from the Gomti irrigated the numerous gardens surrounding it. \(^{20}\) Grand Architectural gestures were made for political statements.


\(^{20}\) Nagpal, “The Gomti Riverfront in Lucknow, India.”
Figure 36: A View at Lucknow. British Library Collection.


Figure 37: View from River Gomti

The river was used for its aesthetics, and also for its environmental positives. The cool breezes, and boat rides gave the elite families a retreat from the bustle of the city. The relationship of the buildings with the riverfront varied, where some directly fronted the river, and others were enclosed by high walls. The stratification of experience ranged from roof top terraces, and pavilions to direct boat rides on the river looking at the palace complexes. For recreation, walled gardens were the ideal place for the elite nawabi families to rest. Commemorated gardens were known as baghs, an urdu word for garden. These proliferated the edge of the river with intricate pavilions and water channels. On the other extreme large areas near the water were used for hunting and elephant fights. These open grounds, are known as maidans today. Similar to the Yamuna riverfront in the 16-17th Century, where it was lined by Mughal gardens and palaces, the difference lay in the typologies of the fronting buildings. The French Influence on the Nawabi waterfront occurred due to the superintendent of the Nawab arsenal, who designed buildings influenced by European detailing.

Colonial British Mutiny: Backwaters
The 1857 Revolt led to the administration being passed from the East India Company to the British Crown. The battles between the Indian uprising and the British were fought within the great architectural sites, and in the process buildings were destroyed or modified. The result led to political, social, and economic changes which manifested itself onto the landscape. The ruins and the desolation, led to the loss of the magnificence of the original Nawabi riverfront. The Gomti now flowed through a battle ridden landscape where the remnants of the wealth and splendor of a Nawabi past took on an eerie shade. The rebuilding effort led to the clearing of such ruins without any concern for lost heritage, and military efforts led to a engineered effort towards new infrastructure. The new wide roads were forced through to allow for the rapid movement of military troops. These efforts opened up the Nawabi palaces to the public eye and shifted the power from the riverfront to new cantonments built away from the water’s edge. The transportation use of the river also declined, and the river turned into backwaters with the city turning its back onto the memories of a lost past of
Figure 41: The Kuriya Ghat Today


Figure 42: The Uprising of 1857

splendor. With the advent of railways, the utility of the river as a transportation artery also declined. A shift from agrarian to industrial left a patchwork of farms in decline along the waterfront. The only time the river came into focus was during the floods, where damage was widespread.

Post-Colonial/Post independence:

Today, the Gomti has been interspersed with agrarian and urban uses. There is a varied pattern of land use, with the shift from private elite waterfront to the vernacular uses of everyday life. The poor and landless find the floodplains an easy place for temporary settlement. The recreational needs of the contemporary public can be traced through new parks and plazas. Gomti, though not highly associated with religion, still attracts religiosity. The shrines on the banks of Lucknow and cremation Ghats, as well as ghats for bathing are a few examples of typologies translated onto the landscape. The plethora of informal activities which are common are kite flying, cricket, laundry, floodplain farming, and rag picking. To address the middle income classes, recreational plazas, parks, and memorials have been built. The Kuriya ghat, built in 2003 celebrates Gomti legacy and is used as a grand celebration pavilion and bathing area during the full moon rituals and festivities. Other larger interventions include the new memorial to Dr. Ambedkar, was completed in 2004. It is used as a political device for the display of power, and also as a symbolic landscape of social change, it stands close to the bank but directly inaccessible from the river. Lucknow’s architectural heritage is most visible from the riverfront, and is designated as a heritage zone in the Lucknow master plan. The effort of beautification of the waterfront has been not only prevalent in Lucknow but across the country.

The Sabarmati Riverfront Development in Ahmedabad, one main model of beautification, is the main focus of this thesis.

IV. WASTE DISPOSAL

All rivers by the late 20th Century were plagued by the problem of waste disposal. Wastewater keeps ending up in drains that release untreated sewage into the cities’ rivers. In the beginning when people started to release waste into the rivers, it seemed as if it were the natural thing to do; however as people became disproportionately larger than the resources, there was a problem. The degradation led to riverfronts being seen as dumping grounds. The waste, as industrialization occurred, became inorganic and non-bio-degradable leading to massive environmental issues.

“INEQUITY OF WATER AND SEWAGE DISPOSAL INFRASTRUCTURE BETWEEN RICH AND POOR AREAS IS ANOTHER PHENOMENON RIFE IN INDIAN CITIES, WITH HIGH-INCOME ZONES CORNERING MOST OF THE AVAILABLE AMENITIES” 22

The riverbeds and its’ tributaries, known as nallahs, are mostly occupied by lower income settlements. These settlements do not have formalized waste management infrastructure and thus lead to the direct disposal of waste into the water. Also, the sacred rituals themselves bring a large number of pilgrims into the riverfronts in India. The river is often seen lined with rotting flowers, coconuts, and other offerings which create a layer of scum on the rivers’ surface. Cremations create pollution, as ash is released into the water after each cremation ritual. Industrialization, Rotting animals, human waste, and other pollutants generate 660 million gallons of sewage produced by cities where only a third is treated 23 Untreated water is still used for bathing, drinking, and rituals. The river has become backwaters, and open drains in cities that once were proud of the amenity. These sewage influx, squatter settlements, and lack of urban infrastructure has led to completely forgotten landscapes, flood prone and lacking basic services. Development that is appropriate can improve the quality of the city, and bring the city back to the river (SRFD). Recently in the last few decades, Indian agencies have been looking into the issues of Indian rivers.

22 Keya Acharya, “How India’s Cities Came to Drown in Sewage and Waste,” The Guardian, August 1, 2012, sec. Environment,

23 Dean Nelson, “Ganges Hit by Alarming Pollution Levels During Kumbh Mela,” Telegraph.co.uk, February 24, 2013.
V. PUBLIC/PRIVATE REDEVELOPMENT

Globally, riverfront redevelopment had occurred much before and changed the relationship of post-industrial riverfronts to thriving riverfront districts. However, the efforts of major riverfront redevelopment in India are comparatively new.

“The multiple issues at play with riverfront redevelopment include governance, the river itself, the city, the design and planning, land use, integration and linkages” 4

The Sabarmati, in Ahmedabad, came under population pressure as the city of Ahmedabad expanded outwards. Private plots flanked the riverfront, and their backwards faced the river. It became a sponge for urban waste, and had no connection to the public. In order to address the waste issues, where cities originally had their back to the river, they have been now been redeveloping and returning to the waterfront. Rivers were neglected till the end of the 20th Century and did not provide city level recreation or social infrastructure. The idea of the development of the riverfront as an asset is only being recently formalized in India.


The current Sabarmati Riverfront Development is a partnership between the Ahmedabad Municipal Corporation, and HCP, an urban design and service firm. In May of 1997, the Ahmedabad Municipal Corporation (AMC) founded the Sabarmati Riverfront Development Corporation Limited (SRFDCL).

One of the primary objectives of this redevelopment is to create infrastructure to prevent waste disposal into the river. The project also seeks to make the banks of the Sabarmati Public. It creates parks, promenades and gardens for recreation and leisure. It also seeks to create a memorable identity for Ahmedabad. The project is also financially a partnership between public and private sources. The development rights to a minimum of reclaimed land will be auctioned to cover the costs of the project.25 As the Sabarmati is the river upon which this thesis is focused, it is important to elaborate upon the objectives of this redevelopment as well as define its weaknesses.

2.2: The Sabarmati River

Figure 47: Painting of Ahmedabad: Philips Baldeaus, 1672 A.D

Background: The Sabarmati

The following section will explore the details of the Sabarmati riverfront basin and its subsequent redevelopment efforts. The old city of Ahmedabad is one of the earliest examples of a planned city. The city is developed by Ahmed Shah in 1411 on the banks of the Sabarmati. The selection of the site for the new capital was influenced by the location of the Sabarmati. His criteria were flat land, plentiful water, and a central location on the road connecting the Deccan and Northern India.26

One main plus point was that the site was the only area on the river Sabarmati that had steep banks and lay above the flood level. The Bhadra fort was located on the cliff with the sharpest vertical drop towards the river. Similar to the Lucknow riverfront, the area between the river and the fort in Ahmedabad was originally meant for elite use. Ahmed Shah also located the city of Ahmedabad on the Sabarmati because of the availability of water. The Sabarmati originates from the Aravalli range known for its dryness in the summer. In 1411, there was sufficient flow through the summer months for Ahmed Shah to have chosen this site. Sabarmati has flowed for centuries. It's a shallow river with a low flow, and has never been known for its beauty. However, the river running 335 kms has been mentioned in the holy documents of the Vedas and Puranas, and has a few sacred sites associated with its banks.27

Sultan Ahmed Shah took to the Sabarmati river, because it was an open and spacious plain available in the immediate vicinity of the Sabarmati with plentiful water for utility at the time. The Bhadra fort was the first area to be built on the river banks, and from time to time other structures were added. The city from its very origins was surrounded by a 10 meter high wall with twelve gates to protect it from outside invaders. The river functioned as a protective barrier. Due to the difficulty of crossing the river during the floods, the development mostly occurred on the Eastern bank. In the Mughal period, the king and the Muslim officials occupied most of the city, leaving the outcasts to occupy outside of the old city wall near to the river.28

27 Majumdar Pratap, "Urban Riverside Development" (C.E.P.T University, 1987), 28.
Also, during the Sultanate and Moghul times, the river banks were lined with gardens adorned with flowering trees, and plants, used for royal families. The city never had direct interaction due to the fortwall, but some of the gates that opened up to the river established linkages, since the city roads tended to run towards the river ending at these gates. The splendor of the Sultanate and Mughal times came to an end when Maratha rule took over. Ahmedabad was torn between the Peshwas and the Gaekwad, two political factions that constantly struggled. As a result, the palaces, mansions, and roads fell to disrepair, and the constant flooding of the Sabarmati destroyed the gardens that originally lined it.

In the initial British period from 1830-1840\textsuperscript{29}, the land use pattern changed. The Shahibag area on the river-front was chosen for British military residence on the Eastern Bank. The arrival of the railways, 1864, created a major shift into industrialization. The industrial era started with the establishment of the first spinning mill in 1859 within the fort wall area. The Ellis Bridge became the first bridge constructed and allowed for the city to slowly begin to occupy the West Bank. In the meantime the area between the railway station and the old city started developing, and by the end of the 19th Century, the city had 27 textile mills\textsuperscript{30}, and became known as the Manchester of the East.\textsuperscript{31}

The degradation of the Sabarmati can be traced in parallel. Historically, the river was the reason for the birth of the city. It was used for potable water, for protection, and for religious purposes. As industrialization occurred, the river started becoming a dumping yard, and an open drain. The cotton and printing industry also used it for industrial purposes. Industrial effluents continued to be dumped into the river. Animal and human waste were deposited into the river. Furthermore, the building of more bridges to the other side of the river, started to cause a rapid increase in population on both banks creating ecological pressure on the Sabarmati. Improper sewage disposal was a result of increasing population. The government did not have adequate sewage infrastructure and diverted it into the storm water line.

\textsuperscript{29} Ibid.
\textsuperscript{30} Ibid., 122.
\textsuperscript{31} A. SRIVATHSAN, "Manchester of the East," The Hindu, June 19, 2006, sec. YOUNG.
which was connected to the river. Since then, there had been less flow in the river, and serious ecological problems plagued the river. Sabarmati was acknowledged during flood season when it wreaked havoc. The city's population depended on the Sabarmati River and wells for its water supply till 1891. Reservoirs were constructed on the eastern bank where water was drawn from wells. The population grew, and so did the water use leading to further degradation of the river.

The Sabarmati naturally was a non-perennial river. It only had water during the monsoon months, and in most cases created a flood hazard. The town planning act of 1954 led to a development plan where 13 percent of the land including the river was kept as open space. Garden spaces were demarcated but as time went on, these open spaces were given to institutions such as universities and hospitals for further development. The result was a lack of comprehensive strategy for any riverfront development. With the construction of additional bridges in the 60's, the western side started to grow faster and Ashram Road, parallel to the riverfront, developed into a commercial zone. It was never however integrated with the riverfront. Sabarmati remained isolated without any connections to roads, gates, and civic places. The city tolerated the riverfront as backwaters. Moreover, with the rapid pace of urbanization and rural migration, landless migrant workers started using the river-bed as free land. Since the riverfront has no had no main governing authority, it was a no-man's land. Squatter settlements encroached upon the riverfront until 1973, when the flood destroyed most of the settlements. The government did attempt to resettle them but the river banks then were just occupied by another set of squatters. As a contrast, real estate developers also viewed the river as a profit generator, and competed for property, not for aesthetics but more for micro climate benefits such as cool winds during specific seasons.

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Figure 49: The growth of the City; Image Source: CEPT University.

32 Kalpana R. Shah, "River as a Generator of Environment," 123.
33 Majumdar Pratap, "Urban Riverside Development," 32.
34 Ibid., 33.
Redevelopment: The First Proposals

In order to address the issues of flow, sewage, and flooding, talk of large scale infrastructure for flood control, water supply and irrigation started in the 60's. The construction of the Vasna Barrage was to be completed in 1976, and the completion of the Dharoi Dam, 1978, led to the beginnings of the efforts to enhance riverside environment.

Before these infrastructure projects were even started, the first proposal for the redevelopment of the Sabarmati was done by French Architect, Bernard Kohn. The scope of Kohn's plan was to develop both sides of the river into a linear park with the land reclaimed from the riverbed. To balance out the land use, high density housing and commercial centers were also proposed. He visualized the development with a mix of commercial, recreational and residential development along both banks of the river. Kohn had presented it to the government, and as a result, a committee had been formed to study ways of enhancing the riverfront in 1963. This committee went to the central water and power research station, Khadakwasla for a feasibility report on the reclamation of land. On the basis of the technical study done by CWPRS, a recommendation was made for the reclamation but keeping the minimum width of the river to at least 1600' for flood mitigation. The significance and scope of the project, led to a separate corporation being established with the civic authority and the state government with various disciplinary groups for consultation. The domino effect of Kohn's plan, led to an effort that culminated in three different proposals in the span of two decades.

1. Technical Feasibility Study (1966)
2. The River Front Development Group Proposal - RFDG (1976)
4. The Sabarmati River Front Development (SRFD) (1997)

The following section focuses on the SRFD Proposal. It illustrates the objectives, and means of redevelopment as well as the criticisms that exist about the project.

2.3: The Sabarmati Riverfront Development:

BEFORE

Figure 51: Before the Sabarmati Riverfront Development

AFTER

Figure 52: After the Sabarmati Riverfront Development
INTRODUCTION

This section is structured as a photo essay with a series of images that were either taken from a Site visit in January of 2013 or from salient reports related to the SRFD. Experiences are taken from spots that are of the rich, the middle class, and the poor. Through the narrative, the contradictions become apparent, as well as the strengths of the project. The purpose of this section is to give the reader a background of the current development as it exists today through a narrative via captions. As a conclusion to this section, the weaknesses will be then elaborated upon in a critique in the following section, 2.4.
According to the proposal done by Environmental Planning Collaborative, the catalysts for the land use plan were as follows:

"... existing land uses along the river; extent, location and configuration of reclaimed land available; potential for development; the structural road network and form of the city; bridges proposed in the Ahmedabad Development Plan and; the possibility of providing adequate infrastructure."

Primary purpose of the project is to provide plenty public facilities and thus maximize the city level benefits. The secondary objectives were financial via setting up optimal revenue potential.

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Ibid., 29.

**Landuse Plan**

- Residential Zone
- Commercial Zone
- Multi Use
- Garden
- Educational Zone
- Open Space
- Public Purpose
- Pedestrian Promenade

Figure 54: The Sabarmati Riverfront Development: Landuse Plan
STRENGTHENING THE TRANSPORTATION NETWORK OF THE CITY

The road network that is proposed is meant to reconnect and provide future flexibility for an increase in vehicles. The CEPT Comprehensive Environmental Assessment of the SRFD cites that there is a “4-lane wide and 9km long road along the entire length of the East bank, a 4-lane wide and 7km long road on the West bank and other new roads on both banks have been proposed. Improvement in the secondary and tertiary road network providing access to the reclaimed areas is also proposed.”

Their hope is that the addition of these major links will strengthen the current network of the City as well as result in a more efficient flow of traffic. However, some of these roads, especially the ones at the river’s edge, 21%, cut off the existing city and may prove to cut off pedestrians as well. CEPT’s report also states that the traffic is expected to increase in and around the area leading to increase in ambient air and noise pollution levels.

Figure 54-55: Qamar Sheikh, “Ahmedabad and the Sabarmati: Criticisms and Lessons Learnt” (HCP, Ahmedabad, n.d.).

Figure 55: The Sabarmati Riverfront Development: Road Network

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38 Ibid., 9.
39 Ibid., 124.
FLOOD MANAGEMENT: CONSTRUCTION OF EMBANKMENTS

There has been reclamation of 162 ha of land. The project has constructed embankments on both sides of the river along the entire stretch. It has created wide public promenades with street parking facilities. These measures are also taken for the elimination of the flood hazard. After these walls are designed, there is no longer threat of flooding. The low lying areas in the city are protected and the possibility in increase of riverbed slums is also eradicated. These drawings belonging to HCP have been redrawn and illustrate the focus on infrastructural strategies that has led to this modern model of riverfront development.

40 Ibid., 29.

Figure 56-60: Original Source: Sabarmati Riverfront Development Corporation and HCP Design and Project Management Private Limited. Graphical edits by Author.
Figure 59: Typical Longitudinal Section

Figure 60: Under the Bridge Condition
CREATE RIVERFRONT PARKS, PROMENADES, AND GHATS TO ENJOY THE WATER

PROMENADE OF JOY

The promenade that is both the lower and upper embankment can be seen in this image. The Ahmedabad newspaper labels it, the 'promenade of joy'. The height of these embankments were primarily said to be dictated by flood mitigation objectives.


What resulted were these high concrete walls that sometimes appear cold, and relentlessly plastered along the entire stretch of the river.


The EPC Proposal states that nearly 42.8 hectares of parks and gardens have been created for the public. Some are expected to serve as city level parks, and others are more neighborhood parks. The proposal sees these areas as breathing spaces.

Image Source: Author. Site Visit 2013.
The view from the Patang Hotel, highlights the riverfront in a different light. It almost seems as if was designed with the aerial view in mind. The restaurant offers grand views to the riverfront, and at the time the Sabarmati Marathon was being staged, and people from all walks were registering for the run along the temporary event space set up on the upper promenades on the rivers’ edge.

The lower promenade which can be seen below has several docks for participating in five minute boat rides for a small price affordable to all.
The high embankment walls lower towards the Southern extreme of the development due to reduced flood risk. This allows for a more fluid connection to the city above.

Below, we see the Sunday Market as it exists today, adjusting to the construction but with imminent relocation to a more formal spot along the riverfront.

Figure 68: Create Riverfront Ghats

Image Source: Author. Site Visit 2013.

Figure 69: The Sunday Market Temporarily Functioning Today

Image Source: Author. Site Visit 2013.
Figure 70: The Creation of Parks and Promenades

Above is an entry to the lower promenade that is more monumental. It is a direct connection from the park above to the lower promenade below.

Below are two brothers, security guards that monitor the construction and the promenades to make sure the youth of Ahmedabad behave. One of them has to live in the makeshift shack while the other goes home and brings him food. They used to live along low income settlements on the river bed itself which were demolished.
The riverfront development comes at the cost of the livelihoods. It is important to note that in the architects first proposal in 1998, the slums were resettled along the bank itself in low income housing noted above as relocation sites, but due to governmental pressures, the second iteration resulted in their displacement to farther sites resulting in a loss of Community and Livelihoods. The following section will give a critical view this project via an essay in order to suggest an alternative cultural model that will lift Ahmedabad beyond the current Sabarmati Riverfront Development.

![Diagram showing land use and area for roads, gardens, relocation sites, informal markets, commercial areas, residential areas, public utilities, and residual/unallocated areas.](image-url)
Figure 74  Slum Relocation Plan
The Sabarmati River Front Development project was undertaken to be an urban renewal and public improvement project. It aims to take advantage of Ahmedabad's historic yet neglected river, and turn it into a theme generator for the ideal modern urban civic realm; in the developer's words, "a vibrant and vital focus for the city." \[41\]

The birth of this project was in 1997, when the Sabarmati Riverfront Development Corporation was formed by the Ahmedabad Municipal Corporation. The construction began in 2004. The projects major objectives are to improve the environment and habitat conditions of the river and its adjacent areas. In order to do so, one of the major actions involved removing the squatter settlements that lived along the river bed.

The primary purpose of the project is to efficiently manage the river as an infrastructural element. Strategies include incorporating water management systems to minimize flooding in traditionally flood-prone areas, and investing in sewage treatment infrastructure. The riverfront development includes major interceptor sewer lines on both banks of the river, capturing several sewage discharge points and routing sewage to newly-commissioned treatment plants south of Vasna barrage \[42\]. Diaphragm walls are built into the riverbed at both banks of the river at a depth of more than 10m, and retaining walls which are meant to protect low-lying areas from periodic flooding. The river is channelized to a constant width determined by the ideal flood carrying capacity of the river. The Sabarmati River has been in the recent past ravaged by drought, and relatively dry. The first step in envisioning this project was to re imagine a different future.

In the North of the city, the Narmada Canal channels the water into the Sabarmati. It is retained in the river because of an existing barrage. Thus, the traditionally monsoon-fed Sabarmati is able to hold and replenish water year round, thus enabling a public realm. According to project briefs, the development encompasses both banks of the Sabarmati for the length of 11.25 km. It creates 185 hectares of reclaimed land by channeling the riverbed to a constant width of 275 meters. \[43\]

Justified by the desire to reclaim the private

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42 Pragya Prakash Srivastava, "Riverfront Development in Indian Cities- Casestudy: Sabarmati Riverfront Ahmedabad," 34.
43 SRDCL, "Sabarmati Riverfront -"
AMC is ready with designs for 6 parks and gardens (to be called 'Urban Forestry and Ecology parks') under the Sabarmati Riverfront project.

AMC plans to expand city's green lungs along Sabarmati's banks

- A'had's first sun dial AMC has made a provision to gift Ahmedabad their first sun dial, in its garden between Sabarmati Bridge and Dholka Bridge.
- 77 hectare for parks and gardens Of the total around 105 hectares of acquired land, AMC plans to use 77 hectares (around 30%) to develop parks and gardens.
- 500 rare tree species 500 trees will be developed on the monuments from Vavne to Sabarmati Bridge where there is no dense green cover. Each tree will have its name and history mentioned.

1 km-long garden

In this virtual green belt for Ahmedabad eyes, the proposed parks and gardens will be developed along the road, using an area of almost 1 km area. These green spaces will include green spaces for senior citizens and kids, recreational space, say AMC officials.

8,000 plants all over

With 10,000 plants on the lower promenade and 8,000 on the lower terrace, AMC corporation has made special to add more green lungs in the city.

The green cover is not only being developed to increase the green lungs of the city. But the entire Sabarmati Riverfront stretch would become a classroom to teach lessons on botany and environment, with details about species, history and other interesting details on every tree.

— IF Gajdani, Chairman, SMEDOL

Figure 75: AMC plans to expand city's green lungs along the banks

Web: http://www.skyscrapercity.com/showthread.php?t=1107117&page=2,3

Figure 76: The Sabarmati River through time: Google Imagery

river edge as a public asset, and real estate driver, the project becomes the largest slum displacement force in the history of the city. Only after legal action against the developers, were members of these communities given a provision for more permanent housing. Noted as an environmental improvement, social upliftment, and urban rejuvenation project that will renew Ahmedabad, one must wonder, who’s Ahmedabad? Granted, even though the riverfront project presents a great opportunity to create a public edge to the river, and restore the city’s relationship with nature, the final outcome represents a skewed image of a western utopia, formed by years of misconstruing first world ideals as the best possible solution for every problem.

The project is really driven by the desire to generate international interest and investment via a unique identity and a skyline for the city. The paradox lies in that Ahmedabad is steeped in a rich authentic and historic tradition and yet by using the past as a reservoir for themes, the project relies on simulacra, and becomes fundamentally inauthentic. Cities are engaged in forging a distinctive image for itself, and creating an atmosphere for distinction that lures people and as an investment. Also vision acts as an anchor for the residents in order to keep them from moving away. The belief is that the more a city focuses on history the more important their image will become, reaffirming to the residents, and attracting investment. The project is designed to maximize the use of the reclaimed land for public purposes. The urban design and architecture of the project involves a two-level continuous promenade on both sides of the river. Built above water level, the lower level serves pedestrians and cyclists with access to the riverfront. The upper promenade is being built to host a variety of public buildings, cultural and educational institutions, public parks and plazas, and a few areas for commercial development. Many new public facilities will be built including relocating existing temporary markets.

The upper plaza is woven with fabrics of simulation, and raw referentiality. The more simulacrums are created, the more they become part of the environment and less unique. The shift happens from consumption of goods to the consumption of services. The promenade is built around experience, and the production of symbols. Even though the intentions are to orient Ahmedabad’s future towards one that considers resident’s needs and responsible inclusive growth,
the inclusion in itself is exclusive. Given that the project has been planned as a self-financing project, the sales of the reclaimed land are meant to generate revenue. These plots will be bought by developers involved in the making of a very specific type of real estate product. Commercial and retail space catering to the middle class will prevail and at the same time pay for the development of the riverfront, and its maintenance. Thus an urban citizenship amongst the religious majority is articulated. Hindu nationalism and identity and pride in entrepreneurial Ahmedabad, had led the city to become a space of ‘exclusionary citizenship along the vectors of class and religion.”

“The new city replaces the anomaly and delight of such places with a universal particular, a generic urbanism inflected only by applique. With components reduced to a repetitive minimum, space is de particularized. Obsessed with the point of production and the point of sale, the new city is more than swarm of urban bits jettisoning a physical view of the whole, sacrificing the idea of the city as the site of community and human connection”

By analyzing the publicity of the project, and looking at the reactions of the general Ahmedabad public, conclusions can be drawn as to what makes the city tick. One must look at the history of urban citizenship in Ahmedabad. It has a long history of violent clashes between different religious groups and in 2002; the communal riots were taken to the next level with lack of preventive action on the part of the Hindutva government. In spite of the anger and clamor against the government in allowing and perhaps even encouraging the genocide, they were reelected. Thus to legitimize and reproduce the political power of this illiberal regime, they aggressively attempt to re-insert the city and region into the capitalist space-economy.

This is done by city Imagineering, and place marketing through flagship architectural and urban projects. Ever since 2005, the government in Ahmedabad has been trying to erase the blemishes, and make the people forget the past, and look towards a better future. They are bound up in rehabilitating the city’s and region’s image, following the Hindutva-driven and State government

44 Urbanizing Citizenship, sec. 34–54.
45 Michael Sorkin, Variations on a Theme

46 Urbanizing Citizenship.
supported program against Muslims in Gujrat. These practices have successfully created a shift away from the city and region as a violent and unsafe city, to a vibrant space of development. Part of the new image making involves an emphasis on the cultural heritage and all things safe and friendly. It also displays the potential of the city as a profitable place to invest, live and work in, and an exciting place to visit. An article in the Times describes a portion of the Sabarmati Riverfront as a stroll through time. A heritage park will be spread over twenty acres on either side of the river, showcasing the city through the millennium. The article states:

A walk down the memory lane through Sultanate, Mughal, Maratha and Colonial rules, while the first two zones will capture history up to Independence, the third zone will focus on the Ahmedabad's contribution to the Indian freedom movement. The fourth will focus on the modern era.


The city becomes a large heritage park. It features traditional built forms, recalling the past. “It will unravel the varied facets of the city and its history at a single destination. The project is about all 5 E’s: environment, entertainment, events, education and employment.” The project has been conceptualized and designed on Indian ethos and traditions. Through simulacra and zoning of specific activities, the park will showcase the blend of tangible and intangible heritage. As Michael Sorkin says in his book, Variations on a Theme Park, “here is urban renewal with a sinister twist...” By emphasizing and recreating the heritage and traditional cultural values of the city, it deceives the public by putting forward a happy face of familiarity, and doing away with the fundamental realities. Representing both a history, and a generic modernity, the Sabarmati Project essentially functions as an advertisement. It takes advantage of its rich heritage, and yet negates the very basis of that authenticity by trying to meticulously emulate ‘forward thinking’. By embracing the western ideal of the ‘modern way of building and city planning,” it falls into a trap. The design relies on the density of the traditional city, by assuming masses of people, and not
East Riverfront

Mughal era
The second zone depicts the journey of Ahmedabad through the Sultanate and Mughal rules. The enclave will recreate the aesthetical essence of the era known for its fountains and gardens. Mughal gardens with musical fountains will be a mainstay.

Ashawal to Karnavati
The first zone of the park which will take visitors through the golden era of Ashawal and Karnavati. Remains of temples and idols of 12th and 13th centuries excavated from riverbed will be reconstructed.

Colonial rule
The third zone will depict the history of Ahmedabad during the Maratha period and the colonial rule along with the city's important role in the Indian freedom movement. Structures built on British and Dutch styles of architecture will be displayed.

Wall of fame
A model of city's fort wall showcasing 600 significant people who contributed in creating the 600 years of living history of Ahmedabad.


Figure 80: A Walk down the Memory Lane: East Riverfront Strategies
in the strength of the place itself. The hard cold surface of concrete retaining walls and massive boundaries create a dystopia for the individual, completely alienated from reality beyond the walls. The regulated and controlled river, urban civic realm, and development around, will lead to a pleasure society and a substitute for the democratic public realm. It is obvious that the most appealing ‘isms’ of urbanism have seeped in for those that need an image, and a promise of a bright and safe future.

The goal for a common good, and a prescribed ideal state, promises to raise the quality of life and standard of living by creating better places to live. The emphasis on experience and high quality of life, be it authentic or simulated, is of utmost importance. In the Savarmati Riverfront project, experience is commodified, and social interaction and cultural activity spelt out to a minute level of detail. Recent blog threads in skyscraper city that follow the Savarmati project since its early construction phase have highlighted how the people perceive the abundance of experiences. There seems to be something for ‘everyone.’

The civic authority has planned a “cultural mile” on the Sabarmati river front with numerous facilities that will make it the cultural nerve center of the city. The cultural mile will have museums, exhibition centers, dancing floor, theatre, amphitheater, galleries, and concert halls. Even a water park has been proposed, along with floating restaurants. Branding, commodification, and pleasure are the keywords for Ahmedabad today.

The saleable built-up area on the riverfront will be calculated as a multiple of the area of the footprint and the number of floors assigned to each of the plot shape. These shapes are anywhere from a circle to quadrilateral and squares and rectangles. Some of the heights are up to 150 meters, and each plot has an assigned number of floors, in order to mandate the developer to build within a larger urban design vision for the skyline instead of building depending on demand. This obsessive desire to build a “authentic” skyline, is ironic because not only will demand be different in the Indian context, so will climate and building materials. However as one can see, the mentality of the decision makers are that of claiming a birthright to a skewed western ideal. According to officials:

49 Dinnie, City Branding.
“Any riverfront around the globe has a signature skyline and we want to ensure that Sabarmati has one...After extensive travelling to European countries and some south east Asian countries, we wanted to emulate some river redevelopment plans in our city. Sabarmati deserves this plan”\textsuperscript{50}

By stating that Sabarmati deserves this plan, it is clear that there is an assumption made on what is ‘good’ for the city. This desire to become a megacity has consequences that resonate across urban life. Other categories will soon form like ideal citizens, ideal professions, and ideal homes. The modern citizen of the metropolis emerges as the ideal and the squatters, who were displaced, are now extinct from the reality of the project. This is clearly not feasible since the informal economy in India is extremely powerful, and hawkers and squatters will never disappear. Informal urbanism is an ideal that struggles to hold its ground in this riverfront development project.

An example would be the Sunday Market that is reassigned from a temporary space to an assigned location along the promenade walk. Also known formally as the Gujari Bazaar, this six hundred year old trader-organized market was established in 1414, during Ahmedabad’s inception. The Gujari Bazaar consists of more than 1200 regular and 1000 ad-hoc traders and functions as the backbone of Ahmedabad’s informal sector. In turn, the informal sector comprises approximately 75\% of Ahmedabad’s working population. Market traders sell everything from sustenance items, affordable household utensils, clothing and second-hand hardware tools to re-purposed waste, electronics and rare books. The bazaar operates as an open market each Sunday, providing livelihoods for an estimated 200,000 lower-income residents through a complex regional chain of artisan-entrepreneurs, home workers, mechanics, technicians and small traders.\textsuperscript{51}

There are women traders, half of which identify within the lowest caste system called the Dalit’s. Also, the market survived communal conflicts, and acted as an authentic space of social and ethnic integration. The


market involved regional traditional craft persons, small entrepreneurs, and created links between traditional crafts and modern modes of production. Around one lakh people depend on the market for their livelihood.

The Sabarmati riverfront construction work has reduced the market space by 35 percent, and may soon be displaced. More than 20,000 people are dependent in the chain between making, transporting, and the sale of goods in the market. They were once spread over a square kilometer of the eastern bank, along the remains of the historic city wall. Now they are sandwiched between the existing buildings and the new concrete walls of the development at about half their original size. Even though one can see a reassigned location for the market in the project proposal, there are major doubts as to whether this market will continue to function without its past strategic location. The promise of water, sanitation, pavements and lights, have not placated the traders who are skeptical.

Ideally, the developers have written off the problem of the hawkers by assuming that they will appreciate the shift from their ‘shoddy’ location, into the hygienic modern canvas of the riverfront. However what they look over is that perhaps the Sunday market will stop being successful because of its loss of existing customers and novelty. The authenticity will disappear as a result of being uprooted into a simulacrum. The Sunday market, while it attracts a few middle class citizens just for its novelty, is mostly attended by a migratory population that are scavengers searching for knick knacks and basic items for a minimal cost. The siting of the Sunday market in its original context was very accessible to the poorer population, since their squatting communities were only a five to ten minute walk. With the Sunday market being located in the riverfront promenade, access will not only be cut off to that now displaced population, but the upper middle class that will actually use the riverfront the most will eventually stop attending the anesthetized version of the Sunday market.

The social interactions, the banter, and the political and cultural exchange that occurs on the street today is a unique attribute of India. Even the squatter settlements that were along the Sabarmati River Bank were not initially provided with relocation plans. Only after litigation, were they given the option of housing in areas far from their means of livelihood. This led to the squatters eventually renting out their allotted housing, and moving to a different part of
the riverbank until forced out again. This overarching idea of beautification driven by
the logic of modernization can be attributed
to the idea of city branding.
The following quote from the SRDP
(Sabarmati Riverfront Development Project)
website illustrates this utopian ideal.

“It’s like a vast dream that one lives. Waking
up by the river; driving down the riverside;
board meeting with vast blue vista in
the background and then a cruise across
the water for a power lunch on the other
bank...And then, a dinner on the floating
restaurant...in the middle of concrete and
steel...that is the dream that city planners
are conjuring for apnu Amdavad”

Apnu Amdavad refers to a personal
nickname that mostly the middle class Hindu
inhabitants of Ahmedabad have lovingly
given themselves to caricaturize their loyalty
to the city, and their dedication to the
 cultural meaning of place. This utopian ideal
belongs to a certain group of citizens. It is by
no means inclusive of all the population in
Ahmedabad, especially the Eastern side. The
eastern side plagued by communal riots in
2002, and marginalized due to its minority
Muslim community, will remain in stark
contrast to the megacity that is developing
only a few blocks away. Its years of unchecked
settling and assemblage of cultural heritage
monuments from Sultanate times, act as
reminders of a blemished past, that the
government would benefit from forgetting.
Thus the SRDP justifies leaving
them out, by commodifying the sultanate
architecture into symbols within a newly
simulated heritage park. The types of
physical connections between the eastern
and western path, that would create a
cohesive civic structure of a city, is completely
missing. One can argue that the generic
promenade with its high walls is welcome to
all, but after specific real estate development
occurs it will act as a natural separator. In
the case of the Sabarmati project, this is the
urban design of middle class imagination.
It is their vision of how a modern urban
space should look like in order to become
relevant. To be relevant, means to be part
of the larger narrative of progress, and city
branding. This utopic perspective overlooks
population dynamics, religious tension, and
poor pockets. It privileges certain citizenship
by making specific ‘publics’ stakeholders
in the project, while asking the unwanted
population to sacrifice their livelihoods for
the greater good.
The solution is to decontextualize heritage, making it public property and affirming to all citizens their stake in the national/state treasure. The logic is similar to what the Gujarat government used to surmount over a decade of troubles over rehabilitation by introducing the city's strategic potential to be a node in the global network of modern cities across the world, a utopia of accessibility, participation, a shared sense of enlightenment, and feeling of having arrived; a greater good for everyone. According to the master plans, the real estate developments are contained within a certain zone. Who is to say that in a few decades it won't expand into the historical core? The simulacra will become reality, and the authentic, a fossil.

Thus, the Sabarmati Redevelopment project runs a risk of manufacturing heritage. There however does remain a partial exception and this is the Gandhi Ashram that will be elaborated upon in the next chapter as an example of how to modify the Sabarmati in key places.

The assumptions regarding how people should live, and the idealistic visions of a modern public realm, lead to a disjuncture. The population inhabiting Ahmedabad as a whole is not able to accommodate these socio-economic changes that are being privileged by such projects. Even by bringing an immense amount of trade opportunities, there is grave danger if unplanned growth occurs and gentrification leads to the wiping out of authenticity and specific ethnic groups in the eastern part of Ahmedabad.

the mega-city status will further marginalize inhabitants of that social status. Through place marketing, the government have successfully countered the post-riot 'negative' images of Ahmedabad, and rehabilitated the city as a space of development.

How can one arrive at an alternative cultural model? The Gandhi Ashram is an exception upstream of a truly authentic site that remains an important civic space. By using the exception as inspiration, this thesis will project how the largest remaining riverfront open space may be developed to create a successful new model of riverfront development that is inclusive of the marginal population, and remains a more authentic site.

A postmodern Gandhian framework will be generated as ideals for planning and design. This framework will be then applied to a downstream site along the river resulting in a landscape that will decrease vulnerability and increase civic awareness through an integrative cultural model.

The Sabarmati Ashram is sanctified within the landscape of the Sabarmati riverfront as the only remaining private trust. It remains an exception for the following reasons:

1. Only remaining direct connection to the river
2. Only naturally vegetated space fronting the redevelopment
3. Only remaining pavilion that directly fronts the river

It’s the one place that the visitor is consciously forced to reconcile between past and present. Gandhi had been in residence here for twelve years. Named for the river on which it sits, it was created with a dual mission. To serve as an institution that would carry on a search for truth and a platform to bring together a group of workers committed to non-violence who would help secure freedom for India.
CHAPTER 3: A CULTURAL DESIGN PRECEDENT: THE GANDHI ASHRAM:
2nd Analysis

Figure 86: The Gandhi Ashram: Precedent Analysis

PRECEDECENT ANALYSIS:

3.1 Gandhi Ashram by Gandian Terms
3.2 Correa's postmodern interpretation
Figure 87: The Sabarmati Ashram: A cultural precedent along the Sabarmati River

Figure 88: The Sabarmati Ashram: A Direct Connection to the River
*Author: Site Visit January 2013.*
A More Authentic Site:
The Gandhi Ashram

The Conceptual Framework: Defining a new approach that sees the riverfront as a problematic space with heavy handed development, and speaks to creating an approach that deals with the new crises of post 2002 Gujarat. A postmodern Gandhian framework will be generated as ideals for planning and design. This framework will be then applied to a downstream site along the river resulting in a landscape that will decrease vulnerability and increase civic awareness through an integrative neo-Gandhian model.

Methodology:

1. The Ashram:
   a. Architectural Significance: The interpretation of historic structure and spaces and they way they are conserved.
   b. Interpretation of place, and ideas expressed in his time.

There is a sacred simplicity to the Gandhi Ashram and a beauty to Correa’s postmodern reinterpretation that speaks of a heritage of authenticity. Using the past as a reservoir for themes, the current riverfront development project relies on simulacra, and becomes fundamentally inauthentic. The concrete and steel visions projected onto the current landscape of the Sabarmati riverfront are leading to a inauthenticity and decreased sense of self identity as a whole.

Landscapes at once embody a particular way of seeing that is partial (in the sense of representing various class, race, and/or gender interests) and yet that is open to (re)interpretation by others. As these memories are formalized they become vehicles for the production of cultural memory and heritage and are of utmost importance for the intangible psychology of its inhabitants.

There must be an implementation and restructuring of the riverfront type. The Sabarmati Ashram which both metaphorically and physically flanks a symbol of an authentic past can be used as a means of distilling relevant ideals for structuring today’s riverfront. A post Gandhian framework will be generated as ideals for planning and design.

The literature review is conducted in two steps. Firstly, a primary literature review is conducted by researching Gandhi’s letters and correspondences for any relevance on his views on settlement, with a key conclusion is drawn regarding his opinions on cities through a series of diagrams. Next, secondary literature review is done by going through a selection of biographies and books written by others relevant to Gandhi’s time in Ahmedabad and in the Sabarmati Ashram. This primary and secondary literature review supports the five Gandhian ideals related to design and built form that are formulated as a result of this temporal framework.

Introduction:

Ahmedabad has a scarred past. The memories held by its social collectivities vary by caste, religion, and financial status. If one were to determine the strongest tides in its memory, it would have to acknowledge its Gandhian past. Gandhi’s ideals on cities, villages and settlement are all embodied within the ashram in Ahmedabad. The ashram, during Gandhi’s time had no boundaries, since its influence extended far past the confines of the site itself. Today, the Ashram, though highly respected, has ideals that are fading away in the public eye. Its walls are peeling, and the facilities slowly crusting. Gandhi’s ideals are respected, but frozen in time.

To some, Gandhi is outdated, and deemed out of fashion today in a fast paced world of development. He is commemorated through his own Ashram and alongside
The Sabarmati Ashram in History: Original Site Plan

Figure 92: The Site Plan of the Original Ashram

Image Source: Drawn by Author
### Name of Building

1. Tamarind Tree (witness to all events of the Ashram; fallen down in 1972)
2. Udyog Mandir (All India Khadi Technical Institute)
3. Old Handmade Paper Workshop: Manav Sadhna
4. Nandini (Guest House)
5. Small Ghat
6. Vinoba- Mira Kutir (hut)
7. Abode of Heart (Hridaya Kunj – Gandhi's House)
8. Prayer Ground
9. Gandhi Memorial Museum
10. Ghat
11. Nandial Shah’s House flooring
12. Narhari Parkh’s House
13. Magan Nivas
14. Dairy Office (old cow shed)
15. Safai Vidyalaya- Environmental Sanitation Institute
16. Dairy Residences
17. Abhaya Ghat (Moranji Desai’s cremation place)
18. Site of Gulzarilal Nanda’s Cremation
19. Where Gandhi's ashes were immersed
20. Maharshi Dadhichi's Mandir
21. Amar Kantak Tree (Established Labour Institute)
22. Dandi Bridge
23. Road to (Ashram Road): Gujarat Vidypith; Navjivan; Kochrab Ashram
24. Road to (Ashram Road): Sabarmati Jail
25. Khadi's Dehala
26. Family Residence (10 Rooms)
27. Somanath Chhatralaya (Community Life House) Primary Teachers Hostel for Women
28. Teachers’ Housing (1)
29. Family Residence (Naranda’s Gandhi)
30. Teachers’ Housing (2)
31. Community Kitchen
32. Seva Nivas
33. Imam Manzil- Imamsheb, Aminaben and Kureshibha’s House
34. Anand Bhavan- Mahadev Desai and Kaka Kalelkar’s House
35. Memorial Trust Quarters
36. Ashram Guest House
37. Kalamkush (Gujarat Khadi Gramodyog Mandir)
38. Sardar Wadi
39. White Bungalow (dismantled)
40. Khadi Prayog Samiti
41. Mashruwala’s Silence Kutir (hut)
42. Jyoti Bhuvan
43. Leather Tannery
44. 7 Residence
45. Jamana Kutir
46. Vinay Mandir Hostel
47. Vinay Mandir
48. 6 Family Rooms (Khadi Workers)
49. Bal Mandir
50. Primary Teachers’ College
51. Rashtriya Shala (Primary School)
52. Teachers’ Housing (3)

### Figure 93: A Peaceful Landscape

### Figure 92-96: Author. Site Visit 2013

### Figure 94: Lookout Pavilion

### Figure 95: Swept Earth and Greenery

### Figure 96: An existing community

### Figure 97: A glimpse to the museum
Figure 99: A landscape of harmony
Author: Site Visit January 2013.

Figure 100: Site Plan of Sabarmati Ashram: Gandhi and Correa

Image Source: Drawn by Author
1: Hriday Kunj: Gandhi's home
2: Gandhi Memorial Museum
3: Magan Niwas (Lodge)
4: Sanitary Block
5: Narmad Niwas (Lodge)
6: Store
7: Water Room
8: Nandini (Guest House)
9: Vinoba Mita Kutir (Cottage)
10: Udyog Mandir (Temple of Industry)
11: Upasana Mandir (Prayer Pavilion)
Figure 101
Map: Key a: Sense of Peace + Tranquility: Swept Earth and Greenery

Figure 102
Map: Key c: Only direct connection to the Sabarmati Riverfront

Figure 103
Map: Key b: Smaller Ghat: Interaction with the Sabarmati riverfront project

Author: Site Visit January 2013.
the museum designed by Charles Correa housing Gandhi's writing and timeline of significance. Even so, the Gandhi Ashram, and the museum are enclosed within a bubble; described by the layman as a vehicle for escape from the world of chaos outside its walls. Ahmedabad has all along had authenticity along the riverfront in the Gandhi ashram which was founded due to particular reasons. These reasons will be explored on multiple levels of Gandhi's thinking: One, on the macro level, defining the need for an ashram, and two on a micro level, analyzing his choice of the Sabarmati Ashram. One fundamental reason was to ignite change in the social behavior of the individual. Gandhi dealt with conflict resolution with a very thorough program. His philosophy of peace dealt with one individual at a time. The literature review on this is extensive, thus after a brief sampling the following points are highlighted as necessary. In Volume 81 of his collected works, he constructs a program for the construction of complete independence by truthful and non-violent means.54

Gandhi says, “Every educated person should be made aware of the fact that the issues relating to peaceful co-existence basically belong to each citizen. So every person must be trained to rise above communal pressures, religious loyalties, regional and other interests etc. Harmonious interpersonal relationship must be developed through formal and informal education.”

Once the individual is addressed, then society can be modeled. The embodiment of these ideals took the form of the Sabarmati Ashram:

**The Exception: Ashram as a microcosm of the city: Why Ahmedabad?**

To Gandhi, it was the birth of an ashram: A place where man is inducted in vows. The Sabarmati Ashram, otherwise known as the Gandhi ashram, is located on the banks of the river. Gandhi had been in residence here for twelve years, located four miles from the town hall. Sabarmati Ashram named for the river on which it sits, was created with a dual mission. To serve as an institution that would carry on a search for truth and a platform to

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bring together a group of workers committed to non-violence who would help secure freedom for India. During his time at the Ashram, Gandhi formed a school focusing on manual labor, agriculture, and literacy to help communities become self-sufficient. Gandhi's ashram's relationship to the river is an example of one of the only remaining locations where the river has remained accessible perpendicularly, in the traditional ghat form.

While at the Ashram, Gandhi formed a school that focused on manual labour, agriculture, and literacy to advance his efforts for self-sufficiency. By conceiving such a vision Gandhi and his followers hoped to foster a new social construct of truth and nonviolence that would help to revolutionize the existing pattern. Given that the viewpoint of the majority held Gandhi as a staunch anti-urbanist, it is ironic that Gandhi chose to establish his ashram within a city. There were essential reasons of him doing so. The resourcefulness of a city cannot be compared with the village. Early on Gandhi knew that if he were to have his social movements be successful he needed to locate within a city. So how did he choose Ahmedabad?

The area where the Ashram is located has a legend associated with it that appealed to Gandhi. It was famous for an incident of extreme sacrifice. The Sabarmati has intangible heritage associated with it. It is said that in the east flows the Sabarmati that is gifted with a boon where its waters will flow even in the summer and in Kaliyuga, an era of havoc. Additionally, southward from the land of the ashram, on a riverbank was an old temple, blessed as a place of victory over battle enemies in the war between the demons and the sages. The sage that was the victor was Dadheechi who was an embodiment of Upanishadic teachings that Gandhi practiced: Enjoy by renouncing.55

When Gandhi first went to the site there were no roads leading up to it. The riverside was broken and had many pitfalls. It was a jungle, far away from the bustle of the city, but near enough that it was connected by an hour (during his time) of travel. He liked the peace and the surrounding quiet nature. At the time, on one side of the site was a prison, the Sabarmati Jail, and on the other a burning ghaat; A place for the burning of the dead. He remarked, “This is the right place for our activities to carry on the search for

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Truth and develop Fearlessness-for, on one side, are the iron bolts of the foreigners, and on the other, thunderbolts of Mother Nature. The networks of a city were undeniably invaluable for his agendas. The reason Gandhi chose Ahmedabad despite his public views are pragmatic. His expertise in the Guajarati language, culture and wealth led to allies that would help support him in his movements. Communication and Publicity were the two main reasons he chose the city of Ahmedabad. At the time in 1915, when Gandhi chose the city, Ahmedabad was rapidly growing, and had an air of insurgency planted within already. During times of negotiations with labor organizations, Gandhi used the Sabarmati riverbed as a meeting point for daily public meetings. It knew how to not cooperate with foreign political rulers if need be. Ahmedabad was steeped in resources including the business community and other tightly woven organizations, from where Gandhi drew his support. He appreciated the city as a cultural center, and knew his own publications would do well there. Ahmedabad was the center of Gujarati culture. Ahmedabad was steeped in resources including the business community and other tightly woven organizations, from where Gandhi drew his support.
Zooming out and understanding Gandhi's views on settlement will make clear the paradoxes in his sentiment against cities. One must acknowledge his views on villages, and then the criticism on the city can be brought to light. By comparing his writings on cities, villages, and settlement, and secondary literature written about this topic, Gandhi as a planner, and urban designer can be unveiled.

It is on these four corner-stones of 'Simplicity, Non-Violence, Sanctity of Labour and Human Values,' that Gandhi builds his ideal economy of decentralized cottage industrialism and self-sufficient Village Communities. The small and extremely ancient Indian Communities are based upon the communal ownership of the land, upon a direct linking up of manual agriculture and handicraft and upon a fixed form of the division of labor. They constitute self-sufficient productive entities, upon which production is carried on. Products are for the communities, and not seen as commodities. Land is commonly tilled, and produce is divided among the members of the community, while each family carries on an ancillary occupation such as spinning, weaving etc. The villages had developed an ideal form of cooperative agriculture and industry in which there was no scope of spoliation of the poor by the rich. Production was for immediate use and not for distant markets. Gandhi was an advocate of Prosperous agriculture, artistic and decentralized industries and small-scale co-operative organization: His views on the village settlement were utopian for he believed that it was the only way to secure India's true freedom.

The Gandhian Plan defined the unit as the following: The unit may be a village or a group of villages, within a radius, of five miles, in other cases the unit of self-sufficiency may extend to a district or even a small province. These units are solely meant for the necessities stripped of any luxuries. Food, clothing and housing are key to these units. For luxury and receiving articles of comfort, Gandhi reverts back to the whole country, or a series of cities. He believes that universalism and villagism can be practiced simultaneously. The peasant is key to the Gandhian plan, and it is he who thrives within the cottage factories and workshops surrounding the fields.


60 Ibid.
Gandhi’s view of the village

This is his place of honor and pride. Gandhi’s economic and socio-political order is based on non-violence, democracy, justice and simplicity. Gandhi was hugely inspired by Tolstoy and Ruskin’s Unto this last. He believed that the last man should be the first concern, and the immediate needs and requirements of the poorest and lowliest sections were of utmost importance. The last must be the first, and the first the last, in the scheme of establishing a socialistic society. Self Sufficiency and Self Reliance was the key to individual and corporate non-violence. The village institutions were emphasized because they had a sense of social cohesion, intimate acquaintance, and mutual confidence. In order to get to the essence of Gandhi’s views on settlement, one must study both his ideas on rural settlement, and urban settlement. Though at first, Gandhi may appear to be anti-urban, he was quite the opposite, but for unique reasons. His idea of a village self-rule, was one that would function as a complete republic, and be independent of its neighbors for its basic needs, but be interdependent for certain others. It states that there would be a reserve for cattle, recreation areas for adults, and playgrounds for children. If there is an excess of land, then useful crops can be grown. There will be civic services in the village including a theatre, schools, and public halls. It must have its own waterworks to ensure a clean and sanitary supply. He proposed doing this by having controlled wells, and tanks. Education is compulsory up until a certain basic point. Every activity will be conducted in a co-operative basis. There will be no caste system, degrading and marginalizing the untouchables. It was his idea of a perfect democracy based upon individual freedom.

Gandhi’s problems with the city are that rural people are forced to migrate into bigger cities, and are uprooted from the soil and create problems in the urban areas. These problems are manifested in the shape of slums and pavement dwellers. The economic point of view suggests that it is cheaper to absorb a person into a natural village setting than to rehabilitate him in a city. Gandhi’s views of cities were especially degenerative due to the issues of sanitation and hygiene. He complains of the plight of society in urban areas due to their disregard for cleanliness in both physical and spiritual terms. Even if there were clean roads, how would one clean the filth within?

61 ibid.
The morality of the people is in question, and the crime, violence and theft within cities during his time were at a much greater rate than today. Gandhi seems to correlate cities with a higher degree of sanitary problems due to crowded conditions and basic numerical differences in population. At a speech at Mahomedan Association in Surat, Gandhi said, “In every city there are two divisions, the cantonment and the city proper. The city mostly is a stinking den” 63

In 1917, the cities were unhygienic and divided between the cantonment, where military and British personnel would stay, and the city proper, with mostly the middle to lower class demographics. Gandhi’s ideal for urban living was the cantonment where it was free of disease and basic sanitary problems. He goes on to say, “It is very significant that when the plague is working havoc in our rural quarters, cantonments as a rule remain free. The reasons are obvious. In the cantonments the air is pure, houses detached, roads are wide and clean and the sanitary habits of the residents wholesome, whereas ours are as unhygienic as they well could be. Our closets are as filthy as hell.” 64

The plague is attributed to the inner city arrangements and lack of organization in the rural quarters. He makes a comparison between the inner city and the cantonment and labels the cantonments as free of sanitary problems due to essentially its urban design. The air in the cantonments is pure because of the detached houses, wide roads and clean and sanitary habits of the residents. The inner city on the other hand is where 90% of the population is and where the spit, dirt, urine and defecation layer the streets. Until dirty habits are abolished, self-rule or Swaraj cannot be achieved. The city though ridden with sanitary problems is of great importance to Gandhi. Control over cities, would mean control over national life. Gandhi says, “If we cannot regulate the affairs of our cities, if our streets are not kept clean, if our homes are dilapidated and if our roads are crooked, if we cannot command the services of selfless citizens for civic government, and those who are in charge of affairs are neglectful or selfish, how shall we claim larger powers? The way to national life lies through the cities. It is, therefore, necessary to linger a little longer on this subject.” 65

63 Ibid., vols. 15, 111.
64 Ibid., vol. 16.44.
65 Ibid.
Sanctity to Gandhi was a question of cleanliness. Even in the most sacred places in Ahmedabad, the streets were dirty. Gandhi said that the same dirt was to be seen even in the sanctuary, where the din and noise was very great. In such a place there should be perfect orderliness, peace, silence, gentleness and humility. These ideals were his key desires for a sanctuary, one that he found mostly in the villages of India.

Gandhi critique of the city:

“The true Indian civilization is in the Indian villages. The modern city civilization you find in Europe and America, and in a handful of our cities which are copies of the Western cities and which were built for the foreigner, and by him. But they cannot last. It is only the handicraft civilization that will endure and stand the test of time. But it can do so only if we can correlate the intellect with the hand. A Bombay or a Calcutta did not represent true India, but it was the seven lakhs of villages that were spread throughout the country which were real India.”

Gandhi’s anti-industrialization views can be prescribed to his stance that modern society is mainly selfish and competitive. He predicted that the natural resources of India will be channeled to meet the needs of the urban-industrial sector. This will lead to the diversion of forests, water, and resources to the wealthy. Already the elite had stripped the natural resources of India, and caused environmental degradation. While the rural and tribal communities were deprived of their rights of access and use, the modern sector keeps moving aggressively to strip India of its resources. His view on the ideal village settlement was the solution to the problem of exploitation. By creating self-reliant village units, there would be local self-reliance that could act as a model on a national scale. His views of the ideal were a clean and hygienic environment, where collective management of the resources of nature would lead to an ideal scenario. On the level of the individual, Gandhi’s ideal of simplicity would be a more appropriate model than the modern lifestyle. Resource recycling, and the controlling of wants is integral. An ecological program based on Gandhian principles would focus on soil maintenance, water conservation, recycling,
and forest rights. During British rule, Gandhi was aware that there was poor maintenance of irrigation tanks, and a lack of conservation of water to augment the water table and reduce brackishness. The relationship between man and nature in Gandhian thought is that of symbiosis. Man should not dominate over nature and appropriate nature to adjust it to a profit-driven agenda. Instead he should work with nature, and find ways to use its resources towards sustainable methods of development.

Though Gandhi preferred the village model, he did want to influence the city of Ahmedabad especially in terms of sanitation. Even though Gandhi left issues in the administration of the municipality to Vallabhai Patel, who was Gandhi’s principal lieutenant in Ahmedabad, where he ran the Congress Party, sometimes he did intervene. One such event occurred where he chaired an Ahmedabad civic meeting on water supply at which he called for improvements in urban sanitation. Gandhi held sanitation, both bodily and urban to levels of high priority. He believed that an aspect of Swaraj or rule over oneself has its basis in public health. In regards to water he says “…We are generally very careless about it. If we were to be sufficiently careful about air, water and food, the plague would never make its appearance among us. Some parts of Ahmedabad have been experiencing difficulties about water during the last eight years. For these three months, the whole city has been in difficulty and we have assembled here to protest against this to the Collector of Ahmedabad… from now on we must take up the effort to secure water.”

Gandhi knew of the condition of the mills and the living conditions in the surrounding neighborhoods. The mills were also notorious for releasing wastewater into the areas of workers’ housing and slums. Worker’s housing lacked proper sanitation, water supply and toilet facilities. When Vallabhai Patel became elected councilor, he had two goals, both inspired and backed by Gandhi. He wished to have Ahmedabad be healthy and clean, with adequate facilities for water, drainage, sewerage, lighting and roads. To a great extent, he did make a great leap towards this direction. He made sure that

68 Arne Kalland and Gerard Persoon, Environmental Movements in Asia (Routledge, 1999).
70 Spodek, Ahmedabad, 70.
the drainage was adequate. He diverted water from the Sabarmati to proper wells and purification facilities to augment the water supply throughout the walled city. Vallabhai was a staunch Gandhian and called for self-reliance. He was Gandhi's general, in the sense that he had the congressional power to implement programs for urban sanitation that Gandhi had imagined. He also believed in individual contributions to the larger mission of cleanliness, as Gandhi believed. Gandhi's views on cities were transformed after his experiences in Ahmedabad. He received loads of monetary support from the businessmen of the city, and saw how the resources that were offered within a city context were essential to his freedom movement. The work of Vallabhai in installing proper drainage and water supply also uplifted Gandhi. A new vision evolved where Gandhi was less critical and more hopeful about the potential of cities:

The latrines of the city will be as clean as a library; its pols will be a model of cleanliness; all of its children will be going to school; it's contagious diseases will be minimized; there will not be divisions between labor and owners, between high and low; the president of the Municipality should be able to sleep in the houses of the workers-someday the Municipality will be like this. And I will get to see it. It is in the power of the citizens to achieve it. 

In this one account one can clearly tell how the ideals of equity, cleanliness, and education are important to Gandhi.

Gandhi's Critiques

Nehru critiqued Gandhi on multiple levels. He believed in the preservation of law and order, and saw the authority of the state as crucial to maintain peace. For Gandhi, it was wholly nonviolence. Gandhi was anti-technology and a staunch critic of western civilization. He believed that commercialization was a curse. He favored small scale cottage industries in order to provide employment to the underprivileged masses, and solve the problem of poverty and unemployment. Nehru on the other hand was a supporter of western science and technology. He supported heavy and large scale industrialization and its power to mold nature into human benefit.

Ambedkar, another critic of Gandhi strongly disagreed with him on the case of

71 Ibid., 69.
untouchability. It's their philosophies that were polarized and led to vast differences in thinking. Gandhi is located on the spiritual end of the spectrum, and Ambedkar was modern. Ambedkar wanted to remove the Dalits from the Hindu community and Gandhi wanted to eradicate untouchability from Hinduism. Gandhi always dealt with his approaches with a spiritual basis and a large moral incentive. For him, without the spiritual underlay, politics would encourage violence and conflict. Ambedkar accepted conflict as inevitable on the basis of the understanding that society was simply an agglomeration of socio-economic groups, each with its own interests. Conflicts would be resolved on the basis of negotiation, bargaining and compromise. Thus politics to Ambedkar was an action-reaction knee jerk reaction with superior power positions and bargaining power as crucial factors. Morality was not the concern of the untouchables. It was a single-minded pursuit that change would have to come. Ambedkar and Nehru weren't the only two that saw Gandhi as imperfect. His constant 'appeasement' of the Muslims endangered the interests of the Hindus. Gandhi was always in flavor of a united India and had no qualms about the Muslims or their interests. He would not have minded if Muslims were head of the government as long as they followed his views on brotherhood and equality amongst all people. This to Ambedkar was conservative, reactionary and unrealistic. Gandhi said, "It is my desire that Ahmedabad should become a thousand times greater than it is today and the prestige this city has today should be greatly multiplied. It is a heterogeneous place. It is my function to bring about harmony among its varied elements. It is the function of us all. It is not for us to accentuate distinctions; it could be the work of class war enthusiasts. We should on our part plead with them to bear with a single union." His belief in equity and communal unity was something that his critics found naïve. Also, his opposition to machinery and his commitment to the spinning wheel also estranged Ambedkar. Similar to Nehru, he believed that modern devices would end economic and social ills and liberate the lower orders of the Indian society, not Gandhi's ideals. Ambedkar believed that

72 Mahatma Gandhi, Collected Works (Publications Division, Ministry of Information and Broadcasting, Government of India, 1976), vol.63.405
Gandhi's ideals would never liberate the individual, but rather the only thing that would, is culture. Culture is only transferred when there is leisure, and Gandhi never believed in leisure. He acknowledged the danger of the lure of leisure, and believed that free time should be spent productively. Ambedkar believed that by reducing the toils of life, one would have time for culture which is of utmost importance.

Gandhi believed in culture as truth. His ideals went beyond all the critiques because of its one strength, his innate ability to transcend skepticism and question the status quo, while still demanding respect. Even though he has been criticized harshly, it's not to say that human nature can't be transformative. His life was highly contested and not immune to attacks of those in power. His critics included Nehru, Ambedkar, British, and even Indian elites. Yet regardless of all the controversy, there is one thing that bound him to a larger meaning, his ability to emanate hope. Nehru, after Gandhi’s death summed it up elegantly when he said,

“The light has gone out of our lives and there is darkness everywhere... the light that has illuminated this country for these so many years, will illuminate this country for many more years, and thousand years later that light will still be seen in the country and the world will see it and will give solace to innumerable hearts.”

Figure 107: Mahatma Gandhi's Funeral Procession

Image Source: http://library.thinkquest.org/26523/mainfiles/death.htm
Ideals for Planning and Design

In the following pages, these five ideals will be traced through Gandhi’s Collected Works. The way of arriving upon these ideals involved doing keyword search hits through Gandhi’s online collected works for the purpose of distilling his views on cities and settlement. The keywords were searched in pairs also noted on the mind maps. After this keyword search, these five ideals were generated. Key related quotes that contributed to this list can be traced in the following pages.

Image Source Figure 80: Sabarmati River Front Development Corporation Limited, HCP Design and Project Management Pvt.

Figure 108: Ideals for Planning and Design
Gandhi's Ideals related to settlement, landscape and Built Form to be applied to the Sabarmati Riverfront: (See Figures 1-5)

I. Sustainable:
Must be responsible in its use of natural resources. Man and Nature must have a symbiotic relationship.

II. Empowerment:
Empowering society, one individual at a time. Leading to key institutional partnerships of educational powerhouses such as IIM, N.I.D, and CEPT and NGO's in dealing with the public space allocated by the riverfront.

III. Sanctuary:
Use the reclaimed center of the city to develop consciousness of unity, and diversity of the city. A clean city can inspire a sanctified spirit:

IV. Equity:
Create a non-denominational space irrespective of race, caste, or financial status geared towards education, commerce, and ecological landscapes for the purposes of raising awareness and capacity building.

V. Civic ness:
What's the new public sphere for modern Ahmedabad?
NEO -GANDHIAN IDEALS:

I. Sustainable:
   - Empower
   - Sanctuary
   - Equity
   - Civic ness

If we cannot regulate the affairs of our cities, if our streets are not kept clean, if our homes are dilapidated and if our roads are crooked, if we cannot command the services of selfless citizens for civic government, and those who are in charge of affairs are neglectful or selfish, how shall we claim larger powers?

But for the last 150 years the trend has been for cities to exist only to squeeze wealth out of the villages. Towns exist to exploit the villages.

model sanitation cleanliness sanctify city

...lead the way in model sanitation. Let them, whether the State help them or not, call in a specialist and spend money in improving their sanitation so as to make it perfect. 'Cleanliness is next to godliness.' We can no more gain God's blessings with an unclean body than with an unclean mind. A clean body cannot reside in an unclean city.

In every city there are two divisions, the cantonment and the city proper. The city mostly is a stinking den...
If we are to live in cities, if we are to live an organized life, if we are to grow in health and wisdom—we shall have to get rid of insanitation some day or other...

Cantonments
Pure Air
Sanitary
Wide Roads
Detached
City
Unhygienic
Filthy

In the cantonments the air is pure, houses detached, roads are wide and clean and the sanitary habits of the residents wholesome, whereas ours are as unhygienic as they well could be. Our closets are as filthy as hell.
Villages inspire a sanctified spirit: Access to water and new institutions focusing on communal identity and the importance of spirit.

II. Empowerment:

A Bombay or a Calcutta did not represent true India, but it was the seven lakhs of villages that were spread throughout the country which were real India. The true Indian civilization is in the Indian villages. It is only the handicraft civilization that will endure and stand the test of time. But it can do so only if we can Correlate the intellect with the hand.
The villages are not inhabited by uncivilized people with no art and nothing good to show in life. There is much beauty in the villages. There is much art and there are industries that the whole world knows about. Village crafts have been appreciated all over the world. I would ask you to ignore big cities if you would see the heart of India. The big cities here are but poor editions of your big cities. Therefore you have to go to the villages and those too not close to cities or to the railway line, but unspoilt by them.
NEO-GANDHIAN IDEALS:

I. Sustainable:

II. Empower

III. Sanctuary:

IV. Equity:

V. Civic ness:

The streets of Kashi, the most sacred place for the Hindus, are dirty. The same dirt was to be seen even in the sanctuary where the din and noise was very great. In such a place there should be perfect orderliness, peace, silence, gentleness and humility.

"After securing the land you should prepare a blueprint indicating all the proposed arrangements. The halls for treatment and experiment should be in the centre or in one corner. They should be surrounded by decent huts for the residence of patients and children entrusted to our care. The sanatorium should grow full, flowers, food grains and vegetables. It should have cattle sheds and roads good enough for vehicles. It should also have a gymnasium, a tank for bathing and other facilities."

Careful Air, water and grains are three chief kinds of food. Air is free to all, but, if it is polluted, it harms our health. Doctors say that bad air is more harmful than bad water. Inhalation of bad air is harmful by itself and this is the reason we (sometimes) need change of air. Next comes water. We are generally very careless about it. If we were to be sufficiently careful about air, water and food, the plague would never make its appearance among us.
Use the reclaimed center of the city to develop consciousness of unity, and diversity of the city.

Wherever we may be, if we keep our places clean, it will have its impact on the whole city. Let every man keep his own house, his own heart clean.

Clean
Impact
Everyman
Heart
Create a non-denominational space irrespective of race, caste, or financial status geared towards education, commerce, and ecological landscapes for the purposes of raising awareness and capacity building.

**Reason**

**Educate**

**Watersupply**

There is no earthly reason why the Ahmedabadis should not be able to sweep and light their own streets, educate their own children and look after their sick and their watersupply without hanging on to the Government.

**Plead**

**Union**

**Accentuate**

It is not for us to accentuate distinctions; it could be the work of class war enthusiasts. We should on our part plead with them to bear with a single union.

**Forget**

**Untouchability**

**Cleaning**

Townspeople should on the other hand, forget that there is such a thing as untouchability and learn the art of cleaning their own and the city's drains.
If, then, our two communities live in harmony, we shall have all that we want dropping into our hands, so to say. To ensure this, we must behave with no fear in our hearts, and with a mind that is ever the same.

This gathering reminds me of South Africa, where the Hindus, Parsis and Muslims had become one. I shall, therefore, tell you in brief that I returned to India with the desire to render equal service to both the communities, Hindus and Muslims.

Heterogeneous Harmony Elements

* It is my function to bring about harmony among its varied elements.
Gandhi was a designer and he had pragmatic intentions in each of his actions. His primary concern with cities were that of improved sanitary conditions, and beautification as a way of value increase.

Ahmedabad. I may go if I am invited. I should be taken only to places from where we hope to collect funds.

- Ahmedabad happens to be my permanent headquarters and has so much more of wealth, shrewdness, intelligence, business activity and a spirit of venture

"Could we not have small children's parks in every locality in Ahmedabad? Could not the roads be broadened? if there is social cooperation between all citizens and if the rich regard the entire city as their own and spend their riches on beautifying it. They should also realize that wealth spent in this way begets wealth."
If the roads in Ahmedabad are widened the adjoining land will rise in value. In addition to this, there is an economic gain which follows from improved health of the people and the resulting increase in their vitality and their life-span.

Desire Economic Gain
Prestige Value
Multipled Vitality

National Life
Cities

"It is my desire that Ahmedabad should become a thousand times greater than it is today and the prestige this city has today should be greatly multiplied."
3.2: GANDHI AND CORREA: THE ORIGINAL AND THE INTERPRETATION

Figure 114: Site Plan: Gandhi and Correa
1: Hriday Kunj: Gandhi’s home
2: Gandhi Memorial Museum
3: Magan Niwas (Lodge)
4: Sanitary Block
5: Narmad Niwas (Lodge)
6: Store
7: Water Room
8: Nandini (Guest House)
9: Vinoba Mita Kutir (Cottage)
10: Udyog Mandir (Temple of Industry)
11: Upasana Mandir (Prayer Pavillion)
The Gandhi Smarak Sangrahalaya was designed and built during 1958-1963. Designed by Charles Correa, this museum has now become a part of the Sabarmati Ashram premises. The client for this project was the Sabarmati Ashram Trust who had asked Correa to design a memorial museum, and a study center in 1958. This museum was to function as archival facility housing around 30,000 letters writing to and by Gandhi, photographs and documents including several hundred volumes edited by his secretary Mahadevbhai Desai. 

The memorial museum is built in honor of Mahatma Gandhi to commemorate the Sabarmati Ashram as the site that launched India's freedom movement. Inaugurated in 1963 by the Prime Minister of India, Jawaharlal Nehru, the museum is a narrative through his life.

Image Source: James Wescoat

Approaching the Museum

The entry to the museum is marked by various thresholds. Vehicular entry is prohibited by virtue of a narrow indirect entry. When one enters the side of the Ashram with the museum, there is a slight rise in ground level which is paved parking. Most people take public transportation to the site of the Gandhi Ashram given that most often they are tourists. The first impression one has is not of the museum itself, but rather of the elements of the old Sabarmati Ashram. There is a long view vista to the waterfront and the ashram on the right, since a pathway lined with trees takes the visitor to the entry of the museum which lies on the middle of the path on the left.

Spatial Elements

Charles Correa used the same materials as used in the ashram for the construction of the museum. He extracted the essence of openness from the Ashram, and embedded it onto the spatial layout of the new museum. Tiled roofs, wooden doors, stone floors, and brick walls come together in an arrangement that is open on four sides. The lack of windows made of glass, and other modern technology, makes it a simple yet profound interpretation.
Figure 116: The Gandhi Smarak Sangrahlaya: Site Plan

Image Source: Charles Correa Foundation. Redrawn by Author.

INTERPRETATION: GANDHI'S ADVOCACY FOR THE VILLAGE

1. A CENTRAL COURT: A MEANDERING PATH LEADING TO THE WATER COURT

2. MICROCLIMACTIC STRATEGY: AN OPENNESS TOWARDS THE RIVER

3. INTEGRATION OF NATURE AND BUILT FORM
The tiled roofs combine to mimic the rooftops of the village, and are grouped in a pattern that recalls the Sabarmati Ashram's meandering pathways. The village always had a central meeting point, whether it is at a chowk, an intersection of main streets, or at the pond, or common well. Similarly, the meandering path of the museum draws the visitor in to the centrality of the water court.

Nature and built form are well integrated with nature being enclosed within the courtyards. All the courtyards are at a lower level, without the base plinth, and are textured by water, pebbles, and vegetation. The eye follows the continuous open spaces created by these open modules, and scans the nature beyond, including the Sabarmati from various views.

**A Waterfront Project:**

The project is a waterfront project for the main reason, that it takes into consideration the micro-climactic strategies into its layout. The uniform distribution of courts, and the concentration of enclosed spaces northwest and openness towards the river, demonstrates its waterfront strategy. The organization and placement of the courts,
semi-open and enclosed spaces, is related to the river. Along the river side, the openness is maintained so the breeze can be captured. Since open to sky courts, and semi open circulation and exhibition spaces are organized around the water court, there is continuity in the depth of field for vision. The nature of the original Gandhi Ashram pervades the museum by indirect views that are seen framed by the modularity of each pavilion. Gandhi’s advocacy for the village inspired Correa. He made sure that the sky, and parts of nature are visible at all times through the museum. This way the visitors feel as if they are walking through the traditional village where life is both inside and outside. These square modules are 6m X 6m, and have three types: Enclosed, semi-open, and voids in the form of open-courts. These modules are defined in space by the micro environmental qualities. If a module receives natural light, it remains open without a roof or vertical walls. However, if a module is to hold an exhibition, it becomes entirely enclosed by roof and vertical walls. The modules, which act as a transition from closed to open spaces, are only covered by the roof without any vertical elements. The human scale of the museum is evident in its proportioning, and rectangular framing of the views.

This language of designing, of openness, is suggested by Mahatma Gandhi when he says,

"I do not want my house to be walled on all sides and my windows to be stuffed. I want the cultures of all lands to be blown about my house as freely as possible. But I refuse to be blown off my feet by any of them." 

Correa’s memorial in Ahmedabad is an attempt to interpret a Gandhian architecture. The simplicity of the formal quality of the museum evokes the beliefs that Gandhi had about settlement. The architecture embodies a sense of ambiguity, one that parallels a phase of uncertainty in India. The traditional systems and rapid pressures of modernization created conflict in the built form. Correa expressed the ambiguity through the qualities of the museum, one of his projects in the post-independence time period. The search for an Indian identity is clear in his subtleties.

75 Vivek Mistry, “Giving Identity to Built Form through Courts- Studying the Works of Charles Correa” (C.E.P.T University, n.d.).

76 Mahatma Gandhi, "The Collected Works of Mahatma Gandhi (Electronic Book)," vol. 6 pg 170.
Flexibility and Incremental Growth is an important part of the design. Movement is an important aspect of the museum. The paths taking the visitor from open to enclosed spaces, from darker to lighter spaces, from exhibition to reflective spaces are layered creating a comprehensive spatial experience. The use of landscape and nature within the building creates contemplative courtyards that act as interfaces between the outside and inside. The Hriday Kunj, or Gandhi's house, has the following three elements: the verandah, the colonnade, and the courtyard. These characteristics have been reinterpreted in the building of the Gandhi Smarak Sangrahalya. The central courtyard is an organizing core. Similarly, in the Hriday Kunj, the spaces are organized around the courtyard. The overall Ashram, composed of a series of huts clustered in functional similarity, is also recalled in the organization of the museum. The single roof structure houses four distinct clusters, and a series of pathways moving through them centered around a water court.

The sequence of events that the visitor goes through imitates the sequence of the Hriday Kunj. One enters a verandah space in Gandhi's home, and is greeted by a courtyard. In the museum, one enters semi-wide open space...
created by the congregation of several semi-open modules, and is greeted by the water court, which is centralized and open to sky. In the Hriday Kunj the enclosed rooms are organized around the circulation space, and similarly in the museum the circulation spine leads to the closed rooms. The closed rooms in the museum are fragmented and reached by meandering paths that takes the visitor through various shades of light. Whether, its light shining through the open to sky modules, or reflected by water, the play of shade and light enhances the experience greatly.

Charles Correa reinterpreted Gandhi by using the same materials as used in his Ashram. He used white plastered brick walls, Kota stone, wooden doors, windows and roofs as well as pitched roofs covered with Mangalore tiles. White colored wooden louvers are used in the entire museum. Colored white to evoke simplicity, the walls are similar to those of the Hriday Kunj.
Conclusions

Thus, it can be derived that Correa reinterpreted Gandhi on an architectural scale, with the waterfront being a key generator of spatial organization. He worked with site and nature, by creating courtyards that controlled the nature found in the Ashram. He used planes, vertical and horizontal to frame views to the waterfront, and guide the visitor's movements. His concern for appropriate materials, technology, and scale reveal a post-independence Gandhian architecture. Correa interpreted Gandhi through an architectural scale. The qualities reflect a sense of openness and freedom. Correa interpreted Gandhi's advocacy for the village through a postmodern lens interpreting it through civic space. This thesis takes the stance that it can be re-interpreted again on an urban scale downstream. The following section will describe the site chosen to be appropriated. This site will be a microcosm of what the city ought to be through its accessibility, and inclusiveness. By appropriating this area, this thesis proposes an area that will be central for the expressions of the values missing elsewhere.
Figure 125: The Three Wise Monkeys

Image Source: Author. Site Visit 2013.

Figure 126: The Museum as an homage to Gandhi

Image Source: commons.wikimedia.org
CHAPTER 4: SITE INTERPRETATION AND ANALYSIS

Figure 127: A Downstream Opportunity: Selection of the Site

Image Source: Author
Sections:

4.1. SITE HISTORY AND LEGACY
4.2. APPROACHING THE SITE
4.3. ACCESSING THE SITE
4.4. MOVING THROUGH THE SITE

Figure 128: Public Transit Systems Available

Image Source: Author
Introduction

The site's history dates back to the Mughal era where two monuments can be found on the site including a Mosque, and a Tomb from the 1500's. Next, in late 1800's, the Calico Mills were founded on this site and became one of the most modern trendsetters of the Indian textile era. In the early 1900's, Gandhi, worked with the owner of the Calico Mills, Ambalal Sarabhai, to maintain labor harmony and solve issues related to workers' discontent. Ambalal, in return, helped fund Gandhi's freedom movement with the profits of the mills. Since the 1980's, the mills have shut down. Today, though the mills have been abandoned, and remain open for development. For historical research, literature review was conducted and newspaper articles were consulted for determining the Calico Mills' contemporary heritage importance.


Image Source: CEPT University Scans.

Figure 129: A Map from the British Era: Two Monuments on Site
The Mughal Heritage

The two monuments from the 1500's are the Baba Lului Mosque and Mir Abu Turab's tomb. The Baba Lului Mosque which will be later shown in photographs was built in 1560 by Baba Lului, a pearl merchant. Mir Abu Turab's tomb was built in the late 16th Century. He was a nobleman of power, and had much to do with Akbar's regime in Gujarat from 1573-1583. According to the Gazetteer of the Bombay Presidency, Abu Turab was the chief of the Mecca Caravan, and had brought back a stone with the mark of the prophet's foot which was then buried on this site. There was a building erected over it which became an attraction for pilgrims. However in the 18th Century, the unrest caused this area, at the time known as the outskirts, to be unsafe. The stone was taken away, and moved elsewhere. He was still buried here in the tomb. Today, both these monuments are ASI protected but not in the public consciousness, especially the tomb of Mir Abu Turab. As it remains encroached upon and surrounded by the vast abandoned mill lands.

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The Calico Mills: A legacy of an Industrial Heritage

2003: Google Earth

Figure 130: The Calico Mills on the Downstream Site before Demolition. An Industrial Site.
Figure 131: The Calico Mills Demolished: Leaving behind an important industrial footprint.
Figure 132: An Abandoned Site surrounded by a diverse population.
Figure 133: A Historical Industrial Plan imprinted in the form of foundations in the landscape.
The Downstream Site: Historical Perspective

Ahmedabad is amongst the ten largest cities of India, with a population of 4.4 million. The city grew with development of textile industries in India, and provided employment to more than 50,000 workers. Due to the industry shifting to Mumbai, the textile industry declined. Mills were shut down in the early 80’s which created a large rate of unemployment for the city. Currently many of these mills are under litigations. 1.7% of the total Ahmedabad Municipal Corporation is closed mill lands located around the walled city. With a high potential for development, re-use of the compounds could provide employment in commercial or small scale industrial sectors. This land could also be used for providing public open spaces, since the walled city is very densely built and is in need of open space. The Calico Mill is situated in a prime location on the end of Sardar Bridge and at the edge of the Sabarmati River.

Sultan Ahmed Shah might have founded Ahmedabad, but it was the mill owners or mahajans that gave it its modern incarnation. Textile mill owners were not just businessmen, but they were rather visionaries that used their resources to bring Ahmedabad its civic powerhouses.\(^{80}\)

Ahmedabad’s first millowner was Ranchhodlal Chhotalal, and he was also chairman of the AMC, Ahmedabad Municipal Corporation. Next, with the help of Vikram Sarabhai, who was the son of the Calico Mills owner, Ambalal Sarabhai, the IIM was brought to Ahmedabad, designed by Louis Kahn. Almost all the educational institutions are built on land owned by him.

Calico Mills:

Calico Mills was at one point a symbol of the industrial splendor of not only Ahmedabad, but Gujarat as well. Originally known as Ahmedabad Manufacturing and Calico Printing Mills Company Limited, it was popularly known as the Calico Mills. Established by a Sheth Karamchand Premchand in 1880, it was one of the earliest textile mills in the city. Later on the mills came under the ownership of Ambalal Sarabhai. It is then that it became the first Indian mill to manufacture cotton sewing thread, and later on synthetic sewing thread.\(^{81}\)


\(^{80}\) "Mahajans Gave Birth to New

\(^{81}\) ("Calico Mills Passes into History for Rs270 Crore :: DNA")
Ecologically, the main textile unit was fueled by natural gas, and was conscious about its waste. It had its own primary effluent processing plant. Coupled with the shifting of the textile industry to Mumbai, the Calico Mills had to disintegrate due to financial troubles and eventual liquidation.

**Gandhi and the Calico Mill Workers:**

In the 30’s, Gandhi then turned his attention to the mill workers of Ahmedabad. A dispute arose between the mill owners and the workers over the question of a plague bonus. The employers wanted to withdraw the money being assigned once the epidemic had passed, but the workers insisted its’ stay trying to make money. The British collector who feared a showdown requested Gandhi to bring about a compromise. Ambalal Sarabhai, a leading mill owner was a friend of Gandhi. Gandhi persuaded the mill owners and the workers to negotiate. The mill owners offered a 20% bonus and cautioned against disagreement with threats of dismissal. Gandhi, upset by the breach in agreement advised the workers to go on strike. The strike began and Gandhi addressed the workers everyday on the banks of the Sabarmati River. Ambalal Sarabhai’s sister, Anasuya Behn, was one of the main lieutenants of Gandhi in his struggle. After some days, the workers began the sign of weariness. In this situation, Gandhi decided to go on fast to strengthen their resolve. Fast, however, had the effect of putting pressure on the mill owners and they decided the whole issue to a tribunal. The strike was withdrawn and tribunal later awarded 35% increase the workers had demanded.

Ahmedabad’s image of mill workers with tiffin boxes tied to their bicycles riding towards the city at the crack of sirens was somehow forgotten. Soon one mill after the other fell like a pack of cards. Even till this day the people of Ahmedabad recall that the first neon sign of the city reading “Calico’ and the first neon clock that was displayed at the mill. The neon signs were visible from Ellis Bridge back then.

Ambalal Sarabhai’s philanthropy helped Mahatma Gandhi establish his first ashram,

82 Ved Mehta, Mahatma Gandhi and His Apostles (Yale University Press, 1993).

along with helping fund his experiments with the untouchables. However, owing to financial problems, the mill went into liquidation in 1982. Before the downturn, affluent industrialists Gautam Sarabhai and his sister Gira Sarabhai had started the calico museum to house the history of Ahmedabad’s textile industry. They wanted to raise awareness of the art, in 1949. Prime Minister Jawaharlal Nehru had inaugurated the museum, and had said, “The early beginnings of civilization are tied up with the manufacture of textiles, and history might well be written with this as the leading motif.”

The Calico Textile museum is one of the foremost museums of textiles in India. During its origins, it focused on handicraft textiles, and moved onto informing people of Indian textile and handicraft industry. Running publication programs, it emanates knowledge regarding the history and research in the textile industry. The Museum inspired by Dr. Ananda Coomaraswamy was formally housed in 1949 by Shri Gautam Sarabhai and his sister Gira Sarabhai in the large industrial house of Calico.

The Calico Mills used to do fine reproductions of choice textile pieces on cloth housed in the world famous textile-museum that was located in the mill compounds. Considered as the leading textile museum of the country and one of the most illustrious institutions of its kind in the world — Calico Museum of Textiles in Ahmedabad was established in 1949 and is one of the must-visit places in the city. The museum boasts of some marvelous collection of Indian fabrics epitomizing handicraft textiles that span more than five centuries thus attracting large amount of visitors from all across the society. Large number of Indian and international research scholars have visited, and are visiting the Calico Museum of Textiles for their research and referral work. Most importantly the Calico Museum serves as a reference point to the surviving handicraftsmen of India who draw their inspiration from these ancient textiles of India. The museum also serves as a reference point for the Indian machine-textile industry, which is constantly

84 "Mahajans Gave Birth to New Ahmedabad."


trying to revive the rich textiles of India through machines.

In 1949 Gautam Sarabhai and his sister Gira Sarabhai along with the industrial house of Calico founded the Calico Museum of Textiles in Ahmedabad. The museum that was established in the compounds of Calico Mills was to serve as the specialist museum in India that was concerned with both the historical and the technical study of Indian handicraft and industrial textiles. However, it is believed that by the early fifties the museum discovered its original aim and concentrated all its energies on the huge and imperative field of handicraft textiles thus devoting much less time to industrial fabrics and inviting the surviving handicraftsmen to display their work in the museum. With the profitability of the textile industry, the Sarabhai’s built the textile shop, the Calico Dome in the old city, while the actual mill lands were in the outskirts of the old city within the industrial zone.

By the year 1971, the House of Calico came to the conclusion that the excellent fabric collection and the invaluable research conducted by the publications were such that museum should be an independent society. And the museum was able to achieve this transition smoothly only under
the progressive administration of Gautam and Gira Sarabhai who from the day one have been using their knowledge and their reputation as art connoisseurs for the betterment of the museum. In addition to that the continuous funding by the Calico Group in spite the fact that the museum was now an independent society has allowed the museum to grow both in volume and stature and today it is one of the most renowned institutions in the world for its eminent and wide-ranging collection of textiles and artifacts.  

Calico Mills Downturn

During the 1980’s the Calico Mills were in trouble, and could not house the museum anymore within the mill compound. Transferred in 1983, to the Sarabhai haveli, it has been running as a renowned museum showcasing a variety of fabrics. The library, and textile gallery has informed the curriculum for textile design at NID, the National Institute of Design.

The mill was closed down in 1994, and went into liquidation in 1998. Slums have developed on the outer southern periphery of this mill. The Eastern part is the timber market of the city. The North has the flower and grain market. It is the biggest mill in Ahmedabad. In 2003, the factories were demolished and today the unused land is overgrown with trees, with remnants of concrete foundations and the main chimney still standing iconic of its glorious past. This chimney of the mill, which used to bellow smoke high into the sky flaunting the city’s status as the East’s textile hub, will be preserved as a heritage structure. Ahmedabad Municipal Corporation (AMC) has taken the responsibility for this.

"We shall reclaim a small portion ofthe land around the chimney. This shall be turned into a small museum showcasing the mill culture, the people who made the chimneys and the heydays of textile industry boom here," said a senior AMC official. 

This is an important step in the city’s quest for a World Heritage City status as UNESCO has mandated industrial heritage of any city to be preserved.

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88 Paul John and Kevin Antao, “Calico Chimney Would Hold City’s Heritage High.”
Today, the site is surrounded by organized slums, a mosque, crematorium, and burial grounds. With the riverfront development plan the adjacent area, the periphery of the Sabarmati river, is about to be commercialized and used for recreational purposes. The slums are to be demolished and relocated from the river side. In a few years, this Calico old mill area is bound to be capitalized on. With a densely packed city, an open area like this can generate a new image for the city.

There are about 49 other mill plots closed up in Ahmedabad. Now, the Ahmedabad Municipal Corporation (AMC) wants to plan a more balanced development on the land occupied by closed textile mills to resuscitate areas around it. The General Development Control Regulation (GDCR) Act can be changed to allow for city development. The ‘general industrial zone’ embargo can be lifted provided that education and other social infrastructure could be set up on the land. The AMC has also made it mandatory for developers to ensure that 20 percent of the mill land taken by them be reserved for housing of urban poor.

The key considerations are employment generation, creation of city level open spaces & recreational facilities, city level institutions (training, educational, cultural etc), providing neighbourhood level amenities and facilities and a limited amount of commercial activity.
Approaching the Site

The methodology for understanding the surrounding context is as follows:
Each approach will be labeled as 4 directional arrows and the key highlights along the route will be pointed out including its relationship to the abandoned Mill Site. Each zone will be explored in conceptual diagrams in plan and associated narratives, including those from site visits. The following Zones will be elaborated upon:

1. Sardar Bridge to Jamalpur Flyover
2. Jamalpur Gate
3. Ram Rahim Route
4. Kankaria Route

Each approach remains unique, and in need of being integrated with the site. From the waterfront, it remains inaccessible. From Jamalpur, the plethora of informal activities surrounding the site cannot currently penetrate the abandoned compound. And most importantly the community in the south end of the site, Ram Rahim must be integrated. They are an exceptional community composed of Christians, Muslims and Hindus that have maintained peace through communal violence and been awarded the Indira Gandhi National Integration award.

The Calico Mill Site, is an area of 59 acres surrounded by the fragmented types of fabrics. It is enclosed by a compound wall, with one entrance that has been made smaller after the demise of the calico mill industry.

Most importantly the community in the south end of the site, Ram Rahim must be integrated. They are an exceptional community composed of Christians, Muslims and Hindus that have maintained peace through communal violence and been awarded the Indira Gandhi National Integration award.
Figure 138: Approaching the Site: The Four Varied Approaches

Image Source: Author.
Figure 139: Tagore Memorial Hall
Image Source: www.fotothing.com

Figure 140: The Flower Market
Sonali Dalal’s photos: Flickr

Figure 141: The Vegetable Market
streethawkers.blogspot.com

Figure 142: Travelling from Across the Bridge
N.I.D: National Institute of Design

Image Source: Author
Baba Lui Mosque

Figure 143: Sanskar Kendra
www.fundationlecorbusier.fr

Figure 144: N.I.D

Figure 145: The Mosque
Site Visit: 2013
1. Sardar Bridge to Jamalpur Flyover

Zone A:
The Journey from across the Sardar Bridge, going from West to the East side, is characterized by drastic changes in the sense of place. The three points of civic importance, Sanskar Kendra, Tagore Hall and the National Institute of Design are clustered on the West Side next to the Sardar Bridge. NID is highly secured and cannot be felt while driving by, other than a sign that one passes, and Doshi’s Tagore Hall on the other hand can be seen. Sanskar Kendra, Le Corbusier’s museum, cannot be felt from the street. As one drives over the bridge, the one prominent icon that recalls the past is that of the Calico Chimney and the Baba Lai Mosque is also seen. Once over the bridge, the landscape feels fragmented as vegetable carts line the streets, and vendors sitting on the street continue their banter. The left hand side driving leads one to zoom past the Calico compound wall and onto the Jamalpur flyover, or towards the old city, without even being aware of it. On the other hand the series of images on the left, are of traveling from the East to the West, coming off the flyover, where one comes down the flyover and is aware of the edges of the Calico Mills, but can only see wild nature beyond the compound wall.
Figure 151: The only existing entry towards the waterfront

Google Earth Ahmedabad Dec 2013.

Author. Site Visit 2013.

Figure 152: Gate to Waterfront

Author. Site Visit 2013.

Figure 153: A Private Feel
Figure 154: Zone A: Crematorium along the water

Image Source: Oksana Ramos

Figure 155

Image Source: Oksana Ramos

Figure 156

Image Source: Oksana Ramos

Figure 157

Image Source: Oksana Ramos
Zone B: Waterfront

The Waterfront Access is currently underway, and one can see the road that has been constructed as the overall connector for the West Side. However, given the Calico Mill Site and its lack of current ownership, the road construction has stopped. In its way are several heritage monuments, and scattered graveyards. In the interim the waterfront is used by children from the squatter communities to play cricket, run around, and enjoy the openness. The reclaimed land has created an edge that didn't exist below. The one major monument, Baba Lui Mosque, has been taken into consideration by SVRDM when building the riverfront edge. A series of steps in a ghat format, lead from the upper embankment to the lower embankment.

The Squatting communities on the rivers edge, have been given an alternate arrangement on the outskirts of town, and since it is not feasible for them to maintain their livelihoods away from this location, they have continued to remain here. The Waterfront on the East side remains under used and underdeveloped on a whole. According to the security guards, the safety of visitors are not guaranteed, and instead they are warned to stay away from this edge. The efforts for redeveloping public edges remain concentrated on the West Side predominantly. Just across the river, is NID and its new frontage, the reclaimed land given to public use. Why cannot this public use extend across to the other side? There is a large potential for this connection to occur.
Figure 160: A landscape of potential character

Figure 161: A View from the Bridge: The Calico Chimney

Figure 162: The Current Character of the Waterfront

Author. Site Visit 2013.
The Old City

Inaccessible Edged Calico Mill Workers Housing

Zone B

Behrambura Marg

Jamalpur Gate

Lagadnath Temple

Going Under the Flyover

Bukharibava Muslim Cemetery

To Kankaria

Figure 165: The Jamalpur Route
2. Jamalpur Gate Route

Zone A:
As one travels down from the old city, a symbol of Ahmed Shah’s remaining Ahmedabad, comes into view, the Jamalpur Gate. This was once an exit port for other cities. Today, it is an exit into the more industrial part of the city, or to the largest public space in Ahmedabad, the Kankaria lake.

As one goes around the Jamalpur Gate, and towards Behrampura Marg, the Jagadnath temple is found on the right. Historically, this area where now stands Shree Jagannathji Mandir campus, was a thick forest beside the river Sabarmati in the East and the city limit ended at the Jamalpur Darwaja in the North. ¹

The Rathyatra that typically begins out of this temple in June, is a massive procession that goes through a 15-km route of eastern Ahmedabad. It starts from Jagannath mandir, and contains 18 elephants, 103 decorated trucks, security vehicles, and a million plus people. Though the route goes in the opposite direction and through the old city, the surrounding areas have great potential for festivities and preparation.

¹ http://www.jagannathjiahd.org/live_darshan.php
2. Jamalpur Gate Route

Zone B:
As one travels further beyond the temple, one goes underneath the Jamalpur flyover, and past the AMC Vegetable Market. Next, the landscape is of a narrow road adjacent to the compound wall of the Calico Mills surrounded by squatter settlements. There is a lack of legibility and sense of chaos while passing through this landscape. Traveling in a vehicle is the only option for an outsider. The pedestrian realm is associated with the surrounding community. The community is always on guard, and highly suspicious of outside visitors, unless accompanied by a familiar face. The various types of vehicles, three wheelers, two wheelers, and bikes and cars add to the mix of chaos through the thoroughfare.

The users from this zone of the site analysis can be categorised as the following:

**Zone A : Users**
- Street Vendors: Vegetable, and Flower
- Old City Residents
- Festival Goers
- Temple Worshipers
- Commuters

**Zone B: Users**
- Commuters
- Residents of Behrampura
- Ex Calico Mill Workers and Officials
- Old City Residents heading to work

Thus, one can see that the qualitative factors of each zone are different. Zone A is more manageable for the pedestrian and has a street character that is conducive to selling, bargaining, and purchasing of vegetables and flowers for subsequent praying at the various temples in the area. The Jamalpur Gate is a heritage monument, and occasionally draws tourists.

For Zone B, the qualitative factors are very different. Mostly functioning as a thoroughfare, there is no pausing on this route. The compound wall of the Calico Mill site, allows no perpendicular connections. The wall is part of the heritage of the industrial legacy of Ahmedabad, yet it is passed by without making any imprints. The connectivity to the outskirts of Ahmedabad, also makes this zone highly used by commuters that get stuck in traffic most often during rush hour. Zone B is surrounded by a fragmented urbanism.
Figure 168: Zone A: Under the Overpass

Image Source: Author. Site Visit 2013.

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Figure 169: Zone B: The Calico Compound Wall

Image Source: Author. Site Visit 2013.
This specific approach is laid out through an informal interview taken during a site visit to this community. The reason for doing so is the profound effect the site visit had on this thesis for being an inspiration for the program. Viren Joshi, or Viren bhai, as they call him in respect, is one of the founders and managing director of Manav Sadhna, a Gandhian NGO that is building a community center down at this site. During the car ride from Gandhi Ashram to this community, he elaborated upon its history, its importance, and his wishes for the future of the abandoned calico mill site. Jan, an architect from Australia who had drawn a concept for the center was also with us. The following conversation is paraphrased and will shed light upon the importance of the exceptional Ram Rahim community, not only for this site but for Ahmedabad as a whole. As a conclusion, personal observations are laid out.
Q. Who composes the surrounding community, and why are they noted to be special?

The number one reason for their special status is that they have always kept peace. During any riots there have never been any stone throwing, and the community always remains nice and peaceful. They are part of the blue collar working class. They have this peace committee that keeps peace. So that's one reason it's so special. The second reason it's so special, is because the community space that we are in has in the center both a Dargah, for Muslim worship and a Temple for Hindu worship in the same space, and they all do just fine. There are no issues at all.

Q. How was this community space created?

The way which it was created was also very powerful. As you know we used to run a street school, where all the street school children used to come to learn at Paladi char rasta (Cross roads). Barod and one other teacher found out one day that all the children on the street disappeared for three days in a row. They researched about what could have possibly happened and found out that in the newspaper there was an article about child labor and how the government wasn't active about it. So cops got active and arrested a bunch of juvenile little kids and threw them in a jail downtown, and didn't even tell the parents. The next day they got them out, but then decided they aren't going to school anymore. So the teachers went inside the community to reach the kids. The parents and kids both requested that something should be started within the community. So we liked the idea, and we rented a small room, a really small room, and started a small school right in the area. We did it for a couple of years and people loved what we did with the kids. So then we were given the space, the land where the temple is, the community place. We started using that space beautifully. A year along the line there were a few guests that randomly came to Gandhi ashram and came to prayer. They said that they run an organization named Flowering Tree and they are supporting initiatives, and they really liked what Manav Sadhna is doing with the children and the concept. They spent a couple of extra days, and came to Ram Rahim and saw other community centers. The third day into the prayer, they announced that they would like to build a
community center in this area, since it has great potential. We said we agree that it does have great potential, but we are not ready yet to create another community center, and its way too far from our area (The Gandhi Ashram).

So we were trying to buy time, by saying not now, but they didn’t budge and said whatever it takes, (we will do it). In the same week they ended up buying a brand new car to Manav Sadhna saying here is the (solution to the) commute issue and (asked) is there anything else we need to do? They were committing. We kind of liked the idea too and we were going towards that. So then we asked Barod if he is ready, Manish Barod who grew up with us since he was a 8 year old kid, and he himself was part of the struggling children who grew up to be a great leader. He said he was ready and he wanted to give it a shot. He went and they donated for the construction, and general expenses. Jan started the conceptual idea.

Jan : We did a measure up drawing for the concept, and this great architect Hiren Patel did the final concept.

Arrive at small room with computers—This was the first site of the original community center. This is one of the first activities we proposed. We initially did not have the second floor. The local community, especially women that come from Muslim communities (come here). They have very severe problems at home, because of not being allowed to go anywhere too far, or into other communities. They are part of a strict orthodox community but because of our community, they do believe in education. There is a teacher that does great work, and also gives sewing classes. There are about 45 students she teaches per hour. The lab has internet connection, and they learn a lot of things.

Climbing up the stairs and arriving at mezzanine floor: The sewing class

Q. How long is the course?
It ranges from student to student. This is the first initiative. The curriculum hangs up on the wall, where there are various clothing items that range from blouses to small caps and socks that women learn to sew. There are students that vary in learning speeds and we adapt to their speeds.
Enter Larger Community Center:
(The Temple Bells are ringing and school children surround us asking us what our names are and where we are from.)
This whole thing was wasteland, {there was} nothing here before. The mosque is there. The mosque is very famous since it came from the earth. During one flood, {after it} subsided, they see this grave that came up because the land shifted. They saw the writing on it, and found that it is of some great saint. They established and created a space for him, and a hindu man did all of this. He established the grave area as a dargah {a sufi shrine} and started doing puja in a Hindu way.

Q. How does the community center work?
The school starts at 9am in the morning, 200 children in the morning, and then they go back, and 200 older children come back in the afternoon. They are all fed, have a good education, and then go back. This is the tuition class, not formal education. So after they get educated in their formal schools they come back and study here...

-End Interview-

Personal Observations
The relationship between the community school and the river is solely visual. It runs risk of being cut off from the waterfront due to a service road that will be connecting the ring roads. The impact that this site has on the rest of the river is miniscule, but it is one of the only ones that have a productive program for the marginalized. The empowerment of children through a community center is an exception to an otherwise commodified riverfront. The intimate scale of this project is architectural by nature but the need for expanding their efforts are quite clear.
Viren Bhai, the head of Manav Sadhna, wishes the Calico Mill Site could be redeveloped as a series of community centers. The energy in the community school is undeniable. The kids feel lucky, and learn the basis of communal harmony. The varying backgrounds of girls, and boys create a unified community. The volunteers that arrive to work with Manav Sadhna are from several international locations. The community center, named the Humanity Center by the architects, is nestled amongst a sea of tin roof with fragmented views to the river.
Observations:

Beyond the Ram Rahim Nagar in the South-East lies an industrial landscape of manufacturers, and small scale woodsheds, and steel works. The population working there would typically not come up to use the newly redeveloped Calico Precinct. However, if they wanted to have a place to relax, have food, or talk a walk in the park, they should feel welcome to do so.

The general community of Ram Rahim Nagar, should equally feel welcome to enter the green spaces on the south most extremes of the Calico Site and gain skills for future employment.

The community of children that come to the Humanity Center, should have a separate access into the extension of the Manav Sadhna core within the Calico Redevelopment site, which directly will lead to the new waterfront pedestrian plaza.

The users from this zone of the site analysis can be categorized as the following:

- Ram Rahim Nagar residents
- Ram Rahim Nagar adolescents
- Industrial Workers
- Floating marginalized populations
Figure 177: A view from the courtyard of the community center.

*Image Source: Author. Site Visit 2013.*
The Stretch between Kankaria Lake and Calico Mill Site has a direct vehicular link. However there currently exists no civic link between the two areas, because the Calico Mills remains a private enclosed area. There is a strong potential for the Calico Mills to connect as a second large public space, as it remains only 2 miles from each other.

The Kankaria lake originated in 1451. The site at which the Kankaria tank exists was a natural depression where rain water used to collect. Qutubdin of the Sultanate dynasty led to the present form when he had built the present day Kankaria tank, the buildings and the gardens around it. Under Mughal rule, 1573-1753, there was further renovation and gardens were added to the surrounding complex and the tank was well maintained. During the Maratha rule, the tank started to deteriorate, and until the British took over in 1818, it had begun to fall to pieces. Major restoration work ensued, in 1952 by the department of archeology. Recently, HCP, the same architects incharge of the Sabarmati Riverfront Development, was incharge of a recent renovation of the Kankaria precinct. The lake has been a historical part of the Ahmedabad identity. Today, due to traffic issues and overbearing informal activities there is a lack of access of the lakefront. The AMC decided to take on a project to upgrade the Kankaria, in order to create a high performing pedestrian and public realm.
Predominantly Apartments and Housing Societies

Kankaria Lake (1451)

Figure 179: Kankaria Lake
Conclusions

By creating efficient and durable infrastructure, AMC hoped that it would support not only the current activities, but add new ones for support. The pedestrian zones along the lake edges were created, by removing present traffic congestion. This was made possible by developing an outer ring road that would strengthen the existing street network, and create new access points to the lakefront. By encouraging overall development within the precinct, the recreational, public, and historic facilities would be enhanced.

Traffic congested lakeside roads are turned into pedestrian promenades lined by gardens, food courts, and vending spaces. The promenade includes a pedestrian zone on the edge of the lakefront with street furniture, lighting, and trash collection zones. Circling the entire lake is both a toy train, and a bike path. The functional design details creates on-street parking, and facilities for the vendors, along with access ramps to the lakes’ ghats.¹

Given that Kankaria lake is 2 km, or a 5 minute drive away from the Calico Mill Site, the programming of two similar public spaces should be avoided. However an important link exists and must be made that can create a civic link between the two sites.

The Calico Mills has an industrial heritage that deemed Ahmedabad, Manchester of the East. Remaining within its sites are vestiges of an industrial past, along with a few heritage monuments. The intangible heritage is under the threat of being lost with impending development. The 60 Acres of land that are waiting to be bought out, will bring with it plans for hotels, offices, and profit driven buildings. There is an alternate model, that balances the two factors, while respecting heritage, yet not looking backwards, thus reinventing a past for the 21st century.

¹ http://www.hcp.co.in/project-details/61/73/77/kankaria-lakefront-development
Figure 180: Overall Landuse Plan

1. BABA LUI MOSQUE
2. OLD CALICO CHIMNEY
3. HUMANITY CENTER: GANDHIAN NGO
4. NATIONAL INSTITUTE OF DESIGN
5. FLOWER MARKET
6. VEGETABLE MARKET

Figure 181: The Downstream Site and the Calico Chimney

Image Source: AMC. Redrawn by Author.

Image Source: Author. Site Visit
4.3: ACCESSING THE SITE

Current Access

The Site as it stands today is entirely inaccessible to the public. It remains a privately held space waiting to be bought by a national developer. It has a series of heritage spaces that are associated with it, but in most cases they remain surrounded by haphazard squatter settlements, or overgrown wilderness. Policed, and surrounded by unwelcome activities, the site is isolated. The only remaining entrance is cut off by the recent construction of an overpass that takes the traffic coming off the bridge directly over to the Jamalpur flyover.
Proposed Access Points

In order to be inclusive, this site will be reintegrated with the city through proposed access entry points in order to have a central site accessible from all different sides including the waterfront. Before demonstrating the cultural model on the Calico Mill Site, one must understand its present state. Moving through the site and demonstrating what remains of its industrial glory is important. The following section will move through the site and present the associated heritage monuments, the landscapes, and voids within the old mill compounds.

1. Ferry Entry from the River
2. Ram Rahim Community Center Entry
3. Ram Rahim General Entry
4. New Connection from neighborhood
5. Main Connection from Kankaria
6. Existing Entry
4.4 : MAJOR SPACES AND PATHWAYS

A. MAJOR MONUMENTS :
1. HAZRAT BABA LAHLAVIETOMB
2. THE CALICO CHIMNEY
3. MIR ABU TURAB'S TOMB

B. THE VOID:
4. RUINS + REMNANTS
5. THE MAIDAN: OLD FOUNDATIONS
6. VEGETATION

C. THE WATERFRONT
7. DEVELOPED
8. UNDEVELOPED

Retain Low Income Mill Workers Housing

Create a large open space through a Maidan

Create a plaza around the Calico Chimney

The combination of these heritage monuments, remnants of an industrial legacy, along with the maidan, can make for a new model of waterfront redevelopment that is truly profound, and respectful of an important legacy.

*Image Source: Author*
Moving Through the Site

The methodology for this section will involve a photo narrative with captions through the site from the only real informal entrance, up until the exposed foundations of the demolished industrial buildings. On the way, remains of multiple housing complexes are seen along with remnants of an industrial legacy. The narrative and pictures are derived from a site visit where photos, brief photos and interviews were taken. Unfortunately due to safety regulations, and recent crime activity, the site is legally virtually inaccessible to the public.

The Calico Mills is in dire need of development since the 60 Acres of land remain located in a prime spot adjacent to the new riverfront development project. However, given that the proposals that are being suggested involve high profit development at the risk of the loss of tangible and intangible heritage, there is also a need for a balanced new cultural model of development. The industrial heritage, along with the Gandhian heritage makes this an important site for a cultural model of development.

The following zones are the primary spaces and pathways in the area:

Archeological Buildings:
1. Hazrat Baba Lavlavie Tomb
2. Mir Abu Turab Tomb
3. The Calico Chimney

Maidan and Canopy:
4. Ruins + Remnants
5. The Maidan: Old Foundations
6. The Void: Wilderness

Waterfront
7. Developed
8. Undeveloped

Each of these zones represent a potential for development inspiration. The redevelopment must respect the existing conditions, and work around the squatter settlements. The development should not be the cause of displacement. The combination of these heritage monuments, remnants of an industrial legacy, along with the maidan, can make for a new model of waterfront redevelopment that is truly profound, and respectful of an important legacy. The following elements will be integrated in the cultural model via a historic path.
1. Baba Lavlavie Masjid

This particular monument is seen from the river, and well known as it is part of the waterfront frontage. It is a functional Mosque and caters to the surrounding community.
This particular monument is completely invisible to the public eye. It lies sandwiched between thick vegetation and low income settlements. Its history dates back to the late 16th Century.

2. Mir Abu Turab Tomb

Figure 187: Mir Abu Turab's Tomb

Image Source: http://www.panoramio.com/photo/38105734
"Following the high court's intervention in the Calico Mill case, AMC took the responsibility of preserving the chimney. It's a very important part of the collective memories of Amdavadis. The mahajans, the shethia club, the Majoor Mahajan Sang are the history of the city," says a senior AMC official.\textsuperscript{1}
4. Ruins and Remnants

These buildings still house old mill workers and some officials that have stayed on within the compound wall. They have adopted their area and created a temple within their courtyard. Though these look abandoned, they are not. People live in them, even if they are not taken care of by the government.

The image below offers in the background a glimpse to the bungalows that are currently remaining on the site.
Even through the landscape of Remnants, the Calico Chimney is visible. Its strength as an industrial monument, makes it far more symbolic than just a ‘pipe.’

Below are more images of Bungalows, and housing that currently exist on the North portion of the site that this thesis seeks to retain, and project additional housing.
The foundations of the old mill site are still very prominent along the ground. They form a large maidan, an open space. Currently, very few people have access to the site, and the youth that trickle in are allowed to play cricket.

Below one can see the calico chimney visible beyond the trees. The landscape is used as seating to be spectators to the events in the Maidan.
6. The Void: Vegetation

The thesis seeks to preserve the existing canopy, for it projects that once the area is open to the public, it will become a spot for picnics, recreation, and joggers. The original vegetation on this site can be seen scattered around the void of the Maidan.
The waterfront retains a strong character due to its surrounding spaces. The crematorium on the north end remains developed, and the scattered monuments, graveyards, and tombs must be protected. A pastoral edge will be most appropriate. However, near the chimney, one can have a clearing, a grand entry and access to a plaza.

1. The Waterfront remains currently inaccessible.

2. There is a chance that a future highway might cut through the entire edge of this site.

3. The waterfront has landscape character and potential that should be acknowledged and developed.

Figure 199: The Mosque: Landscape Character and Potential
CHAPTER 5: DEMONSTRATING A CULTURAL MODEL

Introduction:
The cultural model of riverfront development must create a metropolitan level of change. It will do so via weaving Gandhian ideals of sustainability, empowerment, sanctuary, equity, and civiness into the East Side.
This chapter is organized into the following sections:

5.1: Programming
5.2: Overall Concept
5.3: Program Inventory
5.4: The Site Plan and its' elements

The Programming Section suggests an extension campus on the East side via a collaboration between the existing educational powerhouses which are predominantly on the West. The program for this campus will be elaborated upon.
The proposal is a schematic plan, and a visualization of an alternate future. Through an intentional representation style, it evokes a future that can lift Ahmedabad Beyond Shock City.
The site is a layered cultural approach, a prototype for an antidote to the Shock City creating access from all sides of the city, including from the water.

The concept creates 2 main points clusters of interest. First, is the extension campus meant for the empowerment of the marginalized which basically expands the educational efforts that are already implicit in the Ram Rahim community via institutional participation which will be elaborated upon in the programming section.
Secondly, it creates a space of equity, through the Maidan, or a vast open space which is akin to political gathering spaces of the Gandhian era. This space emerges from the preserved forest canopy surrounding it. The footprints of the old industrial landscape take shape on the ground through landscape elements. The maidan is seen as a political device, a gathering space, a landscape of social change.
The design demonstration also seeks to create a porous waterfront through a historic, and ritualistic path which bisects the extension campus, a new industrial museum and existing archeological monuments.
Lastly, the main symbolic gesture occurs through the development of an institution committed to peace building efforts in Ahmedabad leading to civic awareness.
5.1 : PROGRAMMING

Figure 202 : Aims to propose an extension campus in the new Calico Mill Site as a collaboration between IIM, C.E.P.T, and N.I.D.
Programming

In this section, an extension campus is proposed, and the proposed program is elaborated upon. Through a collaboration between the educational powerhouses, IIM, CEPT, and NID along with the following Gandhian Institutions, a powerful incubator can be set up downstream.

The 'campus' is used as a programming tool in this thesis due to its implicit harkening to a state of 'oasis' and a 'sanctuary' for learning. It implies an integrative and connected series of buildings that students are expected to move through and inhabit in order to gain skills to develop into a more rounded person with expertise in each respective chosen field. What would a philanthropic, non-profit campus be like in the downstream site?

Gandhian Institutions:

1. Ashram: Memorial Trust
2. Harijan Ashram Trust
3. Khadi Pratishtan: Khadi
4. Safai Vidyalaj: Sanitation
5. Manav Sadhna
6. Handmade Paper and Production of Charkhas
7. Naturopathy
8. Mills and organizations: Issues of land
9. Kheth vikas: Agriculture labor and agriculture indebtedness

An integrative model of cultural development is related to inclusive ideals. By demonstrating the interaction and collision of varied ideas, one can create an active platform for dissent via debate, mixing, and collaboration, instead of a sole unified vision for manufactured content. Ahmedabad is a city with major institutions held in esteem as national symbols of India's intellect. With the IIMA, C.E.P.T, and N.I.D, Ahmedabad is a powerhouse for creating individuals that inspire change. In parallel, the Gandhi Ashram today is surrounded by 'Gandhian Institutions' that inspire change in piecemeal fashion, and cut across varied fields that help promote inclusive programs for the marginalize population. The powerhouse universities also have various programs that are meant for non-profit sectors and the promotion of grants that help the marginalized. Why can't there be a platform for collaboration that is transparent for the public to experience? If the three powerhouses were to have an extension 'campus' to collaborate within
and be further integrated with each of the current Gandhian institutions and their agendas, then a real force of change can be developed.

The University Militant, in the work of Charles Ferguson in 1912, was quoted by Patrick Geddes since he admired the concept of "The University Militant." Ferguson believed that universities should play a more active role than just teaching what had gone before. Geddes believed that universities should be free to indulge in the battle of ideas and do useful, practical things. He said, "Education like religion, can only be truly vital in the measure of its freedom from external authority; since truth, like goodness, cannot be imposed from without, but can only grow with mind and soul within."

In order to be a part of this university, there are collaborations amongst the educational powerhouses, CEPT,NID, IIM and the current Gandhian institutions. Each component developed as an integrated 'wing' of the campus will have the following components:

1. A wing for transparency: exhibits held every week for the public

2. Classrooms and Studios for daily activities for skill building and empowerment run by existing NGO's that are expanded onto a larger scale.

3. Lecture and Assembly halls that invite scholars from all over the world for talks that are empowering and a mode of fundraising. For example, a platform for conferences that could be televised and by virtue of being located in a new waterfront campus will invite publicity of Ahmedabad as a national center for ethics and a genuine care towards non-profits and the marginalized.

4. In residence studios for visiting scholars and eminent artists

5. A Canteen and Place for Reflection

6. Centralized Program: An Industrial Museum, An outside concert space, a textile market and a waterfront pavillion.

7. The Ferry Landing: The Lower Embankment

8. Ancilary Programs: Through a inductive process of listing qualitative programs that are known to be of an 'Indian' nature, these series of miniature programs can be found all along the site.
Figure 203: Ancillary Programming Icons

- A place for multi-cuisine
- A place for kite-flying
- A place for riverfront concerts
- A place for biking
- A place for scholars
- A place of national importance
- A place for rally's
- A place for morning walks
- A place for the marathon
- A place for pause
- A place for gathering
- A place for celebration

Image Source: Author
A place for communality

A place for informal vending

A place for the first monsoon

A place for chai under the tree

A place for wedding's

A place for institutional collaboration

A place for debate

A place for rejuvination

A place for communality

A place for worship

A place for learning

A place for peacocks
The design concept presented here seeks to primarily retain the existing clusters of low income housing. It will not displace the old mill workers' housing on the north end of the site where it projects additional affordable housing for those in need. It creates three circulation loops labeled 1,2,3 bringing in a diverse group of people presented in the last chapter, into the public areas. The three main anchors will be the extension campus, the industrial museum, and the peace institute. The Maidan ties it all together along with the historic path that bisects both the archeological monuments as well as the maidan.
5.3: CULTURAL DESIGN DEMONSTRATION: INVENTORY

This section is an inventory of the various elements of the design concept. The layered approach to a cultural model becomes apparent.

The historic path is a ritualistic path that circles the waterfront. It becomes part of a guided route that highlights the archeological monuments as well as the new Industrial Museum. The path terminates at the calico plaza which leads once more down to the lower embankments. The path is a loop and connected to the various important spaces in this design.

Image Source: Author

Figure 205: A HISTORIC PATH CREATING A POROUS WATERFRONT
The Maidan emerges as a large open gathering space. Used as a political device, the maidan seeks to create a landscape of social change. Maidans in the country are used for fairs, cultural activities, expositions, public demonstrations and political rallies.
The surrounding landscape is that of vegetated canopy. Retaining the existing character through these designated forested patches is an important facet of the design concept. The Maidan by virtue of the forest canopy, emerges as a clearing: A large clearing surrounded by several groves with the Sabarmati river flowing by. (Reference to Vrindaban)
The programming of this public landscape occurs in key areas. The linear strip that anchors into the maidan, consists of a city wide effort to address peace building as a priority. The Peace Institute is fronted by a rooftop garden that can be used as an informal cricket ground which as an activity brings diverse groups together. The textile haat is an area adjacent to the new industrial museum that can bring textile artists into an outdoor market to display and sell their work.

A. THE PEACE INSTITUTION:
1. CRICKET PRACTICE PLOT
2. TEXTILE 'HAAT': INFORMAL MARKET

Image Source: Author

Figure 208: PROGRAMMING FOR A METROPOLITAN OPEN SPACE
The foundations of the old mill have been turned into a landscaped zone within the maidan. Also, one can see the underground parking lot that is a direct accessible from the river road. This road would be a continuation of the major connector that hasn’t been completed as of 2013. This proposal seeks to have it underground so that the road does not disconnect the area from the rivers’ edge.

Figure 209: MAINTAINING THE OLD MILL FOUNDATIONS
5.4: CULTURAL DESIGN DEMONSTRATION: THE SITE PLAN

Image Source: Author

1. THE PEACE INSTITUTE
2. THE ROOFTOP GREENS + UNDERGROUND PARKING
3. THE TEXTILE 'HAAT' (MARKET)
4. THE CALICO PLAZA
5. THE INDUSTRIAL MUSEUM
6. THE EXTENSION CAMPUS
7. THE MAIDAN
8. FERRY LANDING
5.4: THE SITE PLAN AND ITS' ELEMENTS

Image Source: Author

THE EXTENSION CAMPUS

THE CALICO CHIMNEY

THE CRICKET PITCH

Figure 211: THE MAIDAN: A MEANS OF EQUITY
5.4: THE SITE PLAN AND ITS' ELEMENTS: THE EXTENSION CAMPUS
The Extension Campus:

1. A Pavilion for transparency:
   Exhibits held every week for the public.

2. Classrooms and Studios:
   Daily activities for skill building and empowerment run by existing NGO's that are expanded onto a larger scale.

3. Lecture and Assembly halls:
   Invite scholars from all over the world for talks that are empowering and a mode of fundraising. Such conferences will invite publicity of Ahmedabad as a national center for ethics and a genuine care towards non-profits and the marginalized.

4. In residence studios: Visiting scholars and eminent artists

5. A Canteen and Place for Reflection


Image Source: Author
5.4: THE SITE PLAN AND ITS' ELEMENTS: THE RIVERFRONT
1. PASTORAL EDGE
2. FERRY LINK: FROM INSTITUTIONS ACROSS THE RIVER
3. OVERLOOK PAVILLION
4. STEPS TO WATER: GHATS AND CHIMNEY
5. TEXTILE 'HAAT': AN OUTDOOR MARKET
6. A CRICKET PITCH

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THE HISTORIC PATH
THE FERRY LANDING: A VIEW TO THE PLAZA

The Calico Chimney is an iconic part of Ahmedabad’s past. Its importance can be gleaned from the fact that its lit up signage was the first neon sign in Ahmedabad seen from all around. Thus, this view and movement upto the Calico plaza should not be underestimated. The chimney is not ‘just a pipe’ in the memory of the city. Its historic and symbolic importance to the society, makes this grand entry into the plaza a celebratory measure.

Figure 214: THE FERRY LANDING: A VIEW TO THE CALICO PLAZA

Image Source: Author
AN INTEGRATIVE + INCLUSIVE MODEL

I. SUSTAINABLE

II. EMPOWERMENT

III. SANCTUARY

IV. EQUITY

V. CIVICNESS

Image Source: Author

Figure 215
CHAPTER 6: CONCLUSIONS

As this thesis proposes a cultural model of riverfront development, it contributes to this vision that aims to lift Ahmedabad beyond its shock status. The importance of the proposal is that it takes an existing exception, the downstream Ram Rahim community, and seeks to empower further and bring awareness which is manifested in physical development in order to bring justice to their efforts of peace building. The way in which it does so is through several layers, both spatial and programmatic such as the philanthropic campus which is programmed for public transparency and symbolic importance, along with the iconic Peace Institute. The Ram Rahim community is not an unknown community, even if its efforts symbolize a needle in a haystack, in the conflict prone Ahmedabad context. It has been awarded the Indira Gandhi Award for national integration by national politicians, and been congratulated by Sonia Gandhi, leader of the Indian Congress party, herself for maintaining peace throughout the 2002 pogrom.

The key to their success is their tight knit insular capacity, but this can be brought to expand in an active effort to spread peace building efforts amongst the youth. The agenda of empowering the marginalized in order to lift Ahmedabad beyond Shock City through contributing to the efforts of the Gandhian ideals of harmony, equity, and civic behavior is invaluable. Not only would that affect the overall city, but put forth an image that Ahmedabad’s government cares about its’ marginalized and for a less fractured future. Currently, even if that there are multiple efforts from the non-profit sector that cares for the marginalized such as SEWA, Manav Sadhna, and the multitude of Gandhian organizations previously mentioned, they can be strengthened. The creative dialogue between these organizations is missing (Dr. Tridip Shurud). This thesis proposes to place the marginalized together in a campus dedicated for their education, play and empowerment and as a stepping stone into being a valuable contributing citizen to the city of Ahmedabad.

In order for this proposal to go through, there needs to be an institutional mechanism put in place. Currently, the market forces have skewed development in another direction, hence all the precedent proposals solely focus on the highest and best use of the site keeping the heritage in mind but in piecemeal fashion,
where it does not include the landscape surrounding, but only a radius around a particular monument, in this case the Calico Chimney.

A more comprehensive proposal is presented in order to go beyond piecemeal efforts of heritage conservation, philanthropic efforts, and public space along the Sabarmati Riverfront Development. How can one put a value on the “rehabilitation of hearts and minds?” By reiterating the quote by SEWA presented in Shock City the contribution of this Thesis is put into context.

The real task of tomorrow is the rehabilitation of “hearts and minds,” of getting people to live and work together in the same occupations, and to study together in the same schools. We have to organize and join hands in the same organization. That is the India to which we belong. That is our tomorrow. (SEWA)

In a conversation, with the executive coordinator of Environmental Planning Collaborative (EPC), the reality was discussed. The smaller scale developments are encouraged and occur primarily in the informal areas. In the informal settlements, they are already there. An example previously mentioned, the Humanity

![Figure 217: Plaque hung on wall in the community center.](Image Source: salaamnamasteindia.blogspot.com)
Center located in Ram Rahim ne Tekro, is an example of this. In the formal areas, the market is very heavily skewed so that if left to solely market forces, small footprint developments would not occur. However, there is a way to make it happen, and that is to develop an institutional mechanism for it to work. According to Chirayu Bhatt, the executive coordinator at EPC, these institutional mechanisms are not in place in India. As an example he mentioned the Trust for Public Land in the United States, where funding is generated to buy up land from the market for public uses. Similarly, if there was such an institution in India, these larger public endeavors can be supported. Also, if there is a single benefactor, their involvement must occur on a large scale.

The abandoned Calico Mill Site lies on the fringes of the formal and informal. The private owner that is the current owner will eventually give it up, and sell it to a private developer or a set of developers. In doing so they will have to give up a portion of the land to the government, which in the case of the Calico land, is 20% to the Ahmedabad Municipal Corporation for low income housing. The public private partnership is key. The Calico Mills is a valued institution, but no one knows what might happen to the land as the market forces continue. However, given that the Sarabhai’s had ownership, they could choose to start an institution and help protect the land and keep the brand value of the institution which used to be the glowing icon in the industrial era. During the freedom movement, Ambalal Sarabhai, the owner of the Calico Mills funded Gandhi’s freedom movement. The public private partnership is in the Sarabhai’s legacy. The Calico Mill site that now waits to be redeveloped dependent on market forces can be used for a metropolitan level gesture that only strengthens the Sarabhai’s legacy and gives new meaning to a past heritage of philanthropy.

The redeveloped Calico site is not only a symbolic gesture, but an active process which makes each and every day a step towards a better future. The historic path, the pavilions, the campus, and the ‘maidan’ allow an area for public reflection towards a higher purpose. Music, festivals, and multiple means of promoting the desire for communal harmony already take place in Ahmedabad. July 1st is celebrated as Communal Harmony Day by multiple organizations. This site would become the
Figure 219: The Self Defense Class

Image Source: Author

Figure 220: A Mixed Class

Image Source: Author
location for such activities to take place, not only one day of the year, but every day, with its public maidan, large calico plaza, and outdoor concert venue.

As Julian Beinart said, “This should be an interfaith space when once a year on peace day, there are a series of festivities which are produced by coalition of religious or ethnic groups and there is a ritualistic path which is circular in nature, and created within this space, and walked each day, especially on a designated {communal harmony} day...” (Beinart)

This Site Plan is a manifestation of the five Gandhian ideals: sustainable, empowerment, sanctuary, equity and civicness. The maidan has a political philosophy not unlike Gandhi’s gathering spaces by the riverbed. This becomes a special place in the metropolitan area that needs an area devoted to peace efforts, celebrated through ritual events, through exhibitions, through concerts, and through public discourse on a continuous basis. It is not only a major park; it has got a larger underlying essence to it. The peace building institute is not only symbolic but linked to skill building and other efforts. It is part of a larger civic structure that is committed to new terms of rehabilitation. This city needs a relatable place of identity for the marginal which is known and understood as a secure space within the city devoted to Gandhian ideals.

The decision by the city and its related developers to not devote this space to an office park, or purely profit oriented development, is based on the city’s commitment to the education of its people, and of civic consciousness which is manifested through specific Gandhian ideals.

The value of such an investment is immeasurable for even this small but significant site, will contribute towards rehabilitating the hearts and minds of one of the most raptured cities in India, and thereby truly lifting Ahmedabad beyond Shock City.
Bibliography by Chapter

Chapter 1: Shock City


Chapter 2: Indian Riverfront Urbanism


Chapter 2: Indian Riverfront Urbanism


Krieger, Alex, and William S. Saunders. Urban Design. Minneapolis: University of Minnesota,
Chapter 2: Indian Riverfront Urbanism


Raval, Noopur. "Sabarmati Riverfront Development Project: Megacities and Myths." Diss. JNU.


Site Visit. Dec 17th-Jan 10th 2013


CHAPTER 3: A CONCEPTUAL FRAMEWORK


Dave, Malay. "Layering as a Design Notion in Architecture : a Study of the Museums in Ahmedabad and Jaipur by Charles Correa." C.E.P.T University


Dr. Tridip Shurud. Gandhi and his relationship to Ahmedabad. In Person., Jan 2nd.


Site Visit Dec 17th-Jan 10th 2013

Chapter 4,5,6: Downstream Site Interpretation + Design + Conclusions


Site Visit Dec 17th- Jan 10th 2013

