The Excmo. Ayuntamiento de Valladolid (Spain) and the Ahmedabad Municipal Corporation (India), hereby represented by Excmo. Sr. D. Francisco Javier León de la Riva, Mayor of Valladolid, and by Mr. Kanaji Thakore, Hon’ble Mayor of Ahmedabad, intervene and sign the present

Friendship AGREEMENT

In the aim of establishing and fostering friendship ties between the cities they represent and to progress in the mutual knowledge of their cities.

By signing this document, in the year in which Valladolid celebrates the Centenary of its City Hall, both cities manifest their desire to strengthen and widen the relationships born from contacts held at the EuroIndia Forum 2008 and through the Casa de la India (House of India) located in Valladolid, with the creation of a general cooperation framework for the exchange of experiences in the areas of Heritage Conservation and the Promotion of Tourism, and any other area of common interest to both cities.

In witness thereof.

In Valladolid, on October 4, 2008

Mr. Kanaji Thakore  
Hon’ble Mayor of Ahmedabad

Excmo. Sr. D. Francisco Javier León de la Riva  
Mayor of Valladolid
FOREWORD

We at the Ahmedabad Municipal Corporation feel pleasure and that not without a measure of pride in presenting this book “Discovering Ahmedabad: Annals of Reinvention”. In fact the book is the culmination of an exhibition on Ahmedabad that is to take place at Casa de la India, Valladolid, Spain in association with the EuroIndia Forum. It is also a logical step forward following his visit in October 2008, Ahmedabad Municipal Corporation (AMC) mayor Kanaji Thakore, had signed MOU with city of Valladolid to share co-operation on heritage conservation, promotion of tourism and technological advancement.

Gujarat is blessed with natural bounty in the form of the sea on its three sides. It also has beautiful forests, deserts, mountains and rivers. The civilization that has come into being here has left breathtaking traces of the past; the cities, especially Ahmedabad referred to in this collection show some vignettes of these traces. We hope that this well researched work will inspire many more visitors to discover Ahmedabad and Gujarat.

Incidentally, the city of Ahmedabad also reflects the celebrated Gujarati virtues of pragmatism, innovation and collaborative partnership. The lanes and residential precincts of the old town of Ahmedabad, the pols, are the only depositories of ancient wisdom and knowledge. One can only marvel at the sophistication of management systems that were necessarily required for the successful completion of the building of this city and I believe that it is worthwhile to study it as it holds the keys to our present concerns and problems like energy conservation, global warming and sustainability in our planning and design.

Indeed, it is not an exaggeration to state that the old town of Ahmedabad needs care and recognition as never before. In the rapid march of “progress” we have to take care not to forget these great elements of our identity. This city is a pillar of our culture and not only are we proud of it but we want the entire world to share in celebrating it. I thank Debasish Nayak, the head of the Ahmedabad Heritage Cell and his team for taking infinite trouble in preparing the book. It is hoped that the book will be enjoyed by each reader and inspire him or her to visit Gujarat soon.

I.P. Gautam (IAS)
Municipal Commissioner
Ahmedabad Municipal Corporation
Contents

SECTION 1 - THE CITY AND ITS ENVIRONMENT

Introduction 02

Geography and Settlement: The North Gujarat region 04

Settlement pattern: The North Gujarat pattern 06

The Architecture of North Gujarat 08

Settlement and Topography I: The physical context of Ahmedabad 10

Settlement and Topography II: Natural ground and Urban structure 14

Institutions: People and Water I: Rudabai’s stepwell at Adalaj 16

Institutions: People and Water II: Sarkhej and Kankaria 18

Urban structure and Character: Symbolic Institutions 20

Construction of the Pol house I: Response to Water harvesting and Earthquake 26
# SECTION 2 - THE CITY AND ITS HISTORY

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth and Evolution of Ahmedabad I: A historical overview</td>
<td>30</td>
</tr>
<tr>
<td>Growth and Evolution of Ahmedabad II: Its sense of life</td>
<td>34</td>
</tr>
<tr>
<td>Rise of the mills: The textile revolution and growth of Eastern Ahmedabad</td>
<td>36</td>
</tr>
<tr>
<td>Ahmedabad and Independence</td>
<td>38</td>
</tr>
<tr>
<td>New institutions and growth of Western Ahmedabad (1941-1965)</td>
<td>40</td>
</tr>
<tr>
<td>New institutions and growth of Western Ahmedabad (1964-2000)</td>
<td>44</td>
</tr>
<tr>
<td>Ahmedabad: The contemporary city: River front development and other initiatives</td>
<td>46</td>
</tr>
<tr>
<td>Ahmedabad: The contemporary city: Slum networking and other initiatives</td>
<td>50</td>
</tr>
<tr>
<td>Inhabitation: Lived in city: Street Markets, Bazaars, and character of Urban space</td>
<td>52</td>
</tr>
<tr>
<td>Urban villages: The co-existence of Old and New</td>
<td>54</td>
</tr>
<tr>
<td>The Neighbourhood: Urban tissue and the intimate city</td>
<td>56</td>
</tr>
<tr>
<td>The Pol house: Patterns of living</td>
<td>58</td>
</tr>
</tbody>
</table>
SECTION 3 - HERITAGE CONSERVATION: CONTEMPORARY INITIATIVES

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>60</td>
</tr>
<tr>
<td>Heritage: The Ahmedabad initiative: Heritage department – Ahmedabad Municipal corporation</td>
<td>62</td>
</tr>
<tr>
<td>Heritage: the need for awareness</td>
<td>64</td>
</tr>
<tr>
<td>Heritage and Citizens participation: Social initiatives</td>
<td>66</td>
</tr>
<tr>
<td>Heritage and Citizens participation: The Artist’s conception of the city</td>
<td>68</td>
</tr>
<tr>
<td>The conservation of houses: Restoration of Mehta house and Adaptive reuse of House of Nikhil Vyas</td>
<td>70</td>
</tr>
<tr>
<td>Conservation of Institutions: Swaminarayan temple</td>
<td>74</td>
</tr>
<tr>
<td>Conservation of Public spaces: Conservation of Chabutras and Squares</td>
<td>76</td>
</tr>
</tbody>
</table>
Introduction

Like all unhappy families, all unhappy cities are the same. All happy cities, like all happy families, are different in different ways. Founded in the year 1411 AD, the city of Ahmedabad indeed has a claim to happiness for having not only survived but also thriving for six centuries. Established as a small military settlement six hundred years ago, on a dry and sandy north Gujarat plane on the banks of river Sabarmati, the city today has an area of 47,156 acres and is the main city of the state of Gujarat in the Indian Union. This exhibition is an attempt to present the six hundred years of the past of Ahmedabad through exploring its size, form, density, texture and diversity. The world is waking up to the fact that more than half of the humanity now lives in cities. But the idea of city in the Indian civilization is as old as the hills; some of the highest institutional expressions of the Indian civilization were in its cities. The Indus Valley civilization of India, a great urban civilization contemporaneous with those of Egypt and Mesopotamia, existed five thousand years ago. Dholavira, in the Great Runn of Kachchh of Gujarat is an incredible example of this Indus Valley civilization town. Each town of this civilization, at times two thousand kilometers away from each other, had a similar plan: there was a palace in each town; the town area was divided on a grid pattern and wide streets that ran north to south and east to west. Like other towns of the Indus Valley civilization, Dholavira too is a parallelogram.

During the subsequent 30 centuries, hundreds of capitals, ports, emporia, centres of handicrafts, pilgrimage, temple and monastery cities as well as educational and military towns appeared in the Indian civilisation. Elaborate and comprehensive theories about making cities were written by learned pundits. When the city of Ahmedabad was founded, it had this kind of heritage. British rule of law during the 19th century after the anarchy of the Mughal rule ushered in the modern phase of the city which is going on even now. The Municipal Corporation of Ahmedabad was established way back in 1950 and today’s Ahmedabad is the seventh largest city in India with an average density of population of 18420 persons/sq. km. With expansion and development of the city during the 20TH century, have come the catastrophes which hang in the air which no catchphrase like ‘sustainability’ or ‘equity’ can efface! As this exhibition states, the old town of Ahmedabad is still the very soul of the city that may hold the key to our present concerns and problems. The present exhibition aspires not only to mirror the past of Ahmedabad but the direction the town may take in the coming decades.

*Dholavira of the Indus valley civilization (2600 - 1900 B.C). Archaeological ruins discovered in Gujarat.*
Geography and Settlement

THE NORTH GUJARAT REGION

Geographically, the region called North v is held between the Aravalli hills in the north, the gulf of Khambat in the south and the arid small Rann of Kutch in the West. In general the land slopes from gently from the North East to the South West, giving rise to a system of seasonal rivers of which the Sabarmati is the most prominent. The Sabarmati flows from the Dharohi dam and reservoir, to the Gulf of Khambat meandering its way through the sandy undulating plains of the region. Though the river is important geographically and topographically, it does not serve as the main source of water for the inhabitants of this landscape. This is also partly due to the soil and geology of the region. The soil being sandy and the aquifers being deep, the position and pattern of the settlements in this landscape is determined by centuries of observation that leads to an understanding of the shape of the land and its natural drainage. Looking closely at the settlement pattern and the landscape one notices that each settlement is located within a network of watercourses draining into local water bodies (tanks called ‘Talawadis’) formed by the depressions in this undulating landscape. These are the primary sources of water. One could say that underlying the North Gujarat Settlement is a deep rooted understanding and management of the earth’s surface as a resource. This is true for water, animal husbandry and agriculture. These patterns are visible at all scales of settlement from the smallest agricultural village to the aspiring metropolis that is the city of Ahmedabad.

The Google Earth image shows the geographical structure of the region. Four settlements from the scale of a small agricultural village to the metropolis like city of Ahmedabad show a consistent pattern of occupying this land. Settlement and landscape are found in an equation of ‘balance’. Agriculture and animal husbandry are also a part of this relationship.
Settlement Pattern

THE NORTH GUJARAT REGION

The nomadic Gurjar people who had their migratory routes in the North of Gujarat, gave Gujarat its name. The name “Gujarat” came into use with the rise of the Solanki rulers in the north of Gujarat around the 10th century AD. The Solankis had come to power after the disintegration of the great Hindu Gupta empire. The region was known as “anarta”; “Lata” and “Surastra” of which “anarta” was the present day North Gujarat. The culture that evolved around “anarta” gradually enveloped the whole region of today’s Gujarat and begun to be called “Gurjaramandala”; “Gurjaratra”; “Gurjardesh” and “Gujarat”. All the capital cities of the ancient Gujarat like Anartpur, Anhilapur Patan, Ahmedabad and Champaner were located in this northern Gujarat region. The culture and language of this region is the main stream Gujarati culture as it developed during the next one thousand years.

At all four scales of settlement one can see that the organic pattern of streets closely coincide with the pattern of agricultural fields and the water courses in the landscape. One might say that “Man follows the path of water” in this region, be it a town street, a road connecting two villages or a trade route.

The cluster pattern at the level of a neighbourhood is also constant across all settlements. Houses adjust to the shape of the land in order to maintain the natural drainage. Small pockets of space open up to form neighbourhood squares called chowks.
After the disintegration of what is often described as the “Golden Period” of Indian history, the Gupta Empire (from the fourth to the sixth century A.D.), many smaller kingdoms had come into existence in various parts of India. The Chalukyas or the Solankis had come to power in Gujarat in the middle of the tenth century A.D. The Modhera Sun Temple, located near Mehsana in northern Gujarat, is the epitome of this Solanki art of Gujarat. Built in 1026-27 A.D. by the king Bhima-I of the Solanki dynasty, the Sun Temple is divided in three parts: the Ramkund or the Suryakund (a subterranean architectural typology unique to Gujarat), the Sabhamandapa (meeting and ceremony hall) and the sanctum. The stupendous Ramkund, a 67 meters long and 45 meters wide water tank, is a ceremonial offer of water to the Sun God. Through the steps is evoked the mythical Meru mountain; in the center sits the Shesh Nag (the king cobra, said to be the seat of Lord Vishnu in Hindu mythology) looking in the direction of the Sun God in the sanctum. Through the ceremonial arches called torans (a special characteristic of the Solanki architecture), one enters the Sabhamandap measuring fifty square meters. The octagonal ceiling of the Sabhamandap has breathtaking carvings. The enclosed volume of the sanctum too, measuring 15 by 24 meters, flaunts columns with sculptures amidst which stands Lord Sun. The art historian, Christopher Tadgell has noted: “The major 12th century works, carried out by the great rulers Siddharaja Jayasimha and Kumarapala, are notable for their vast scale. The stupendous Rudramala on the banks of the Sarasvati at Siddhapur, enormous though the resources required for this work must have been, Siddharaja and his successor found more for many other vast complexes - such as one at Vadnagar of which only a great torana remains. Of the Rudramala, an interior screen and one of a pair of toranas remain to guide conjectural restoration of a scheme comparable to that of Modhera but twice as extensive and two storeys high. Superimposed columns screened the arms of a cross from the broad ambulatory in the closed hall, eight major and sixteen subsidiary columns, again in two storeys, ring the vast octagonal central hall and six more large columns form porches north, south and west. Eleven subsidiary shrines, dedicated to the Rudras, surrounded the main structure.” Among the other examples, the Sahstraling lake of Patan epitomizes the building mastery of the Gujarati craftsmanship and the high taste of the Solanki kings of Gujarat.
Settlement and Topography

THE PHYSICAL CONTEXT OF AHMEDABAD

The city of Ahmedabad was established in 1411 on the left bank of the river Sabarmati. Its position was chosen keeping the flooding and course change of the river in mind. The very motivation for the founding of the city may have been a search for water as the previous capital had dwindling supplies of this critical resource. The citadel of Bhadra was established at the head of a Royal Square and a main street that leads to the Main Friday mosque—the ‘Jami Masjid’. The development of the urban form of the city was directed by the particular placement of these institutions to which were later added the King and the Queen’s Tomb.

The undulating ground is negotiated by the urban structure of the city of Ahmedabad. The pattern of Human organization (the grid) accommodates the undulations and variations of the ground articulating local responses and strengthening the sense of place.
These were placed in accordance to the tradition of Islamic City Planning. The Manek Chowk - the city’s commercial hub and best known public space was given definition by the placement of these tombs. Along with the royal complex in the fort, areas called “puras” developed where the senior army officers of the ruler stayed with their retinue. These “puras” were self contained residential areas that during the 18th century developed into micro neighborhoods consisting of people from the same community, which are called ‘pols’. Each ‘pura’ occupied a mound or ‘Tekra’ following the settlement pattern of the region, now at the scale of the city. It is said that seven mounds constituted the topographical context of the city. Often an area is still called by the name of its mound. e.g. the Khadia Ward of the city takes its name from “Khadia no Tekro” (The Khadia Mound).

Needless to say, that the city’s urban structure, its streets and urban fabric also follow the patterns of the North Gujarat Type.

The Building of the Fort Wall, which is 4 to 5 meters tall and upto 2 meters in width, gave Ahmedabad its particular semicircular city form. The fourteen city gates, made of bricks and veneered by stone, linked the commercial hub of the town, and its markets to the agricultural hinterland.

*The ceremonial axis forming the linear center of the city connecting the Bhadra fort (citadel) with the Jami masjid complex (Friday congregational mosque) is part of the legacy of Islamic town planning that is visible in Ahmedabad.*
NATURAL GROUND AND URBAN STRUCTURE

With the ubiquity of modern urban planning and its emphasis on man-made order, we have perhaps grown insensitive to the role of the natural in our cities. Most urban environments are organized by the imposition of man’s will over his environment. In such cases as in many of our modern cities, all signs of the natural have been erased to make way for the efficiencies and conveniences seen to be required by man. The world is slowly realizing the catastrophic consequences of this attitude.

This, however, is not the attitude of planning settlements that was employed in the North Gujarat Region in general and in the old part of Ahmedabad in particular. Here the land was held sacrosanct; its characteristics in dialogue with the human requirements of dwelling, gathering and movement that make the city. It is still possible to see the traces of the natural deeply embedded in the very making of the city. It is visible at all scales; from that of the house to the mosque and the temple and from the ‘pol’ to the ‘pura’. However the best example may be that of the street pattern and its formation.

Topography and the natural ground are deeply embedded into the structure and experience of the city. In the center, from the palace complex to and beyond the King and Queens tomb one can sense the ancient tributary of the Sabarmati that ran through the city. Today that drainage channel forms a lower street bridged by an upper main street (Gandhi road). At their intersection is the Fernandez bridge. The buildings that negotiate the diagonal vectors of these two streets visibly build up the embankment of what was a major natural feature.
Institutions: People and Water

RUDABHAI’S STEPWELL AT ADALAJ

The unique underground architectural marvels called step wells have been constructed in Gujarat since the historical times. This underground construction peculiar to the Gujarat region (except for southern Gujarat) was the outcome of the hot, arid climate and the paucity of water available for human and animal usage in the region. These step wells celebrate water and take the architecture of the region to its high points. Innumerable step wells are found all over Gujarat, but the step-wells of Adalaj (near Ahmedabad) and the Ranki vav of Patan (the old Solanki capital in the north of Gujarat) are the supreme examples of this step well architecture. In Gujarat, the cult of the mother-goddess is very intimately connected with water or watering places. It is said that during the festival of “Navratri” (sacred to the great goddess), Varuna the water god is to be invoked and worshipped after the initial worshipping of Ganesha. That most of the step wells are shrines sacred to one or the other aspect of “Mata” or “Devi” is a clear indication of the link between step wells and the mother goddess worship. A goddess called “Varudi-Mata” is believed to reside in the step well and she is believed to be the goddess of fertility and worshipped to bestow good crops. The Aparajitapoocha, a manual on constructing buildings, is the earliest ancient text to devote a full chapter to the “vastu” of step wells. Its seventy fourth chapter states that, “there are Nanda, Bhadra, Jaya and Vijaya type of step wells. Granting wishes is the one called Nanda with one entrance (eka-vatra) and three pavilion towers. Well adorned is the one called Bhadra with two entrances and six pavilion-towers. Difficult to attain, even for gods, is Jaya with three entrances and nine pavilion-towers. Facing all directions is Vijaya with four entrances and twelve pavilion-towers.” These step-wells or rather “stepped wells” (as such a step-well was accessible through steps), known as “vav” in Gujarati, were always built on the caravan trade routes. The Gujarati word for the step-well, vav, is derived from the old Sanskrit word “vapika”; the oldest existing step-wells in Gujarat are Zilani (550 A.D.) and Manjushree (650A.D.) in the Saurashtra region of Gujarat. The earliest testimony to the antiquity of step well is found in

The cross sectional Axonometric drawing shows the incredible articulation of institutions related to water. Here a stepped approach to a subterranean water source is celebrated with spaces of shade. Every element is articulated into a myriad of carvings such that each surface is broken into textures of light and shadow reducing the glare of the harsh Sun. The spaces reduce evaporation by holding the moisture within the walls, creating inhabitable spaces of great comfort in this hot and dry climate.
the stone inscription of the Ksatrapa ruler Rudrasimha that was discovered in Gunda village in Jamnagar district of Gujarat, dated 181 A.D. These great subterranean water structures provided the travelers and their animals with rest, water and other supplies on their journey on the trade routes. But these vavs were also religious places apart from simply resting and meeting places, and in times of wars and insurrections, they also became hiding places! Even today some communities perform certain crucial rites like marriage at the Adalaj step-well. It is clear that the multitude of step wells form an important part of building activities of Gujarat of the pre-mediaval and mediaval periods. They also clearly reflect the development of architectural and sculptural styles and iconographic schools as can be seen in the chronology of the temple architecture of the region. Step wells are monuments of which the major parts are underground resembling subterranean temples. In most cases they are richly carved and ornamented with decorative relief work and sculptures. A step well consists of three architectural parts, the vertical well; the stepped corridor leading down several storey and numerous intermediate pavilions.

The inscription at the Adalaj step well, set into a niche in the first storey on the eastern side. It is in Sanskrit and “Devanagrai” script. It states that the step well was built in the year 1499 A.D. Even today the villagers of Adalaj refer to the Good Queen Rudabai in their stories. It reads:

“When the year 1555 of the era of king Vikrama....that is the year 1420 of the Saka era, was current, when the sun was in the northerly course, on Wednesday, the fifth of the bright fortnight of the month of Magha [16 January 1499], in the Sisira season...the moon being in Pisces, in the victorious reign of Badhsah Mahmud, queen Rudaba, lawful wife of King Virasimha, son of Mahipa, of the Vaghela clan, who ruled over the district of Dandahi, and was the jewel in the band of the kings, caused to be made the well in Adalaj in order that he husband might attain the world which is the abode of the gods. Marana, the son of Bhima, Srimali by caste, made the well....may it be firm and durable as long as the sun and the moon are in heavens.”

The Adalaj step well is 75.3 meters in total length and is laid out in north-south direction. The well is in the north and the entrance is in the south direction. The three entrances meet in the first storey underground in a huge square platform. This platform has an octagonal opening and rests on 16 pillars. The four corners of the platform have four built-in shrines. The stepped corridor begins from this square platform and descends for five storeys. An octagonal shaft is set into a square with 9-m long sides, the middle of which is the octagonal shaft with sides of 8.40 meters. The well has a diameter of 7m. The pillars of the Adalaj step well are of the “Bhadtrak” type (square with recesses). The niches at Adalaj step well are either filled with lotus medallions or with a depiction of the great Goddess.
THE CASE OF SARKHEJ AND KANKARIA

The Sarkhej Rauza complex, a tomb erected in memory of a saint, Ganj Bakhsh Khattu, is the finest flowering of the medieval Gujarati architecture that is known as the Sultanate architecture. Pure geometrical beauty drips from the sandstone walls of these structures. Its calmness facilitates the dialogue among the sky, the water and the light. During the subsequent decades after the construction of Khattu’s tomb, the Sultans of Gujarat built a large lake and a palace on its banks. Sarkhej quickly became an imperial necropolis. Khattu’s mausoleum is the largest of its kind in Gujarat and covers a plinth area of 31 square meters roofed by a 12 meters high dome. The complex also has a mosque that has no minarets but one hundred and twenty pillars. Right in front of the domed mausoleum stands a lovely freestanding pavilion. This mausoleum of the saint, near the tomb of the temporal ruler, is the center of the entire Sarkhej complex. The palace, around the 210 meter wide and 249 meter long sheet of water became the pleasure palace for the Sultans of Gujarat, especially during the summers. Since Puranic times, it is considered a sacred act to build a water body or cause it to be constructed. The water body, known as Ahmad Sar, was completed by Sultan Muzaffar II in 1514 A.D. During the Sultanate period, water-bodies continued to be built. Hoz-e-Qutb is the Kankaria lake of Ahmedabad, built by the Sultans of Gujarat in 1451 A.D. and is located in the south-western part of the city. It is a vast, thirty-four sided polygon that covers an area of 30.8 hectares. The periphery of the lake is lined with stone steps and in the centre of the lake is Nagina Wadi, former pleasure pavilions of the rulers of Ahmedabad. Kankaria has an elaborate sluice system similar to the sophisticated water control system of sluices, inlet channels and filters employed in the water-body of Sarkhej. These water bodies turn the mundane places of collecting water in to civilisational ornaments of Gujarat.

If the step well is the celebration of the deep source of subterranean water, the tank is a celebration of surface water. Here the Sultanate Architecture articulates its response in the form of the site planning of Sarkhej Roza and the Kankaria lake. The diagonal composition of the Sarkhej complex on the water tank connects this building with the Islamic tradition of responding to landscape and water that can be found in places like Mandu.
The architectural heritage of Gujarat that was created during this period is described as the Sultanate architecture. These examples of the architecture of the Sultanate of Gujarat are located mainly in Ahmedabad but also in other towns of Gujarat like Khambhat, Dabhoi, Champaner, Dholka (the ancient Dha-valika), Patan and Mehmdavad. Mirat-i-Ahmadi has noted that the city of Ahmedabad had twelve gates, one hundred and thirty nine towers, nine corners and over six thousand battlements. The city wall of Ahmedabad, built first by Ahmad Shah, was ordered newly built by Mahmud Begda. It may be noted here that it was Begda who had first introduced the Persian garden scheme in Gujarat. The first city gate was teen darwaza which was built at the same time as the citadel of Bhadra. All other gates were built during the sixteenth century. The city wall was made of terracotta bricks, lime mortar and lime plaster. The city gates all were made of bricks veneered with stone. K.V. Soundara Rajan, the noted scholar of the Archaeological Survey of India, has described the Sultanate architecture of Gujarat as the originator of the Gujarat style. He writes: “By the incidence of its examples, as by the ambitious scales of composition, reveals alike the assiduous patronage and vigor of the Ahmad-Shahi rulers to whom these owed their genesis, as the complementary and profound cultural traditions of the ruled. The Gujarat style became by far the most successfully indigenous subversion of the Islamic architectural requirements bearing subtle undertones of Hindu architectural principles consciously adapted by the artisans to suit the demands of the Muslims.”

The second half of the fifteenth century saw some of the best examples of the Sultanate architecture in Ahmedabad. Gradually this style degenerated by the time the Mughals took control of the province in 1573 A.D. Among the best examples of the artistic flowering of this period was the Rani Sipri mosque and Muhafiz Khan’s mosque in which composition, perspective and filigree work took on an absolutely exquisite dimension. The mastery displayed by the craftsmen in this period is so fine that each monument created during this time alone can stand side by side with the best architecture of the world of any epoch. Though a considerable number of epigraphic tablets are missing from the Ahmedabad monuments, more than two hundred survive to this day. Most of these epigraphs are in marble but also

All Mosques of the world point to Mecca - this is true for the Mosques of Ahmedabad as well. The Mosques are found in a concentric relationship centered on the Jami Masjid. All the temples mark a high ground and a localized center. The Mosques and Temples together connect the city to a geographical notion of space far beyond perceptible limits; one in an abstract way and the other in a real way rooted to the ground.
GATES OF AHMEDABAD

KHAIFUR DARWAJA

DELI DARWAJA

GANA DARWAJA

GAEAKWAD HI HAVELI DARWAJA

KHAJAHAN DARWAJA

JAMALPUR DARWAJA

KALUPUR DARWAJA

PANCHKUVA DARWAJA

SARANGPUR DARWAJA

RAIPUR DARWAJA

ASTODA DARWAJA
in some cases in wood. The language in most of the Sultanate period inscriptions is Arabic with a dash of Persian. The scholar of Islamic Epigraphy, Z. A. Desai has noted that “the inscriptions are carved in relief, with the exception of three or so which are incised on stone in the fashion of the Nagri records. They are remarkable for their highly artistic calligraphy which has, as in the matter of language, close affinity with that of Bengal. Inscribed in decorative Naskh and Thulth in Tughra flourish and chaste and pleasing Nastaliq styles of writing on stone, these epigraphs are perhaps unmatched in this respect as well, except for the Bengal examples... The Ahmedabad epigraphs provide some fine specimens, the most outstanding of which is furnished by the Jami mosque inscription. This superb piece of Islamic calligraphy, which is certainly the best of the inscribed Ahmedabad records, can easily rank among the world’s finest examples of this art.”

The Swaminarayan Temple at Kalupur in Ahmedabad, established by Sahajanand Swami himself, is a good example of the Gujarati art and craft tradition. The temple has, in its north, a large court which is defined by wooden havelis on three sides. These traditionally built and decorated buildings are not older
than nineteenth century. There is a large open hall for prayers and congregation on the ground level of these havelis, on the north side of the court. The rooms of the havelis are used for storage and accommodation. The entire Swaminarayan complex is one of the largest Hindu places of worship in the old city of Ahmedabad.

Also it may be noted here that there are more than one hundred Jain temples in the old town of Ahmedabad. Some of these temples are more than four hundred years old. The Jain temples of Vaghan Pol and Shantinath Pol are the most fascinating among these in that they are built under ground. These Jain temples of Ahmedabad and especially the Hutheesing temple are an architectural ornament of Gujarat and a lovely echo of the great building tradition of medieval Gujarat.
The sheer number of wells, step wells, artificial lakes and tanks in the city of Ahmedabad are a mute testimony in honour of the blue gold of our times-water. Ahmedabad is simply a water scarce city. The “tankas” (in Gujarati) are the traditional method of collecting and storage of rain water in houses. The “tankas” are literally tanks, built underground. The technique of tanka involves collecting water falling on the terrace or roof of the house using copper pipes and bringing it in the basement where tanks of lime or stone are made to store it. Studies have revealed that there are more than 10000 of these underground basement water tanks (tankas) in the walled city of Ahmedabad. Their usage was banned by an order in 1943 citing health hazards involved in them. Usually a tanka is 25’ deep and has steps to go down. Water for domestic use is collected from these tankas using bucket and rope. A carved or decorated shutter is used to enclose the tanka. The water stored during one season of rains was enough for the entire year. The Khadia Itihas Samiti, an association of historians of the area called Khadia in Ahmedabad have made valuable contribution in study of these tankas. The Heritage Cell of Ahmedabad Municipal Corporation was responsible for preserving and conserving many of these.

The Pol house is also a constructed in a manner that shows an acute awareness of structural behavior of buildings during earthquakes. Constructed of a timber framework and brick walls the structure constitutes a composite and highly sophisticated hybrid of the load bearing and frame systems. In the Gujarat earthquake of 2001, not a single pol house was severely damaged, a testimony to the traditional methods of construction. Recently structural engineers have been studying these structures and have been astounded by the simple solutions that traditional architecture has found to complex issues. This has even prompted them to consider the limitations of the modern scientific analytical method towards the design of structures.
Cities appear and disappear only to reappear in the tableaux of Indian civilization. The historic city of Ahmedabad, located in the western Indian state of Gujarat was founded in the surge of Islamic conquests that had swept through India. It was established in 1411 AD by a noble, Ahmed Shah, who had rebelled against his overlords in Delhi. Mirat-I-Ahmadi states that the ceremony of the foundation stone of the city was conducted by four Ahmads of the realm of great piety and was further helped by twelve Qalandar faqirs who were the direct disciples of saint Hadrat Nizamud-Din Aulia of Delhi. But there is little doubt that the new Muslim rulers must have been awed by the prosperity of the Solanki kingdom and its stupendous secular as well as religious architecture. The new rulers, keen on establishing their superiority in the material realm, undertook a frenzied program of building activities in Ahmedabad. Their model was the impressive Hindu architecture of the previous centuries which they wanted to outshine. The result, after one and a half centuries, was the celebrated “Sultanate Architecture” of Ahmedabad, considered a high point of world architectural heritage.

The architecture and the design of the new town of Ahmedabad (Latt. 23° 00, Long. 72° 35'), a walled town situated on the river Sabarmati, was a continuation of the Hindu traditions by other means. A French traveler, Taverniere, visiting the town in
the eighteenth century had described it as “the headquarters of manufacturing, the greatest city in India, nothing inferior to Venice for rich silks and gold stuffs curiously wrought with birds and flowers.” It was the same city that James Forbes has described in his memoirs “that until this visit to Ahmedabad I had no conception of the extent of oriental magnificence; the palaces and splendid chambers described in the Arabian nights entertainments, appear no longer overcharged or fabulous.” In 1856 Buist had noted that “Ahmedabad is still famous for its gold, its silks and its carved work, and its merchants and brokers enjoy a distinguished reputation for liberality, wealth, and enlightenment.”

A treaty with the then rulers of western India, the Poonna Peshwas, brought Ahmedabad under the British rule in 1817. The British were keen on annexing Ahmedabad because of “the commanding influence which the sovereignty over the city of Ahmedabad confers on its possessor in the estimation of the country at large.” Both the Mughal and the Peshwa rulers had left the city exhausted and depopulated. At the time of the British arrival, the medieval economy of Ahmedabad had hung on three threads: gold, silk, and cotton. The British rule of law helped flowering the strength of the Ahmedabad “mahajans” (trade guilds), and, aided by the opium trade to China, by 1839 the town was “in a most flourishing condition and progressing rapidly” and its merchants impressing the Europeans by being “the most enlightened and wealthy in India”.

Modern textile technology further oiled the Gujarati virtues of pragmatism, innovation and collaborative partnership in “reinventing” Ahmedabad. Its booming business in textiles had given Ahmedabad the status of “the Manchester of India” by the time of the First World War. It was for this town that Mahatma Gandhi had felt a predilection after his return from South Africa in 1917, staying on in the town for thirteen years conducting his campaign against colonialism that was to conquer the entire colonized world.
It's sense of life

Their successes in textiles turned the 19th century Ahmedabad “mahajans” into great institutional builders in areas of science, technology and the arts during the middle decades of the 20th century. Pharmaceuticals, Construction and Textiles are the main industries of Ahmedabad of today. The town contributes 14% of the total investments in all stock exchanges of India. The Municipal Corporation was formed in 1950 (present budget: 120 million $ US) and even today, its task of providing basic services for an expanded urban area of 191 sq km and a growing population (4.5 million) seems to be a Herculean one. During its march through the 20th century, Ahmedabad has expanded abundantly and haphazardly. Sardar Patel, once a mayor of Ahmedabad, had noted that “our cities are a type of Hell”. The Ahmedabad of 2008 is the place where 40% of the population resides in slums or low cost housing without access to water or sanitation. The task of the municipal corporation is more than cut out in a teeming town caught between vehicular thrombosis and polluted catastrophes. The next ten years in the life of Ahmedabad will show how the reality translates the neo-liberal mantra of allowing private investment in infrastructure and empowering the local government without making Ahmedabad a tale of two cities: one rich and the other poor.
The textile industry success of Ahmedabad is the classic example of how the city reinvented itself and created a future. The old town of trading and handicrafts manufacturing of the nineteenth century had turned itself into a modern textile centre. The richest members of the Ahmedabad mercantile and financial elites actually saw and seized the opportunity of creating a future for themselves and the city by focusing on the modern European technology and method, of course with an active encouragement of the enlightened British civil servants. By 1901, the city of Ahmedabad had 29 textile mills (erected on the Lancashire model) and employed 17,000 workers. It was during this time that the city started being known as the “Manchester of India”. The unique and interesting feature of the industrial revolution ushered in the form of the textile industry in Ahmedabad was that it was entirely indigenous financed. The merchants of Ahmedabad had derived considerable profits from trading (in cotton, textiles and opium) and financial services was invested in the technology. By 1901, the Ahmedabad mills were producing 8 percent of clothing manufactured in India. In fact the climate of Ahmedabad was not considered suitable for the textile industry and there were problems pertaining to coal which had to imported from Bengal. Kenneth Gillion has concluded that “in the nineteenth century, the Gujaratis (and not just their mercantile communities) were, of all the Indian peoples, the ones most favourably conditioned by their culture and history to take advantage of the new economic opportunities in trade and industry”.

The success in textiles had brought the merchants of Ahmedabad in to their own and, by the middle of the 20th century, they had become institution builders of which the Ahmedabad Municipal Corporation itself is a good example. It may be noted here that the horrors of the industrial revolution were not matched in the mills of Ahmedabad thanks to the factory acts of 1881 and 1891 which prevented women and children to work long hours.
The Salt March, 1930
Distance 241 Miles
Participants 79
From 12th March 1930 to 5th April 1930,
Sabarmati Ashram to Dandi
- Night Halt
- Midday Halt
Established as a small joint stock company on the last day of the year 1600 A.D., the British East India Company was primarily attracted to India by the profits to be made in the spice trade. The already established and thriving Portuguese and Dutch companies were the role models for this British late arrival in the eastern sea trade routes. By 1800 A.D., through combinations of Machiavellian politics, tact, organizational abilities, violence and sheer historical circumstances, the British became the supreme rulers of large chunks of India. The British Raj, lasting till 1947 on the Indian sub continent, erected architecture during this period in India that is described as the colonial architecture.

Many towns of Gujarat, and its main city Ahmedabad, have examples of this colonial architecture. The most typical of the colonial architecture in Gujarat is Ahmedabad’s I.P. Mission School. This building, built in 1866, is a fine example of the wooden roof and brick masonry that was characteristic of the colonial architecture. The Gujarat College, built in 1887, another classic example of colonial architecture, is a famous landmark of the city, with three point arches, wooden truss roof and stone walls. This colonial architecture is the heritage left behind by the British in Gujarat that in appearance still conveys strength, power and supremacy of the British imperium.

The Indian decolonization movement and the city of Ahmedabad were deeply linked as the de facto leader of the great movement; Mahatma Gandhi had made his home in Ahmedabad after his return from South Africa. His house, called “Hridaykunj” is a fine building that stands even today. The Gandhi ashram at Ahmedabad was established in 1917 with the object of doing social service for the nation, which was unopposed to the good of the world. Mahatma Gandhi had stayed and conducted the national movement of independence right from this ashram till 1930. The famous “Salt March” had started from the ashram premises. It may be noted that the merchants and high financiers of Ahmedabad were some of the leading patrons of the Indian National Freedom Movement of the Indian National Congress. The newly rich textile barons of Ahmedabad, as a group, clearly saw as early as 1919 that the winning side will eventually be the Indian Congress and supported it. Mahatma Gandhi had received substantial financial and other support from the leading families like the Lalbhaïs and the Sarabhaïs.
New Institutions

GROWTH OF WESTERN AHMEDABAD (1941-1965)

After political independence in 1947, the artists and architects of India had grappled with the question of “what is Indianness” in their work and the meaning of the new Indian reality that they had found themselves in. B.V. Doshi belongs to that pioneering generation of architects and is a leading proponent of modern Indian architecture. Sangath reflects the architect’s deep struggle to understand and incorporate the vernacular elements in his design. The ancient Indian classical architecture too finds echoes in Sangath, as it is also an attempt at interpreting them and finding their resolution in the modern idiom. This building has acquired a cult status to emulate for the entire younger generation of Indian architects. The government decided in 1958 to make a museum in memory of Mahatma Gandhi in Ahmedabad for which Charles Correa was appointed as the architect. Inaugurated by Jawaharlal Nehru in 1963, the museum houses the precious collection of more than 30,000 letters of Mahatma Gandhi as well as photographs and paintings on the life of the Mahatma. The aesthetically very powerful house of the Mahatma himself stands immobile very close to the museum. Known for his sensitive modernist architecture, Charles Correa has created this museum using the
same materials as were used in the making of the other buildings of the ashram, with the addition of modern concrete. The kutir (a hut, beloved of the Mahatma) is used by Correa in construction of the museum. Each unit of a kutir is six square meters and the museum is made of many such kutirs. The expanse of the museum is vast but the visitor does not feel its vastness. If Mahatma Gandhi’s own life was a message, then this building manages to give the message of simplicity and beauty in modern architectural idiom.

It was the family network of visionaries and patrons of art like Kasturbhai Lalbhai, Ambalal Sarabhai and Chinubhai Chimanlal that was responsible for bringing Le Corbusier to Ahmedabad to design buildings here. It may be recalled here that the tradition of patronage of art among the shreshthis and the mahajans of Gujarat is a long one and goes back to the Middle Ages. The buildings designed by Le Corbusier in Ahmedabad are: the Shodhan Villa, the Sarabhai Villa, the ATMA (Ahmedabad Textile Mill -Owners Association) building and the Sanskarkendra (museum). Le Corbusier has created a powerful building in red bricks for the city museum of Ahmedabad that stands on the river Sabarmati and is an important landmark of the city.

The ATMA building, located on the busy Ashram road, also on the bank of the river Sabarmati, is considered the summation of Le Corbusier’s ideas of architecture and in that, it is considered his masterpiece. Louis Kahn, considered one of the leading lights of modernist architecture, designed the Indian Institute of Management building in Ahmedabad. Known as poetry in bricks, this building is considered one of his finest and has placed Ahmedabad firmly on the world map of modern architecture. The western side of the city has been steadily developing all through the 20th century and has wide roads accommodating major institutions and high-income residential areas. The university is located in this area.
It was the family network of visionaries and patrons of art like Kasturbhai Lalbhai, Ambalal Sarabhai and Chinubhai Chimnial that was responsible for bringing Le Corbusier to Ahmedabad to design buildings here. It may be recalled here that the tradition of patronage of art among the shreshthis and the mahajans of Gujarat is a long one and goes back to the Middle Ages. The buildings designed by Le Corbusier in Ahmedabad are: the Shodhan Villa, the Sarabhai Villa, the ATMA (Ahmedabad Textile Mill Owners Association) building and the Sanskar kendra (museum). Le Corbusier has created a powerful building in red bricks for the city museum of Ahmedabad that stands on the river Sabarmati and is an important landmark of the city. The ATMA building, located on the busy Ashram road, also on the bank of the river Sabarmati, is considered the summation of Le Corbusier’s ideas of architecture and in that, it is considered his masterpiece. Louis Kahn, considered one of the leading lights of modernist architecture, designed the Indian Institute of Management building in Ahmedabad. Known as poetry in bricks, this building is considered one of his finest and has placed Ahmedabad firmly on the world map of modern architecture.
Globalisation is the God of our times and urbanisation is his prophet. The walled town of Ahmedabad in the early 20th century was already more densely populated than Bombay. During the next 10 decades, Ahmedabad has expanded in all directions, coming closer to the other towns which existed only as economic extensions. The brand new S. G. Highway, once only a bypass road reaching the state capital Gandhinagar 30 km away, is a proud showcase of the new Ahmedabad. The S. G. Highway is one of the two major lines on which commercial expansion and growth are likely to take place in the coming years, merging the towns of Ahmedabad and Gandhinagar eventually. This in turn justifies the present Indian Finance Minister’s awarding the status of “mega city” to Ahmedabad under the Jawaharlal Nehru National Urban Renewal Mission (JNNURM).

One of the Projects under the JNNURM, the River front project is a noble idea of giving the river Sabarmati “back to the citizens of Ahmedabad”. It envisages turning the otherwise brown dusty Ahmedabad landscape significantly into a green and built urban one. The project has the potential not only to liberate unused space on the river bank by reclamation but also create threads between the East and the West Ahmedabad by stitching contemporary programs across in a manner that attempts to equalize land value and development potential. It has long been acknowledged that appropriate development of the riverfront can turn the river into a major asset, which can improve the quality of environment and life in Ahmedabad and improve the efficiency of its infrastructure. In May 1997, the Ahmedabad Municipal Corporation established the Sabarmati River Front Development
Corporation Limited (SRFDCL) under Section 149 (3) of the Companies Act 1956. In August 1997, the SRFDCL appointed the Environmental Planning Collaborative (EPC) a city based not for profit urban planning and urban development management consulting firm to prepare a comprehensive proposal for the development of the Sabarmati Riverfront.

However, with the speed of economic development, the torture of rapid urbanisation, the tensions of unplanned growth are all too visible in many parts of the city like the S. G. Highway (see next plate). The speculative activities banking on the new growth areas of the town that became common after the 1992 liberalisation of the economy is all too evident too. Here, large international type malls (including one supposedly the biggest in India) scream on the road to sell their wares in little distance from the places of worship which in turn are surrounded bizarrely by the newly found restaurant culture of Ahmedabad and government offices as well as recreational facilities. The S. G. Highway is a typical example that showcases the urban fabric of Ahmedabad after the liberalisation of the Indian economy in 1992.
Indian Finance Minister P. Chidambaram said one year ago in an interview that his “vision of a poverty-free India will be an India where a vast majority, something like 85 percent, will eventually live in cities. Not megalopolises but cities. In an urban environment it is easier and more efficient to provide water, electricity, education, roads, entertainment and security rather than in 6,00,000 villages.” From the “demolition oriented” 1980s, the government has indeed come a long way in viewing slums as reserves of energy to be tapped. The slum networking strategy adopted in the city of Ahmedabad uses water and sanitation infrastructure co-related with nature (drainage topography) to alleviate poverty. This approach overcomes aid dependence with the internal generation of resources by community and local partnerships. It is based on the belief that slums need not exist in India and that massive transformations are achievable in short time periods. This approach does not accept the common assumption that physical and financial limitations are insurmountable. The approach demonstrates three innovations new to present “development” thinking. Of all the leverages available, water and environmental sanitation infrastructure can alleviate poverty cheaper and faster than any other interventions. These dramatically improve incomes, community investments, health, literacy and other social indicators. There are 710 slums in the city of Ahmedabad and 40% the population of the city lives in them. The poor have a latent resource potential which lies dormant due to the lack of tenure. It has been seen that legitimization and land tenure through the provision of infrastructure provides security to stimulate massive community investment in its own shelter. The poor have a demonstrated capacity of generating resources through intangible social networks. Thus the community is not a beneficiary but a capital partner, self committed to the development and subsequent maintenance of their habitat. As institutional financial aid is not sustainable or adequate due to the magnitude of the problem (urban poor), the challenge can only be met by the generation of internal resources through constructive partnerships. The business and banking partners replace financial aid and assist with implementation on a business model. The government’s role is to establish a financial, administrative and legal structure to enable all actors to participate.
Inhabitation: The Lived-In City:

STREET MARKETS, BAZAARS AND CHARACTER OF URBAN SPACE

The nature of the Indian city cannot be grasped from a map or a plan. Ahmedabad, whose urban space is not only intensified but transformed in character by the way in which it is occupied is the case in point. The reason for this may be that the notions of inside and outside, public and private are not mutually exclusive and distinct. Here we find inside spaces smoothly continuous with outside spaces, domestic spaces continuous with commercial spaces, public and private spaces being connected. The architecture of the house, shop and the ‘pol’ is expressive of this. Elements of transition between domains are articulated as important features of the building. The house extends its plinth, ‘Otla’ into the street to form a characteristic social verandah like space that mediates between the interiority of the house and the sociability of the street. This notion of a continuous space gives rise to a vibrancy and intensity that is most palpable in the market streets, Bazaar’s of the medieval city. Here the streets gain their particular character by the nature of the occupation of the people who are its inhabitants.
This in part is a result of their social background, caste and therefore vocation. This in turn determines the market’s position in the city. Ahmedabad is well known for its cloth markets, both ‘Dhalgharwad’, near the Jami Masjid and the ‘Ratan Pol’ are references that one uses to traverse the city. The gold market at Manek Chowk, is well known. This is where amongst the most trading of gold in the country takes place. Just off this market, as one moves away from the centre, is the copper market, the utensil market and the hardware areas, each having a distinct character. There are markets of every kind, for musical instruments in Kalupur near the Swaminarayan Temple, to the ‘Sunday Market,’ a weekly flea market that takes place along the river.

Modern Commercial areas have over time developed some of this sense of life. However the manner of their planning and making does not encourage this inhabitation. At the Ashram Road and the C.G.Road in western Ahmedabad, glamorous shops and advertisements sell the wares that are familiarly branded and available the world over. Here the fine grain of smaller commercial activity, the tea shops, the ‘paan’ and cigarette vendors, lodge themselves amidst this large and chunky urbanity. It is this co-existence of small and big business, which gives these spaces their intensity.

In recent times the Commercial Street has developed into the ‘Strip’. Along the S.G. Highway the hermetically sealed private ‘malls’ are interspersed with temples, recreational, sports clubs and a plethora of eating places and restaurants giving rise to a twenty two kilometer long, ad hoc mixed use commercial development. It is interesting to note that the Bazaars in the Old city are only a few hundred meters long. The length of the new ‘Bazaar’ presumes the automobile. And yet this area is being transformed rapidly and is becoming a part of Ahmedabad.
Urban Villages

THE COEXISTENCE OF OLD AND NEW

Urban population increased six fold from Independence to 2001. The unclear stratum of localities has sprung up in all cities. This category is difficult to grasp statistically, wavering between urban and rural, and constitutes one of the nation’s identity issues: the small agglomerations. Beyond political factors, the geographic distribution of Indian cities remains, like in the rest of Asia or in Egypt, closely linked to the proximity of agricultural fertile and irrigated lands. The only ones that do not follow this heritage of ancient agricultural economy are a chain of towns with a long tradition of commerce, handicraft and industry, such as in Gujarat. Even as the contemporary city grows radially, absorbing into its urban limits the agricultural areas that were once its hinterland, it also absorbs into its fabric the rural settlements that were once part of the network of villages that supported the larger commercial agglomeration of the city. Many villages have been absorbed into the city forming islands within the larger city structure. Many of these villages still have their tanks and water bodies, which the Ahmedabad municipal Corporation is in the process of interlinking to form a system for storm water drainage during the monsoon and a system for water supply in the advent of water scarcity. The areas around these water bodies are being developed as green public space. In addition to this a number of beautiful old houses can be found within the village fabric. These are pockets of heritage found within the newer parts of the city. These urban villages are being transformed drastically by the pressures of real estate and commerce. They are important examples of the co-existence of the old and new and the palimpsest that is the Indian city.
The Neighbourhood

URBAN TISSUE AND THE INTIMATE CITY

Architecture is obviously not only about palaces, temples and forts built by the kings. The buildings used by the common man for living are very much a part of architecture. Residential precincts, known as pols, are a typical typology of houses in various towns of Gujarat. There are literally ensembles of this so-called vernacular architecture in the old town of Ahmedabad, on the east side of the river Sabarmati. The Gujarati word “pol” seems to have been derived from the Sanskrit word “pratoli” and the Prakrit word “poli”. Typically, a pol has one entrance and homogeneous groups of people live in it. Reflecting the rich cultural ethos of Gujarat, pols have their geographical origins in the north of Gujarat. Known as “padas” in the north Gujarat towns like Patan, pols are a key to the understanding of what is called the settlement pattern of Gujarat. Originally, people of the same caste or social group would live together in a “khadki” and a group of “khadkis” would make a pol. During the British period, the Ahmedabad Gazetteer had noted in 1879 that “formerly no man could sell or mortgage a house to an outsider without first offering it to the people of the pol. Again, on wedding and other great family occasions, each household is expected to feast the whole pol, and in some cases all the men of the pol are expected to attend any funeral that may take place. If the pol rules are slighted, the offender is fined.” These pols are found in all major medieval towns of Gujarat like Nadiad, Vadodara, Khambhat and Patan among many. There are about 360 pols in the old town of Ahmedabad alone. Many of these pols have colourful names, reflecting the richness of Gujarati language. These densely packed clusters of rows upon rows of houses, joined by labyrinthine streets are where the thousands of years old Indian architectural traditions continue to live. These pols are the exuberant riots of beautiful wooden facades, lovely wooden brackets, lovingly carved fenestrated windows, magical balconies, otlas, chabutaras (bird feeders), khadkis and chowks. Time has bestowed beauty to this pol architecture of Gujarat, making it an ornament of world architecture.
Prior to the fourth century BC, most of the construction activities in India were done using wood. There are no surviving proofs of these wooden structures but the sacred Rig-Veda has many names for such a house or dwelling in its text. The sacred Rig-Veda defines a house as “a place where men and animals live.” According to another sacred text, the Atharvaveda, most of the houses were made from wood. This text compares an ornamented wooden house with an ornamented female elephant.

The same text compares the beauty of a wooden house with that of a newly married woman. The wooden havelis (Gujarati word, meaning a grand mansion for living) of Gujarat represent this ancient tradition of wooden architecture of India. The famous havelis of the towns of Godhara, Dahod, Palanpur, Radhanpur, Patan, Sidhpur, Himmatnagar, Ahmedabad, Kapadvanj, Dholka, Kheda, Kambhat, Vadodara, Dabhoi, Champaner, Surat, Mandvi, and Bhuj represent the splendor of this ancient tradition of architecture. There are literally thousands of such havelis existing till this very date in these towns of Gujarat. The town of Vaso in the Kheda district of Gujarat is world famous for its beautiful havelis. A typical haveli of Ahmedabad has a central place called chowk (open court) from which many rooms open, where all the domestic activities are concentrated and where people of the household gather. A typical Ahmedabad haveli displays carved brackets; their outer facades are also covered with carvings. The struts in a haveli generally has filigree-like work and the doorways display decorative ornamentation. Beauty flows from each square millimeter of these haveli structures. These havelis once stood as a symbol of power and prestige of a family in society. They also are the reflectors of the great traditions of architecture.
Heritage Conservation

CONTEMPORARY INITIATIVES : AN INTRODUCTION

A culture is indeed created in its cities. The historic centre of Ahmedabad with 10000 ancient houses is located in residential precincts known as “pols”. These houses and the historic centre of the town constitute an exceptional urban and architectural heritage. The unique feature of this ensemble is the wood-carved houses and the way they are built. There are remarkable masonry houses, some of which show outside influences. For example, it is not surprising to come across houses, in the middle of traditional ones, which have eclectic or art deco or composite style! With its surface area of 550 hectares and its population of 440,000 inhabitants, the features of the historical centre of Ahmedabad are indeed dense. Of course, housing, traffic and shops in the historical centres are beset by the economic, social and technological effects. The old city of Ahmedabad defines the “spirit of Ahmedabad” and is a living memory of the personality of the city. Ahmedabad indeed is a balance between “chaos and order”.
The Ahmedabad Initiative

HERITAGE DEPARTMENT AHMEDABAD MUNICIPAL CORPORATION

The Old city revitalization program seeks to inculcate community participation in supporting a program to conserve and celebrate the heritage “urbanscape” of this part of Ahmedabad. This initiative is conducted through a new form of partnership between a government organization (AMC) and the private participation of an NGO. The changed attitude to conservation, from being one of viewing the city as a historical artifact to involving people’s initiative in the revitalization of a historical precinct and its heritage is brought about by the collaborative efforts of local architects and consultants.

The special feature of Ahmedabad is the plan of the old city, comprising numerous pols, self contained neighborhoods, sheltering large numbers of people, traversed by narrow streets, usually terminating in squares with community wells and chabutaras for feeding birds. Heritage Walk conducted by the Ahmedabad Municipal Corporation with NGO, CRUTA Foundation like most Indian cities, has a long history and strong Architectural and urban character. The AMC has been, since 19th Nov1997 as a part of World Heritage Week conducting this Heritage Walk of Ahmedabad as a part of its cherished project “Getting the City to the People”. The Heritage Walk of Ahmedabad is a guided walk of two and a half hours. This daily affair by the AMC is extremely well designed in guidance and cooperation with CRUTA and Swaminarayan Trust, being operated by a group of young volunteers. There is also a half hour special slide show running through pages of the city’s history unfolding back its birth from a 10th century AD ancient site known as Ashaval to the present walled city re-founded during the period of Ahmed Shah and onwards.
Heritage

THE NEED FOR AWARENESS

The built environment of the old city of Ahmedabad is the collective memory of the Gujarati culture. Apart from being the major element of the local identity, it is also a depository of ancient wisdom and knowledge. It may be recalled that in the most recent earthquake, many buildings in the western, modern side of Ahmedabad had collapsed but the walled city had suffered far less damage. The old city of Ahmedabad is also an example of an optimum utilization of urban land. The compact housing pattern in the walled town of Ahmedabad has successfully dealt with the harsh realities of climate of Ahmedabad. As noted by the scholars, the pol houses are a good example of high density low-rise urban housing. Community living and sharing is a crucial social aspect of the pol housing that brings the members of the community a sense of belonging. The pols bring interesting sense of continuity and variation in architectural typology that is remarkable. All these aspects in a living heritage of the walled town of Ahmedabad makes it imperative to conserve and preserve it especially in face of increasing commercial pressures.
Encouraging local artists and artisans
Chitara Kalamkari artisans provided guidance

The Heritage Cell provided guidance to the
“Chitara Upliftment Programme”
A LAP initiative to conserve and revitalise Ahmedabad’s traditional craft of Kalamkari and Block-Printing. A few Chitara families are employed in making of the delicately hand painted, natural dyed, hangings of cotton. The motifs of ‘Pata’ or ‘Patola’ are known as Motuvi Pacheli. The programme was aimed to help them in product development and marketing for their social and economic upliftment of the community as a whole.

Chitara’s Kalamkari & Block-Printing Workshop
A Workshop being imparted to hand in hands training process enabling Chitara Traditional artisans of Wadgaon Community known for their unique and exclusive hand block prints. This workshop is for all who are interested in the traditional art of Kalamkari and Block-Printing of Ahmedabad and its suburbs.
Heritage and Citizen’s participation

SOCIAL INITIATIVES

Activities to raise awareness have been undertaken by the Heritage Cell of the Ahmedabad Municipal Corporation (AMC). These activities involve the population in the restoration of the city by facilitating its discovery. These actions concern both information and programmes for highlighting significance of the monuments.

Celebration of Pol Day. To bring pride among the residents of neighbourhood, Pol–day was organized.

The Heritage Walk. Local people are actively encouraged to become volunteers in this programme that has a great potential for increasing awareness of heritage.

The Rickshaw guides. The common tricycles, a common means of transport are used after training their drivers to show the city to the visitors. The trained drivers act as sympathetic guides who take the visitors around in their vehicles. This initiative is organized with the AMC, the tourism department and the auto-rikshaw association.

The House of Dalpatram, the noted Gujarati poet and scholar was destroyed in 1885. His memory is evoked now by meetings and recitals that take place at the same spot. A statue of the poet and an amphitheater has been erected at the same place.

The Freedom March, linking together eight houses that were important and active during the freedom movement. Also, the houses which were associated with Mahatma Gandhi during his stay in Ahmedabad celebrate his birthday on October second.

An association of the old house owners of Ahmedabad is formed to promote and examine possibilities of restoration.

A programme of clearing and illuminating the city’s gates has begun and is to include the ramparts. Sign posting of pols has taken place. Traditional handicraft objects are periodically distributed.

The financing of the restoration with HUDCO (The Housing and Urban Development Corporation) to support the financing of the restoration/repair of old houses is being organized.
THE ARTISTS CONCEPTION OF THE CITY

Ahmedabad has a vibrant contemporary artists community. Local and international painters, photographers and dancers have found delight in capturing the vivid sense of life that is at the heart of this city, through their art. In November 2003, the Heritage Department Ahmedabad Municipal Corporation, guided by the artists Vridavan Solanki and Jayesh Shukla, invited artists from the city to create works of the medieval city as they saw it. A wide range of artists, from renown ones like Amit Ambalal and Haku Shah to younger aspiring ones who were given an opportunity to exhibit their work, responded enthusiastically to this workshop and seminar held to celebrate World Heritage day. The works were displayed at baronet Haveli in Desai ni Pol, where it was well received by critics and visited by people at large who were simultaneously made aware of the Old City and the contemporary art culture of Ahmedabad.

The organization of cultural programs as a medium through with people are made aware of urban heritage has long been a mandate of the Heritage Department. The Ahmedabad Heritage Festival is now an annual phenomenon. In 2007, Manuella Benini, a Kathakali Dancer from Brazil performed in Dhal ni pol with the traditional architecture as her backdrop and set.
Conservation of Houses

An old house has been adapted to function as a center for creative arts professionals and offers space to work for artists, writers, poets, musicians, dancers, photographers, architects etc.

Located in Khijda Sheri, Dhal ni Pol of Khadia, two storied structure has a floor area of 325sqmts. and falls under the category of ‘remarkable’ buildings as per the survey conducted by the Heritage Department in 2000-01. It represents the typology and evolution of the traditional house type with a ‘Grand Façade’, elaborate stucco work and decorative pediments. The House is a very important building in the Pol; however its spacious interiors with its traditional woodwork had fallen into disrepair. The house was restored with the initiative of Mr. Nikhil Vyas and the architect Pierre Cardot of the Ahmedabad Heritage Centre over a period of two months. The process also followed a traditional time line where the structure was first made inhabitable after which the restorations of the details were gradually completed allowing for the participation of the inhabitants in the process of restoration. The Ahmedabad Heritage Centre sanctioned a direct grant to ensure that this house stands restored to its original grandeur. The house is now used as the ‘Art Reverie’, a residential centre for creative professional to stay and interact with each other in the setting of medieval Ahmedabad.

The Heritage Department also known as the Ahmedabad Heritage Centre, has restored over 25 houses of varying sizes and styles across this part of the city. Another one of these houses, the Mehta House represents a traditional Ahmedabadi house subject to colonial influences. It has been restored to serve as a venue for cultural events directed at spreading awareness about the need to conserve heritage buildings.

In addition to the obvious cultural enhancement this initiative is also an indicator of the changing nature of Government processes, which has opened up to partner with private enterprises, both local and international, in order to induce heritage development. The collaborative efforts of local architects, craftsmen and consultants bring about the transformation attitudes towards conservation that of being a people’s initiative in celebrating historical heritage.
Conservation of Institutions

Hatkeshwar Temple

The Hatkeshwar temple belongs to the community of Visnagar Nagars and is located on the way to the Khadia Gate. The Temple is east facing and sits on a high plinth. The temple, dedicated to the Lord Shiva, has a linga at the centre of its Garbha Griha (Sanctum Sanctorum). At its rear four Idols of Parvati the lord’s wife adorn the structure while to the left we find a niche with the figure of Lord Ganesh, the elephant god and son of Shiva. Keeping in mind the religious importance of the building the restoration was carried out in three phases. The first phase involved the restoration of the wooden facades. The second phase conserved and developed the facilities for basic privileges and the side wing. While in the third phase, a temporary Mandappa (pillared hall) was added to the temple complex. This Maratha period building is an example of traditional Solanki Architecture, a public monument that was restored by the Heritage cell.

Tankshaal Haveli: Adaptive Reuse

This exquisitely carved grand haveli house known as Tankshaal (Mint) ni Haveli has the longest (25 m. long) wooden façade in the walled city of Ahmedabad. city. The haveli has been in possession of Ahmedabad Municipal Corporation since 1925. For the past 25 years this haveli had been abandoned and the lack of care and maintenance had led to major structural damage in the interior. The works of rebuilding was divided into three parts 1. Complete reinforcement of the structure and provide good stability 2. Reconstruction of the rear parts of the haveli using brick and RCC in order to give more space as well as provide for basic facilities that could be used as school. 3. Introducing a new steel gallery between the old wooden structure and the new brick and RCC structure towards the east. 4. Internal refurbishment, including the equipments and furniture. Following the reinstallation of electric and water connection, the structural work started. But soon, a court case was filed by the kin of the donor who donated the building to AMC 75 years ago and the work was stopped from November 2003 till April 2004. The work has been resumed upon an agreement to use a part of the building as girl’s school. It is in its reconstruction an amalgamation of the modern and traditional materials, methods of construction and aesthetics.
CONSERVATION OF THE SWAMINARAYAN TEMPLE

Sahajanand Swami, the founder of the Swaminarayan sect, was one of the social reformers who brought light in the socially dark and morally debased atmosphere prevalent in the nineteenth century flow of life in Gujarat. The Swaminarayan Temple at Kalupur in Ahmedabad, established by Sahajanand Swami himself, is a good example of the Gujarati art and craft tradition. The temple was meant to be that of Nar-Narayan Dev that stands in grandeur till date in the Swaminarayan complex at Kalupur. The main shrine of Nar-Narayan Dev has two idols sculpted in black stone. These idols are installed in the very heart of the temple in the sanctum; the temple faces north. The idols are sculpted in the most symmetrical sambhang posture and are studded with earrings, necklaces, bracelets and attractive rosaries. The simhasan on which the idols are installed, is an excellent example of Gujarati wooden and metallic art. A huge ghumat or the hemispherical dome is built on the octagonal pavilion of the temple and smaller hemispherical domes are constructed on the three entrances. The havelis in the temple complex are made in the famous building tradition of Gujarati wooden architecture. On the ground-floor portico are pillars on which are engraved captivating sculptures of animal heads, birds, flowers and creepers, revealing the art of the Gujarati wood worker. The structure of the three storeyed haveli rests on the octagonal and square wooden pillars. A sabhamandapa or a congregation hall with sixty pillars is constructed in the temple complex. Sculptured lions and elephants, birds like peacocks and parrots as well as lovely engravings of leaves and flowers decorate the panels of the congregation hall. The monumental gateway of the temple in the west of the court is neo-Mughal in style. It manifests triple confluence of the local, the regional and the British styles of architecture and sculpting. There are Gujarati and Marathi folk elements in the facade of the main gateway of the temple.
Conservation of Public Space

THE CONSERVATION OF CHABUTRAS AND SQUARES

Apart from domestic and institutional buildings, the Ahmedabad Heritage Centre has been responsible for reviving public spaces and structures of public importance. The restoration of ‘Chabutras’ across the city is one such example. The ‘Chabutra’ is a stone or wood tower like structure that functions as a bird feeder, and is typically found in the social space of each ‘pol’. There are more than 300 of these intricately carved structures which are in dilapidated condition. The Heritage department has restored many of these, most notably the ‘Chabutra’ located at Karanj near the Bhadra fort complex. This is also the oldest of these structures.

In 2007, along with the citizens of the city, the Ahmedabad Municipal Corporation proposed a memorial to Kavi (Poet) Dalpatram at the site of his house in recognition to his contribution to Gujarati Literature and Culture. With scanty records, the environment in which the poet lived was restored to become a cultural landmark.

The façade of his house was restored and a bronze statue of his has been placed to mark the place. The memorial also serves as an activity area where plays, recitations and other literary performances are enacted to keep the cultural heritage alive.

Another project of this nature, undertaken by the Ahmedabad Heritage Centre is the development of the ‘Chowk’ (square) of Desai ni Pol as ‘Akha Bhagat Chowk’. This was done in the memory of the great Gujarati poet, Akha bhagat, one of the more popular poets who gave to Gujarati Literature his unforgettable short poems – ‘Chappa’.
ACKNOWLEDGEMENTS

Documentation, Research, Compilation and Exhibition design
Anthill Design, Ahmedabad: Riyaz Tayyibji, Roma Pandya, Krunal Mistry, Kiran Kumar, Khushboo Shah, Sivith Kumar, Prabha Choudary, Mangesh Deshpande, Pooja Parekh and Pravin Zapadiya
Heritage Department – Ahmedabad Municipal Corporation
Debashish Nayak, P.K.V Nair, P.D Patel, D. Bumtaria, Nikhil Vyas, Vijay Pandya, Laxman Teli

Text
Hemang Desai

Graphic Design
Kedar Chauhan

Exhibition Curators:
Paloma Gil, Julio Grijalba, Alberto Grijalba, Eduardo Carazo, (GIRDAC, University of Valladolid)

Exhibition Coordinator
Miguel López

Valladolid City Council Team
Mercedes Cantalapiedra, Counsellor for Tourism, Commerce and Culture
Fernando Rubio, Counsellor to the Presidency,
Catherine Park, Head of the International Relations Office

Casa de la India Team
Guillermo Rodríguez, Director
Shamina Rasiwala, Administration
Elke van der Valk, Coordinator of the EuroIndia City summit 2009
IMAGE CREDITS

SECTION 1    THE CITY AND ITS ENVIRONMENT
Plate 1  Introduction
Anthill Design

Plate 2  Geography and Settlement: The North Gujarat region
Undergraduate research thesis’s, submitted at the Faculty of Architecture, C.E.P.T University, Ahmedabad by Choksi Jignesh, Dodiya Mehdihasan and Bhatt Maunsami
Anthill Design

Plate 3 Settlement pattern: The North Gujarat pattern
Undergraduate research thesis’s, submitted to the Faculty of Architecture, C.E.P.T University, Ahmedabad by Choksi Jignesh, Dodiya Mehdihasan and Bhatt Maunsami
Anthill Design

Plate 4  The Architecture of North Gujarat
Pandya Yatin (Concepts of Space in Traditional Indian Architecture, Mapin Publishing, Ahmedabad, 2005)
Kalsi Ekagrat Singh
Undergraduate research thesis’s, submitted to the Faculty of Architecture, C.E.P.T University, Ahmedabad by Kalsi Ekagrat Singh, Choksi Jignesh
Anthill Design

Plate 5 Settlement and Topography: The physical context of Ahmedabad
Anthill Design

Plate 6 Settlement and Topography: Natural ground and Urban structure
Chauhan Mukthirajsinhji and Bose Kamalika (History of Interior Design in India Vol 1: Ahmedabad, School of Interior Design, C.E.P.T University, Ahmedabad, 2007)
Panchal Dhruva
Undergraduate research thesis’s, submitted to the Faculty of Architecture, C.E.P.T University, Ahmedabad by Jain Mita, Lahiri Nikita, Menghani Jitendra, Nanda Vivek and Wagh Ranjit
Anthill Design

Plate 7 Institutions: People and Water: Rudabai’s stepwell at Adalaj
Kalsi Ekagrat Singh
Undergraduate research thesis’s, submitted to the Faculty of Architecture, C.E.P.T University, Ahmedabad by Kalsi Ekagrat Singh
Anthill Design

SECTION 2: THE CITY AND ITS HISTORY
Plate 8 Institutions: People and Water: Sarkhej and Kankaria
Bimal Patel (H.C.P consultants)
Undergraduate research thesis, submitted to the Faculty of Architecture, C.E.P.T University, Ahmedabad by Limbachiya Dhaval
Anthill Design

Plate 9 Urban structure and Character: Symbolic Institutions
Chauhan Mukthirajsinhji and Bose Kamalika (History of Interior Design in India Vol 1: Ahmedabad, School of Interior Design, C.E.P.T University, Ahmedabad, 2007)
Heritage cell – Ahmedabad Municipal Corporation
Anthill Design

Plate 10 The city inhabited: Its sense of life
Anthill Design

Plate 11 Construction of the Pol house: Its response to Water harvesting and Earthquake
Undergraduate research thesis’s, submitted to the Faculty of Architecture, C.E.P.T University, Ahmedabad by Modan Akbar Nazim, Periera Lisa, Raiji Pranav, Nanda Vivek and Balsavar Durganand
Anthill Design

Plate 12 Construction of the Pol house: A simulation
Heritage cell – Ahmedabad Municipal Corporation
Anthill Design

Vastu Shilp Foundation for Studies and Research in Environmental Design

Plate 13 Growth and Evolution of Ahmedabad: A historical overview
Chauhan Mukthirajsinhji and Bose Kamalika (History of Interior Design in India Vol 1: Ahmedabad, School of Interior Design, C.E.P.T University, Ahmedabad, 2007)

Vastu Shilp Foundation for Studies and Research in Environmental Design
(The Ahmedabad Chronicle: Imprints of a millennium, Vastu Shilp publication, Ahmedabad, 2002)
Anthill Design
Plate 14 Growth and Evolution of Ahmedabad: A historical overview II
Chauhan Mukthirajsinhji and Bose Kamalika (History of Interior Design in India Vol 1: Ahmedabad, School of Interior Design, C.E.P.T University, Ahmedabad, 2007)


Hasan-Uddin Khan (Charles Correa, Mimar publications, 1984)

Bimal Patel (H.C.P consultants)

Himanshu Parekh

Meghal Arya and Vijay Arya

Anthill Design

Plate 15 Rise of the mills: The textile revolution and growth of Eastern Ahmedabad
M.K Thakur (Architects personal photographs)

Sanskar Kendra, Ahmedabad City museum

Anthill Design

Plate 16 Ahmedabad and Independence
Sanskar Kendra, Ahmedabad City museum


Shah Suhani

Heritage cell – Ahmedabad Municipal Corporation

Anthill Design

Plate 17 New institutions and growth of Western Ahmedabad I
Setu Mewada

Chauhan Mukthirajsinhji and Bose Kamalika (History of Interior Design in India Vol 1: Ahmedabad, School of Interior Design, C.E.P.T University, Ahmedabad, 2007)


Bhatt Vikram and Scriver Peter (Contemporary Indian Architecture: After the Masters, Mapin publishing pvt. Ltd. Ahmedabad, 1990)

Undergraduate research thesis’s, submitted to the Faculty of Architecture, C.E.P.T University, Ahmedabad by Mewada Setu, Sheth Sameeha and Mistry Krunal

Anthill Design

Plate 18 New institutions and growth of Western Ahmedabad II
Chauhan Mukthirajsinhji and Bose Kamalika (History of Interior Design in India Vol 1: Ahmedabad, School of Interior Design, C.E.P.T University, Ahmedabad, 2007)


Bhatt Vikram and Scriver Peter (Contemporary Indian Architecture: After the Masters, Mapin publishing pvt. Ltd. Ahmedabad, 1990)

Bimal Patel (H.C.P consultants)

Chaaya Neelkanth

Patel Nimish and Zaveri Parul (Abhikrama)

Anthill Design

Plate 19 Ahmedabad: The contemporary city I Slum networking and other initiatives
Bhagwat Aniket (Prabhakar Bhagwat consultants)

Himanshu Parekh

Matharoo Gurjit Singh

Anthill Design

Plate 20 Ahmedabad: The contemporary city II River front development and other initiatives
Bimal Patel (H.C.P consultants)

Kapadia Kiran, Bhatt Mehul and Bhatt Jigna

Bresson Cartier

Anthill Design

Plate 21 Inhabitation: Lived in city: Street Markets, Bazaars,
and character of Urban space
Mehta Rushank, Gajjar Deven
Undergraduate research thesis, submitted to the Faculty of Architecture, C.E.P. T University, Ahmedabad by Tayyibji Riyaz
Anthill Design

Plate 22 Urban villages: The co-existence of Old and New
Anthill Design

Plate 23 The Neighbourhood: Urban tissue and the intimate city
Undergraduate research thesis, submitted to the Faculty of Architecture, C.E.P. T University, Ahmedabad by Nanda Vivek
Anthill Design

Plate 24 The Pol house: Patterns of living
Undergraduate research thesis, submitted to the Faculty of Architecture, C.E.P. T University, Ahmedabad by Nanda Vivek
Heritage cell – Ahmedabad Municipal Corporation
Anthill Design

SECTION 3: HERITAGE CONSERVATION: CONTEMPORARY INITIATIVES

Plate 25 Introduction
Anthill Design

Plate 26 Heritage: the need for awareness
Heritage cell – Ahmedabad Municipal Corporation
Anthill Design

Plate 27 Heritage: The Ahmedabad initiative:
Heritage department – Ahmedabad Municipal corporation
Heritage cell – Ahmedabad Municipal Corporation
Anthill Design

Plate 28 Heritage and Citizens participation: Social initiatives
Heritage cell – Ahmedabad Municipal Corporation
Anthill Design

Plate 29 Heritage and Citizens participation:
The Artist’s conception of the city
Heritage cell – Ahmedabad Municipal Corporation
Anthill Design

Plate 30 The conservation of houses: Restoration of Mehta house and Adaptive reuse of House of Nikhil Vyas
Heritage cell – Ahmedabad Municipal Corporation
Anthill Design

Plate 31 Conservation of Institutions:
The temple at Hadkeshwar and the Tankshaal haveli
Heritage cell – Ahmedabad Municipal Corporation
Anthill Design

Plate 32 Conservation of Institutions: Swaminarayan temple
Heritage cell – Ahmedabad Municipal Corporation
Anthill Design

Plate 33 Conservation of Public spaces:
Conservation of Chabutras and Squares
Heritage cell – Ahmedabad Municipal Corporation
Anthill Design

Internet sources: