

## GROWING FAST, INNOVATING SLOWLY. INFORMAL AHMEDABAD BETWEEN PAST AND FUTURE

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### ABSTRACT

The fast urban development in India is making evident many social, cultural, and economic complexities reproduced in the city's planning and design. The drive for modernization is becoming the central topic in the national and political debate and becomes more urgent every day. Among these contexts, urban fabrics in-between developing cities, heritage roots, "smart city" missions and "kinetic" cities constitute a framework for research on morphological, functional, social and environmental perspectives. This paper investigates contested locations in Ahmedabad, where informality finds space between heritage structures and recent beautification projects, such as the Sabarmati riverfront. The paper understands how a holistic approach is essential in rethinking and upgrading the spatial and urban conditions of informal settlements in the city and therefore highlights the relevance of adequate lenses to understand these complexities. Like many other cities in India, living in slums or informal settlements is a common phenomenon in Ahmedabad, as they provide affordable housing close to job opportunities. In 2009, AMC (Ahmedabad Municipal Corporation) identified 834 slums, sheltering 23 per cent of the total population of the city. Several conditions and features characterize these settlements since their communities are often from the same

region, class, caste, or religion. This paper will analyze case studies in Ahmedabad, where the friction between informality, preservation of heritage structures and new smart city developments is evident. The paper will question various assumptions regarding the informal environment and analyze their cultural and architectural identities, the domestication of heritage structures, and vulnerability within the idea of a smart and globalized Ahmedabad.

### KEYWORDS

Heritage; smart city; informality; India.

### 1. INTRODUCTION

Today, as other countries on Global South, India faces a constant population growth, especially in the urban environment.<sup>1</sup> The rising of the service sector and the location of manufacturing companies on the periphery of the major cities have contributed over the years to a migratory flow from rural areas, with a resulting wide-scale impact on the social fabric. The fast urban growth, combined with urban economic modernization (Fernandes 2004, 2415–2430), has created an exacerbation of problems related to various aspects of social, economic, and political exclusion and the invisibility of marginalized groups.

In 2020, 35% of the Indian population lived in cities (Worldmeters.info), and according to an Indian Urbanization Econometric model report of 2010, most of the states would become majorly urban in 2030 - Tamil Nadu (67%), Gujarat (66%) (McKinsey Global Institute, 2010), bringing economic opportunities as well as a high pressure on the planning and governance institutions to manage urban growth. Nowadays, most Indian urban settlements expand haphazardly, without a masterplan and following decades-old urban and building regulations (Government of India New Delhi, 2021). Moreover, a strong political agenda to transform India into a world economic power (Pande 2020), is creating a demand on urban settlements to be competitive and globally visible, bringing new logics and aesthetics to urban spaces and built forms.

K. T. Ravindran (2017, 15-16) draws attention on how in the past seven decades, interest in urban development in India has focused on large cities or their rapidly expanding peripheral areas.<sup>2</sup> However, most urban centers include historic cores of ancient formation, characterized by an intrinsic cultural and identity value. Still today, no specific guidelines have been identified for buildings in which the historical features can be embedded in the future change.

Industrialization emerges as the only path for the economic development of society and the classification of Indian cities, and the distribution of their resources is also based on it.<sup>3</sup> The master plans as well as the national and international funding have focused on infrastructure development to support industrial growth. Moreover, the same planning approach is applied to historic cities recognized as India's cultural heritage.

This approach is a restricted vision which does not consider the requirements of Indian historic cities: cultural value, tangible and intangible, is not considered as a significant part within the transformation process of integrated development projects.

In heritage precincts, such as the city of Ahmedabad, the ancient traces are not only imprinted in the architecture and urban fabric, as testimony of the communities' history, but even more visible in the city's cultural and traditional legacy, which is expressed in rituals and festivals, including urban space as an integral part of the communities themselves.<sup>4</sup> The place's bond with the people who still actively live in it, shaping an ever-evolving city form in which new elements are juxtaposed in the older fabric, adding a new phase to the centuries of past histories.



Figure 1. Abandonments and encroachments in the Walled City of Ahmedabad This situation in the Indian historic districts highlights how the definition of specific guidelines for preserving the traditional buildings of the historical fabric, which can be incorporated into the future change of cities, is still weak. (©Authors 2019)

## 2. INDIAN URBAN EXPERIENCE “IN BETWEEN”

### 2.1. The negotiation of space

Indian urban spaces result from a cross-cultural, religious, gendered, and caste trade-off, which culminates in a temporary and informal appropriation of space. To emphasize the features permeating Indian urban culture, three main characters are recognized as distinguishing the intricate and diverse Indian environment, which cannot be overlooked even within the strategic framework for the protection of India's historical heritage. These characteristics must be considered when defining future scenarios for planning Indian cities, both in their public spaces and in the modernization drives: static/kinetic city, formal/informal, insurgent public space.

The continuous negotiation of space by diverse groups and activities has an important impact in the production of space in the city and on the experience of its identity. The flexible and temporal spatial manifestations of complex social, economic, political, and cultural dynamics represent a fundamental characteristic of the Indian city. Mehrotra (2008) refers to the relationship between “kinetic” and “static” to define the Indian urban experience. The “kinetic city” is temporary in nature, constantly modifying and reinventing itself, a city that is elastic, adaptable and malleable, made of canvas, plastic sheets and wood (Mehrotra 2008, 206). Many times, associated with informality and poverty, the kinetic city is a condition of negotiation of space in dense urban settlements: festivals, processions, weddings, street vendors, encroachments, religious rituals create a city in constant flux, that gets built and rebuilt over time. On another end is the static city, defined as formal, more permanent and built with stronger materials. It is a condition dependent on the spectacle of architecture.

The second character is the relation “formal/informal”. Informality, according to Ananya Roy (2009), is an ever-shifting status between legal/illegal, legitimate/illegitimate, authorized/unauthorized. Even if this status is not exclusively associated with poverty, that is the perception (Roy 2009, 80). In 2018, 90% of all workers were somehow part of the informal economy (Raveendran, Vanek, 2020), and 35% of the Indian urban population lived in informal settlements (worldbank.org).<sup>5</sup>

Slums are the most evident spatial manifestation of informality (or of the relationships between formal and informal) in the urban fabric. They are spread out in different areas of the city, with a close relation with wealthier neighborhoods, and in vulnerable areas such as riverfronts, low-lying areas, and vacant lands of private or public ownership (Bobbio 2015, 118). Morphologically, they can be easily identifiable as enclaves of high-density low rise construction, with an intricate network of streets and open spaces. As cities expand and rethink their urban spaces, these settlements are interpretable as ghettos, unsuitable for the imagination of a ‘Global City’ (Mahadevia, Desai, Bhatia 2018, 21). The legibility of these settlements as ‘informal’ creates not just physical but social boundaries between slum dwellers and the remaining citizens (Bobbio 2015, 119). Informal settlements are unmapped areas of the city, waiting for investment or displacement. The perception of temporality, associated with informal settlements, creates zones of disinvestment, by slum dwellers that avoid investing on the improvement of their houses, threatened by displacement (Marnane, 2019), and by public governance, that holds these central plots for future development (Bobbio 2015, 125) (Fig. 2).

Moreover, the informal economy is visible in the use of public space by commercial and service activities as street vendors, cobblers, tailors, or bike repairing workshops (Fig. 3). The National Association of Street Vendors of India (NASVI) estimated that in 2015 the number of street vendors was about 2% of

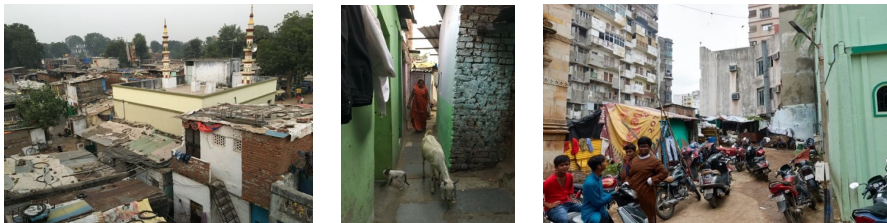


Figure 2. Informal settlements in Ahmedabad located between the right bank of the Sabarmati River and the historical walls at Shapur: Shankar Bhuvan with the high density of buildings (left), the intricate network of alleys between the houses (middle), informality between Khanpur Gate and new apartment blocks outside the walls. © authors 2019

the entire population, 200 000 in Mumbai and 127 000 in Ahmedabad.<sup>6</sup> The occupation of public space by these activities is diverse and complex. While some vendors are mobile and have different routes through the city to sell their products, others are stationary, with a fixed location and a tentative time schedule. Some vendors work in isolation, while others gather in clusters or markets. The markets involve other suppliers of essential services to the vendors, such as water, electricity, and storage, and agglomerate many consumers. One of the largest street markets in Ahmedabad, the Sunday market, had between 150000 to 200000 visitors every Sunday (Mathur 2012). These activities provide an important contribution to the urban

economy, creating employment and bringing affordable products to the urban population. Moreover, they organize public space with their structures, producing landscapes of commercial and social transactions.

The third characteristic is what Jeffrey Hou (2010) defines as “insurgent public space,” describing actions that articulate alternative social and spatial relationships, in which the public realm becomes a support for “a more diverse, just, and democratic society” (Hou 2010, 12). This view of public space highlights the capacity of civic groups and individuals to play a role in shaping the contemporary urban environment, with alternatives to the conventional urban planning practice, and despite official rules and regulations.



Figure 3. Commercial activities and street vendors along the historical masterpieces: a tailor with his shop near the old city wall (left), and the Sunday Market along the western Wall. © authors 2019

## 2.2. Heritage VS modernization

Referring to Mehrotra's insightful observations, Indian cities are the expression of decades-long transitions in India: the built environment is a physical tangle in which fractured fabric, bizarre overlaps, and different stories clash in the same space (Mehrotra 2019, 9-11).

Political intentions and rhetoric are focused on "building a global city," feeding the urgency of a world capital. On one side stands the private business interests of multinational corporations and the Indian state. On the other, the civil society of intellectuals, NGOs, trusts, associations, cooperatives, and trade organizations, seeking for more inclusive policies. The spatial elements of these two dichotomous visions are, on the one hand, airports, motorways, luxury hotels, congress centers, subways, railway systems and a modernization of the streetscape according to imported models from the Western world. The architectural output shows an alienation from tradition, material, and craftsmanship in which the community is located, as well as from a critical adaptation to standardized architectural patterns. The projects are big-scale infrastructure, capable of providing stable and reliable facilities for capitalist profit. In this situation, wealthy people establish "safe" enclaves, like archetypical crystal towers<sup>7</sup> or new suburban complexes, and become more and more clustered from the city.<sup>8</sup>

This scenario is also characterized by a preservation of historical buildings which are interpreted and used as symbols to represent national and local identity, and, on another hand, by a progressive vacancy resulting from weak public actions, as Mehrotra (2019) states.

As the socialist logic of a state-controlled economy is lost, the everyday space is turned into a landscape of DIY settlements and into suburbs sprawling on the edges of the state controlled urban boundary. These suburbs are characterized by tower blocks with eclectic

languages, squeezed into a minimal plot, where the land's highest profit is the rule. The layout of these cities is a bazaar with informal settlements, where economic and cultural challenges are expressed by the population. The projection within this framework is an exponential boom of urban areas with more than a million inhabitants (and perhaps more) in the upcoming years.<sup>9</sup>

The "Strategic Plan of Ministry of Urban Development for 2011-16" by the Ministry of Urban Development stipulates that to improve the cities' competitiveness and to provide essential facilities to the citizens, urgent actions are required. To tackle this, the former Planning Commission of India planned the creation of the first Indian 'smart' city model. In 2015, the Central Government of India launched the "Smart city mission" ([smartcities.gov.in](http://smartcities.gov.in)), an initiative that, through a phase-wise process, meant to select 100 cities and help financing its "smart" development, in partnership with other state and central programs, as the Swachh Bharat Mission or the National Heritage City Development and Augmentation Yojana.<sup>10</sup>

The loose framework of the initiative and definition of smart-city resulted in the integration of a large variety of projects throughout different cities without a common clear vision of "smart" urban development. According to Prasad et al. (2020) the projects funded were mainly: piece-meal placemaking projects, knowledge-based employment amenities, and data-driven urban management projects. Various cities selected in the initiative have historical cores, however the question of preservation and management of heritage is mostly not addressed.

These 'smart' cities have been promoted by the government as a prototype for pioneering development (Bholey 2016, 2394-3351), in which infrastructure improvements are identified. Similarly, digital ICT is seen as tools to deal with the lack of infrastructure and to promote sustainable development.<sup>11</sup>

### 3. THE AHMEDABAD' CASE

#### 3.1. The soul of paradox

More than in any other Indian city, the past and present can be clearly seen in Ahmedabad. The city was able to adapt itself to different historical periods, developing commercial and industrial skills, and traditional patterns of social organization, while keeping its own identity (Gillion 1968, 2). Several myths and beliefs are told about its foundation, examining the reasons why the city was established where it is today, on the eastern bank of the flowing Sabarmati River. Different enchanted visitors sing of its carved architecture, as its location was along the trade routes and it was a city of strategic importance, in the central heart of Gujarat, where temporary markets took place (Chokshi, Trivedi 1961, 1). Moreover, the proximity of water sources ensured prosperity and was the reason for its fortune. It remained the capital of Gujarat from the 15th Century until almost the present day, with only sporadic gaps.<sup>12</sup>

Thus, Ahmedabad's soul has its roots in the history of the geographical area in which the city is anchored, where different religions such as Buddhism, Jainism, Zoroastrianism<sup>13</sup> and Islamism predominated over different times and where centuries of domination by kings, mostly Hindus, anticipated the Islamic rule.

Ahmedabad embodies all these features in its experience and reflects them in its architecture, mosques, temples, mills, thanks to its million inhabitants who live there today. An in-depth multitude of tangible elements, attested by their landmarks and the monumental architecture reveals the series of ages within its historical layers.

Historically, Ahmedabad has always been in the middle of one of the most important trade routes in western India. As the industrial era dawned, it turned into the so-called "Manchester of India" by Spodeck (2011), due to its high growth in manufacturing and its social and political environment.

Still today, the city embodies two interlaced souls in a single physical body. In the oriental part, the walled city, deeply rooted in tradition, with its suburbs dotted with textile factories (mills) and chaals, marked by the working and industrial class. On the western bank of the Sabarmati, new neighborhoods of the Hindu middle class cluster with cultural institutions, universities, and masterpieces of modern architecture (Yagnik, Sheth 2016, 257-258). Moreover, Ahmedabad also has become well-known for Indian independence history, establishing it as the freedom movement's headquarters.

Today, Ahmedabad is the seventh largest metropolitan city in India and the largest in the state of Gujarat, with a population of almost eight million inhabitants.<sup>14</sup> A vibrant city animated by a hybrid soul in a symbiotic relationship between ancient urban fabric, heritage monuments, examples of remarkable architectural modernism and a strong tendency towards globalized development and transformation.

Currently, Ahmedabad is a prominent industrial and financial hub, contributing about 14 percent of all stock market investments in India and 60 percent of the state's total productivity (Bhatt 2003). Several scientific and educational institutions of national, regional, and global importance have been established in the city, attracting a wide range of highly qualified young professionals. Moreover, in 2016 Ahmedabad has been selected as one of the first 20 Smart Cities in India (<http://www.smartcities.gov.in/>) and the present size of the urban area is twelve times the size of the Walled City (AUDA 2021), with a steadily growing trend.

In common with other cities in recent years, Ahmedabad has faced increasing pressure in the pursuit of globalized development, highlighting the deep fragility of the Old City squeezed by the pressures of rapid urbanization. This condition has been creating a strong pressure upon the city and the planning of public spaces, increasing urban congestion and chaos, exacerbating social

inequalities, intensifying property erosion, and reducing public land in the future planning of the city. Over the past two decades, this rapidly changing condition has seen the exacerbation of conflicts (Jaffrelot 2003), echoing similar inequalities in various historic cities of the developing world, and at the same time an overwhelming social movement to save the priceless heritage in danger of destruction.<sup>15</sup> In contrast to the overall population growth, due to the rural-urban migration phenomenon, the Walled City has a depopulation trend, causing the abandonment of traditional Poles, as the inhabitants move into new houses in the city's modern districts.<sup>16</sup> The Walled City reveals heavily congested traffic, narrow streets, polluted air, lack of water provision, poor maintenance of traditional houses and a fragile society, which has been intensified by riots in the recent past, mainly due to religious conflicts,<sup>17</sup> which have caused further insecurity.

### 3.2. Permanence VS transformation

Over the six hundred years of its history, the city of Ahmedabad has alternated between glory phases, which have adorned the city with superb architecture and scenic beauty, and periods of decay, which have compromised the preservation of its architectural heritage and urban fabric.

Since the foundation in 1411 on the eastern bank of the Sabarmati by the Sultan Ahmed Shah, Ahmedabad remained a city enclosed within irregularly shaped semi-circular fortification walls that played an important role in the city's defense. Ahmedabad has passed through a chain of events and multiple histories, which have crossed over the walls of the city, shaping its identity and genius loci. Gillion (1968) identifies the tradition and corporate spirit of its inhabitants, a middle-class élite connected to the history of local financial, commercial, and manufacturing enterprises, and able to evolve to a modern industrialization. Ahmedabad's prosperity, compared to some other cities in India, was derived from trade and manufacturing, and not from the exploitation of the farmlands; its craftsmen were independent of governmental rule; and its merchants and financiers formed an upper class, a widely heritable plutocracy (Gillion 1968, 14). The richness of the city impressed western voyagers, and Ahmedabad became well-known thanks to the Western travels for the craftsmanship of its workmanship (Tavernier 1676; Thévenot, 1687; Campbell 1879; Foster 1905). However, as Gillion reports, its changing fortunes culminated also in neglected conditions: from the 17th century, with the occupation and domination of the Joint Rule (1738 -1753) (Campbell 1879, 255)

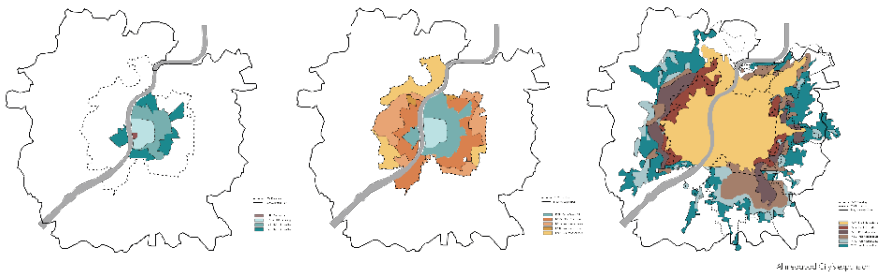


Figure 4. Ahmedabad' City expansion: Between 1411 foundation -1931 British Rule (left); 1931 British Rule - 1959 Post independence (middle); 1972- 2012 (right). © authors 2021



and the Maratha dynasty (1753-1780), when Forbes (1834, 187) reported how the entire territory was in ruins and affected by insecurity and gradual depopulation (Yagnik, Sheth 2016, 77). Also, the wall ramparts had cracked in many spots and there was no life except tigers, hyenas, and jackals in the inner part of the city. Forbes describes the 54-mile-long wall with irregular towers every fifty meters, twelve main gates and several gateways (Forbes 1813, 91; 117). From an area of thirty miles, the city had shrunk to be smaller than six miles and with a population of over 100,000 citizens (Forbes 1813, 150): most of the inland area was covered by ruins and dilapidated public buildings or used as fields and fruit orchards.<sup>18</sup> When Dunlop stepped into the city (December 1817) Ahmedabad was a melancholic relic. To elude the taxes, many of its inhabitants had gone outside the city walls and settled in the suburbs, and houses, mosques and tombs fell into disrepair. In addition, the broken ramparts exacerbated the insecurity of the puras, which were exposed to frequent night robberies, within the city and in the neighboring suburbs (Dunlop 1817).

After the British conquest in 1817, a new phase began for the city. In the central decades of the 19th Century, the British administration played a key role in the revitalization of the overall conditions: restoration of the urban landscape, and economic revival in rehabilitating a favorable environment for traders and entrepreneurs (Bobbio 2015, 27).

The economic recovery led to an overall revival that was reflected in redesigning the urban fabric. Thus emerged one of the most controversial issues concerning the demolition of the wall that had protected the city and played an important role in the history of Ahmedabad's municipal government. Although Geddes wrote the well-known "Note on Ahmedabad," all efforts failed in the end (Stephens 2020). With the beginning of the 20th century, the demolition of the walls led to a large metamorphosis in which the city rapidly

expanded in different directions (Michell et al. 1988, 157).

The history of Ahmedabad's walls is intertwined with the history of the city itself and suggests how the relationship with the walls defined its transformation through the ages, from a medieval structure to a modern city (Yagnik, Sheth 2016). It was not the story of two separate cities, nor was it the story of a new western city created alongside a traditional one. In 1960, when Gujarat emerged as a separate state, Ahmedabad regained its capital status after almost 200 years. A few years later, the new capital Gandhinagar was founded, thirty kilometers north on the Sabarmati River, but despite this, it is still Ahmedabad that emerges today.

#### **4. CRAVING FOR MODERNIZATION, IN BETWEEN INFORMALITY AND HERITAGE**

In line with central government policies, Gujarat and Ahmedabad have invested in several measures and projects to transform cities into megacities. Most Indian urban settlements face cultural and long-standing problems that impact planning processes. Not only are they confronted with competing uses due to market forces, social needs, and environmental concerns, but also by the lack of updated maps and cadastral records that are not available from municipal officials or in the public domain, creating a big impediment in the planning process (NITI Aayog 2015).

Throughout Ahmedabad's history, different dynamics have played the role of driving the city on the path of expansion and modernization. Multiple levels interacted, changing the city's economy, the network between socio-religious groups, culture, space, and territory. A significant part of the modern metropolis has sprung up on the land which was open fields until a century ago. The most significant territorial expansion consequences are found in the interrelationship between the spatial transformation and population growth, which



led millions of people from different origins, religions, and cultural traditions to settle in or near the city, sharing a narrow space in which coexistence had to be constantly negotiated. Today, the environment is faced with heavily congested traffic, polluted air, broken footpaths, etc. This rapid growth rate is thus likely to perpetuate further damage to the city's public spaces and, by consequence, putting immense pressure on upgrading the infrastructure (Patel 2015, 30-35).

In the process that led Ahmedabad to become a metropolis, the rural-urban dichotomy was a constant factor that affected not only the economic sphere but informed the way urban space was organized and the choices people made in how and where they lived in the city. This factor has consistently emerged in underlining the discourse in the debate between public authority and citizens (Bobbio 2015, 27).

Moreover, the manufacturing, which had been the backbone of the city for about a century, crashed and left ground for financial and real estate speculation, which led to an unorganized city growth. In the meantime, government programs and finances facilitated new economic opportunities (Desai 2012, 31-57), while NGOs have matched funding opportunities and social development programs in an entrepreneurship way. This kaleidoscope of situations dragged Ahmedabad away from its Gandhian heritage and propelled it towards national liberalization and urban globalization (Patel 2000).

In light of this, several projects started in the city with the purpose of beautifying and modernizing the city, aiming to create a new image for Ahmedabad, and to promote it to a large-scale panorama.

#### **4.1. Heritage practices: The City Wall renovation**

In 2001, a cooperation project was set up with the French government to revitalize the Walled City. In the Memorandum of Understanding, a

provisional list of heritage buildings within the perimeter of the wall was drawn up. The goals were to define the quantity and character of historical buildings, to contribute to mapping and knowledge, and to overview future rehabilitation projects. In recent years, various projects have been done under this agreement. These included the renovation of 75 per cent of the city walls and some Gates (UNESCO 2016). Since 2012, the AMC has undertaken extensive repairs of the fortresses on the western side of the city along the river, seen as an important step towards the preservation of the city's historical heritage (UNESCO 2016). At the beginning of the last decade, the high level of degradation was evident and the wall was crumbling in several spots due to lack of care: vegetation, encroachments, informal settlements, and modern houses anchored to the walls' facades. At the same time, the debate focused on how the informal settlements were considered a disturbance to the archaeological and historical significance of the walls, and therefore should be removed (Siddiqui 2015). About 10,000 inhabitants who lived in the informal settlements close to the wall were forcefully resettled in other areas of the city (Pessina 2019).

To the present day, restoration work has been carried out on the most degraded segments, at risk of collapse. Aiming to complete the restoration of the remaining wall perimeter in the following years, the interventions were carried out with dubious methodologies regarding the historical monument.<sup>19</sup>

Paradoxically, the portions of the wall that still meet the characteristics of integrity and authenticity are the ones not intervened by AMC's work, because of the presence of structures from the informal settlements.

According to a general discourse about the revalorisation of the city, the underlying issue is that the historical wall remains a secondary matter within the policy line, and therefore there is no thought on giving an identity to the remaining fragments of the historical wall as heritage elements (Fig. 5).



Figure 5. Encroachment along the city wall: new constructions along the historical walls (left), scarce consideration of historical pre-existences such as temples (middle), demolition of the walls for new infrastructures (right). It is noticeable how – paradoxically - the sense of authenticity is preserved where the walls have not (yet) been the “victims” of renovation work (left), while the historical patina has been totally lost with the incongruent rebuilding of the wall (middle and right). © authors 2019

#### 4.2. Approach to Intangible and tangible heritage in public space beautification: the Sabarmati riverfront project

Historically, the connection with the river has been characterized by a very active relationship, as evidenced by the accounts of past travelers from Mandelslo to Geddes, to Bresson's images. In 1917, the Sabarmati Riverfront Development Corporation Limited was created by the Ahmedabad Municipal Corporation to manage the redevelopment of the riverfront. A project was envisioned by many civic groups, citizens, political leaders, and professionals (Shah 2013), including the architect Bernard Kohn that in 1964 made a design proposal for the area around the river (Jha 2013), and the Riverfront Development Group that presented an alternative perspective in the 80s. The project was eventually commissioned to HCP, in an unclear process of selection (Shah 2013), and the pilot project started in 2004.

The project changed the existing landscape by narrowing down the riverbank, adding two roads and creating plots for public (mainly a promenade and gardens) and private development (Fig. 6). Since it is a non-perennial river, the water is maintained throughout the year through a connection to the Narmada canal. The narratives behind the legitimacy of

the Riverfront project were to create a space for the public and assure that the areas near the river were not flooded. Before the redevelopment, the riverbed was used for farming and cow grazing (in the dry seasons) and a variety of activities had always taken place along the banks: circus, dyeing clothes, markets, religious festivals, etc.

The top-down approach of the project displaced the slum dwellers that used the land near the riverbank over the years creating a substrate of dwellings and establishing an important informal economy with the river. They were resettled in housing in the periphery of the city, in polluted former industrial areas. The livelihoods of these communities were interlaced with the river and, due to the distance of the resettlement sites, became unsustainable. This phenomenon is common in the modus operandi of the Indian government. Renu Desai termed this approach as “infrastructural violence” (Desai 2018)

The project of the Sabarmati riverfront was also oblivious to the intangible values connected with the river, as well as the historical structures and urban fabric of the proximity. The new public spaces are at a higher level than the original one and, therefore, block the original secondary entrances to the walled city, forgetting the traditional interconnections between the city and the river. Moreover, no

attention is dedicated to the preservation of the original stone ashlar cladding, at the foot of the wall. In terms of materiality or spatial logics there is no dialogue between the walled city and the riverfront. The austere concrete walls disconnect the two sites, with two distinct identities.

The new design logic, that targets a global citizen, changed the existing relationship of users with the river, turning the river into a riverfront (Dempsey, 2020). The project was inattentive to the daily activities (religious and secular), that constituted an important intangible value related with identity, cultural values and traditions. The river became inaccessible and distanced, contradicting the traditional cultural relation with the water, seen, for example, in the ghats, a traditional form of riverbank that connects the city and the river through a series of steps.

### 4.3. Mobility planning: the BRTS and metro rail project

In March 2007, the Ahmedabad Municipal Corporation (AMC) endorsed a road widening project for Astodia Road through the Walled City, as part of a larger development plan. The goal was to speed up, thanks to the Bus Rapid Transit System (BRTS), the connection between Kalupur railway station and the west bank of the Sabarmati, which is currently the commercial district of the city.

The enlargement of the road, planned with a fast lane in the middle of the carriageway, had successfully processed, with the demolition of the pols, and planned to the Khajurivali Masjid and the Rani Sipri Ki Masjid. The mosque was built in 1514 and was already listed as ASI heritage monument. Organizations composed by various social groups opposed the destruction of the monument and the dispute



Figure 6. Sabarmati Riverfront Project: Near Ellisbridge (left), Khan Jahan's Masjid (middle), Sabarmati Ashram (right) © authors 2019

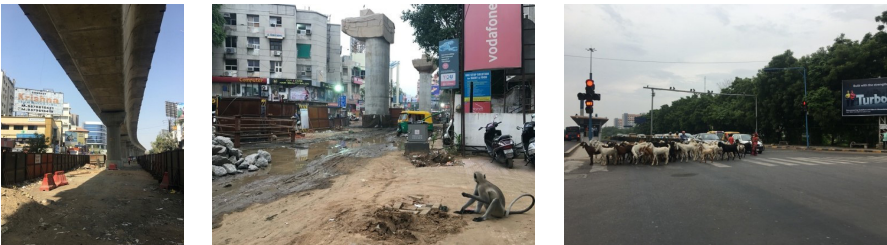


Figure 7. The new underground construction and its relationship to the surroundings (left and middle) and the road section with the BRTS. © authors 2019

was settled in court, saving the mosque and changing the stretch of road.<sup>20</sup> A similar dispute took place between the Gandhinagar - Ahmedabad Metrorail Express (MEGA) and the Archaeological Survey of India (ASI). The Metrorail was planned to pass through the Walled City, demolishing part of the city. This project, due to protests over the listing of the city as a UNESCO heritage site, was revised with a railway about 30 meters underground near Shahpur. The metro will become elevated at Apparel Park, immediately after crossing Kankaria Lake. The three stations in the Old City are located at Shahpur, at Gheekantha and near the Kalupur railway station. The excavation of this tunnel has been authorized by the Archaeological Survey of India (ASI) (Kaushik 2014) (Fig. 7).

#### 4.4. Heritage management: Rani and Raja no Hajiro and Jama Masjid Mosque

In 2016, EMBARQ India and WRI India in association with Ahmedabad Municipal Corporation produced a report to re-imagine Manel Chowk, a square in the historical core of Ahmedabad, near the 15th century structures of Rani and Raja no Hajiro and Jama Masjid. In this report Manek Chowk is identified as a good example of the condition of kinetic city: it is occupied by a daily market of jewelry, with the

extensions of shops towards the square, and during the night it is completely changed with many eateries that set their structures (kitchens, chairs, and tables) in the plaza every night.

Near this square is Rani no Hajiro, where we can see a case of heritage management that can be considered informal. The monument is recognized by the Archaeological Survey of India, and it is part of the walled city founded by Ahmed Shah in 1411. The building is part of a complex constituted by the Queens' Tomb (Rani no Hajiro) and the Kings tomb (Raja no Hajiro). The monument is surrounded by dwellings and vending structures, that make it less visible, and the open space absorbs different activities and occupations, as the stored vending structures of the night market of Manek Chowk.

The historical structure is managed by a family that lives here for decades and that claims to be the custodian of the space. They take the responsibility of the monument maintenance as well as the management of site visits. The Rani no Hajiro space is organized with a blurred division between visitable areas and more private zones, for resting or cooking. According to Cano and Shah (Cano and Shah 2021) there is no consensus regarding the responsibility of conservation and management of the monument, between the stakeholders on the site and the Municipal Corporation (Fig. 8).



Figure 8. Commercial encroachments and informal activities due to some festivals around Manek Chowk and Rani no Hajiro © authors 2019

## 5. VISION OF INFORMALITY AND MANAGEMENT OF HERITAGE SITES

Indian cities are sites of contradictions, of complex social and cultural relations that create ever changing spaces with multiple meanings. The vibrant life in India's urban space brings complexity to the definition of projects, moreover related with historical artifacts, because of the malleability and unpredictability use, and the blurred and pliant between public and private space.

Ahmedabad is seen as an opportunity to re-examine and rethink the regeneration rules in a complex context and a chance for a dialogue between innovative approaches and connections to the city's history patterns, which can create new paradigms.

With a constantly thoughtful approach that seeks to go beyond predetermined processes of regeneration and/or conservation. Indeed, it is necessary to be capable of embedding even those layers of significance that are hidden under the simplest outer shell. This is only possible if the city is read in all its complexity and questioning the common binaries of formal/informal, kinetic/static landscapes.

As we see in the cases stated in this paper, Indian cities such as Ahmedabad are simmering with social, political, economical and physical transformations, with different places coexisting in neighboring spaces. A dichotomy persists. On the one hand, there are the rapid changes imposed often by force, from the top down, in pursuit of a globalized modernity, such as those identified by Renu Desai (2018) or Navdeep Mathur (2012). On the other, there is the perpetuation of ancient cultural and religious rituals that echo in everyday life.

As we underline in the paper, we witness a tendency of contemporary government-led planning to not consider the social and physical complexities and apply top-down processes in sites that negotiate informal and formal characteristics as well as heritage considerations, which on the other hand

demand a critical and thoughtful evaluation of the city's transformation.

In view of developing future perspectives and intervention strategies it is important to think about frameworks for understanding urban domains. In light of this we identify some key points regarding the formal and informal environment, analyzing their cultural and architectural identities, and the vulnerability within the idea of a smart and globalized Ahmedabad.

A. Preserve the tangible as well the intangible heritage

While the concept of tangible heritage and its conservation is not spread throughout the communities, the intangible behaviors consist as important factors working informally (besides the institutional frameworks) in favor for the preservation of historical structures (Tognon, Paisana 2022).

The cultural and religious rituals of everyday life embody a strong relation to history and tradition. In spite of the fast development of economy and globalization bringing new paradigms of social relations and cultural associations, Indian culture is still very present in everyday actions, perpetuating, not just social and many time class based structures, but also traditional relations with the built environment. The manifestation of traditions in everyday life creates a respect for some heritage structures, if they are attached to a symbolic, religious or historical meaning that was perpetuated through memory and everyday practices.

As an example, the relation with water is historically and religiously a strong paradigm in the creation of peculiar riverbanks. As the architects affirmed, this would be a drive also in the definition of the Sabarmati riverfront project. Although it must be emphasized that the project realization reflects more a vision of using space according to Western models, rather than reflecting a link with the Indian tradition, in this specific case also breaking down the Ahmedabad community's link with the river.

B. Enhance the kinetic as a light answer for preserving the heritage

The understanding of kinetic city brings an important lens to the reading of the urban context, as many of the intangible qualities of malleable spaces and temporary appropriations are being replaced, in the process of urbanization, by spatial qualities that offer less flexibility and allow fewer uses. Urban design and planning must recognize the complexity of the relations between static and kinetic city along with aspects of informality, for a sustainable and inclusive urban development. In the case studies mentioned above (chapter 4.1 and 4.3) we highlight that, while many of the new public infrastructural projects in the city endanger intangible and tangible heritage, on the contrary the informal occupations, mainly because of their light and flexible nature, can preserve the conditions of historical structures. The learnings of the kinetic city and informal occupations are that space, in the Indian context, should be ambiguous and flexible to allow for different uses. The reversible and malleable character of the informal structures allow for a constant negotiation of space and a landscape in flux. In such context it is desirable to apply the same logics when thinking about heritage, with a framework that inserts the notion of temporality in the processes of the design.

Paradoxically where the informal occupation of the heritage precincts is still present, as near Khan Jahan's Masjid, the conservation of the sense of the place is not corrupted by modernity. It is therefore necessary to aim broadly at what Mehrotra calls 'the localization of global programs' where design should not be aligned to Western-derived strategies and processes of action top down, but to a localized model that fits the context. This means to involve organizations and stakeholders that have had a continuous presence on the territory, to be able to incorporate insights and opportunities acquired from different backgrounds.

C. Informal management for attending to identity

In heritage precincts, such as the city of Ahmedabad, the ancient traces are not only imprinted in the architecture and urban fabric, as testimony of the communities' history, but even more visible in the city's cultural and traditional legacy, which is expressed in rituals and festivals, including urban space as an integral part of the communities themselves. The place's bond with the people who still actively live in it, shaping an ever-evolving city form in which new elements are juxtaposed in the older fabric, adding a new phase to the centuries of past histories.

The light and flexible occupations of informality adjacent to heritage structures allows for its reversibility and helps preserve some material qualities of the heritage sites. Despite creating visual disconnections with the built forms, many times the informal structures end up protecting the heritage precincts from weather and natural degradation. Even if the anthropic presence could be considered as a boundary for the touristic contemplation, the informal structures have malleable construction materials and techniques, and they touch the heritage structures lightly and in a reversible way. A clear example of this is the Queen's Tomb, which is preserved and cared for by the community that lives around it and occupies its surrounding arcades with their handcrafts and during the setting up of special festivals.

Moreover, some of the everyday life rituals that are interlaced with tradition are becoming marginalized and perceived as informal. In the case of the Sabarmati riverfront, for example, bathing on the river is no longer allowed and it is seen as a nuisance. Therefore, the everyday practices that have the capacity to create awareness about heritage and preservation are being overturned by the new paradigm of urban planning and design.

D. Social equity as an inclusive participatory approach.

In addition to the need to respond to the preservation of historical values, remaining materials, techniques, historiographical traces of the context, and ineluctable drives towards



modernisation, objectives of social equity must be introduced. Many of the projects built today do not take in consideration the informal appropriations by the most vulnerable communities, such as street vendors or pavement dwellers. In the 2011 census, about 66.2% of the population lived in formally recognised dwellings, the remaining 33.8% in slums or chawls.<sup>21</sup> As of today, there are about 700 slums scattered in various parts of the city. As Ahmedabad is a highly industrialized and developed city, it is a magnet for many seasonal migrants from both rural Gujarat and other states (Shah 1981). Designing for such an environment requires a different way of thinking and working, in which interventions must be flexible, robust, and ambiguous enough to accommodate kinetic qualities. Only by including all in the process of design, with more participatory processes and strategies for social impact, a more nuanced and richer architecture can emerge.

It is important, therefore, to think about urban planning and design frameworks, as well as conservation practices that are truly inclusive and participatory. The complexity of the Indian context can be a challenge to create more participatory processes, but the stake of not engaging with the real, on ground problems is too high. As a base for a more democratic, sustainable, and equitable cities, planning participatory processes can be participatory from the reading of the place to the co-design of solutions, including communities that normally do not have a voice, such as slum dwellers or street vendors.

The equity principle can be pursued through the involvement of various groups of people, which is key to reinforcing heritage values, which are important for the definition of an identity principle for the purpose of sustainable development to create a transcalar and transdisciplinary identity-equity-value relationship.

The value acknowledgement includes first the public involvement by activating participatory decision-making meetings. Participatory

processes are fundamental to gain a plural comprehension of the value of heritage or to address contestations for those values.

The acknowledgement of a plural history can create conflicts between groups within the city. The design of these types of participatory processes must be built on the premise that people have equally valid contextual knowledge of the place and a history of conflict solving. These processes must also be examined to understand the relationships and associations that exist between people and the city's heritage.

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## NOTES

<sup>1</sup> In 2020, India had a total population of 1,380,004,385, with an average population age of 28.4 years. Approximately 35 per cent (483,098,640) lived in urban environments and the trend is expected to rise in the next few years. ([www.worldometers.info](http://www.worldometers.info)) Elaboration of data by United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects. <https://population.un.org/wpp/>, Accessed on 3rd April 2022.

<sup>2</sup> India's urban population is expected to grow by 814 million by 2050. Forecasts report that, by 2025, 46% of the total population in India will live in cities with more than 1 million people. By 2030, the number of cities with a population over 1 million will increase from 42 to 68. (McKinsey 2010). Four Indian cities (Ahmedabad, Bangalore, Chennai and Hyderabad),



currently with a population of 5 to 10 million, are expected to become megacities in the next few years, with a total of seven megacities expected in the country by 2030 (UN DESA 2012)

<sup>3</sup> For the designation and categorisation of the Indian cities see: <https://smartcities.gov.in>, Accessed on 12th April 2022

<sup>4</sup> Research on traditional culture in relation to the intangible aspects of heritage is relevant. Sahapedia is a non-profit organization registered in India under the Societies Registration Act of 1860 that carries out studies on the arts, cultures and heritage of India. 'Saha', Sanskrit meaning for 'together with', aims to explore India's various cultural landscapes. See <https://www.sahapedia.org>. On the city of Ahmedabad in particular, see Ashna Patel's articles on the relationship between craft traditions and intangible culture in Ahmedabad. Select in particular the article 'Uttarayan and the Built Environment: Perspectives from a World Heritage City'. <https://www.sahapedia.org/uttarayan-and-built-environment-perspectives-world-heritage-city>, Accessed on 1st April 2022.

<sup>5</sup> The 2011 Indian census defines slum as "a compact settlement of at least 20 households with a collection of poorly built tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions (Government of India 2008).

<sup>6</sup> <http://nasvinet.org/newsite/statistics-the-street-vendors-2/>, Accessed on 15th April 2022

<sup>7</sup> This refers to the debate over the construction of the Mumbai skyline and the disputes related to the erection of some of these skyscrapers with globalizing language. <https://www.newindianexpress.com/nation/2017/nov/28/mukesh-ambani-built-antilia-orphanage-land-illegally-sold-in-2005-maharashtra-state-board-of-wak-1712977.html>, Accessed on 11th April 2022

<sup>8</sup> One example is the former "model" Gurgaon city near New Delhi, whose economic growth began in the 1970s, when "Maruti Suzuki India" established a manufacturing factory, and became more prominent after General Electric settled its corporate outsourcing operations in the city, in collaboration with the real estate company DLF. Despite rapid economic and population growth, Gurgaon continues to struggle with socio-economic problems, such as high-income

inequality and high air pollution (Rajagopalan, Tabarrok 2014).

<sup>9</sup> According to the "India Urbanization Econometric Model", projections predict that more than 50 per cent of the states would be urbanized, including Tamil Nadu (67%), Gujarat (66%), Maharashtra (58%), Karnataka (57%) and Punjab (52 %). India is expected to have 68 cities with a population of more than 1 million by 2030, up from 42 today. (McKinsey Global Institute 2010)

<sup>10</sup> The smart city mission delineated six guiding principles: community at the core (1); more from less (2); cooperative and competitive federalism (3); integration, innovation, sustainability (4); technology as means, not goal (5); convergence (6). And defined smart-city as "liveable, sustainable and with a thriving economy offering multiple opportunities to its people to pursue their diverse interests" (<https://smartcities.gov.in>).

<sup>11</sup> The project aims to realize 100 smart cities across the country. The 'Smart Cities Mission' ([smartcities.gov.in](https://smartcities.gov.in)), launched in 2015, focuses on achieving economic growth, improving the life quality of citizens, local development, and new technology for creating smart solutions for citizens. The mission established \$7.5 billion in funding for the first five years (2015-2020) across 100 cities. The government planned to identify 20 smart cities in 2015, 40 in 2016 and another 40 in 2017. The city of Ahmedabad was included in the list on 28 January 2016, along with 32 others. <https://ahmedabadcity.gov.in/portal/smartcitymission.jsp#smartCitiesMissionDiv>, Accessed on 14th April 2022.

<sup>12</sup> Gujarat's current capital is Gandhinagar, on the banks of the Sabarmati River, about 23 km north of Ahmedabad, on the western side of the industrial corridor, 901 km from Delhi, the political capital of India, and 545 km from Mumbai, the financial capital. Gandhinagar, named as tribute to Gandhi, is a newly built city with the aim of expressing the new, post-independence Indian spirit and thus its planning was commissioned to two Indian urban planners, Prakash M. Apte and H. K. Mewada, pupils of Le Corbusier in Chandigarh. The city construction began in 1966, the government offices moved to Gandhinagar in 1970, and it grew as a commercial and cultural center of

Gujarat. Today, it has a population of 206,167 (Census 2011), 95% Hindu (Apte 2012).

<sup>13</sup> The Indian Zoroastrians, known in India as Parsis, had never been a dominant power, but their influence was considerable in many aspects. The Parsis left Persia in the 8th Century, with the spread of Islam, to go to India, in Gujarat, under the Hindu king Jadav Rana.

<sup>14</sup> <https://worldpopulationreview.com/world-cities/ahmedabad-population>, Accessed on 14th April 2022.

<sup>15</sup> In June 2015, the Gujarat High Court replied to a Public Interest Litigation (PIL) complaining about the demolition of almost 700 houses under the pretense of renovations and the transformation of over 400 for commercial use, damaging instead the structural integrity. The court imposed a duty on the AMC to take strict action to prevent the deterioration and unlawful loss of the city's rich domestic architecture. In addition, legal clashes between religious groups regarding rights to religious ceremonies are also added to the AMC's rules.

<sup>16</sup> According to a site survey at Mandvi ni pol. Monsoon semester 2019 MCR18, Urban regeneration Studio, Cept University. Tutors: Alisia Tognon, Ashna Patel, Jigna Desai. <https://portfolio.cept.ac.in/2019/M/fa/urban-regeneration-cr4001-monsoon-2019>, Accessed on 14th April 2022

<sup>17</sup> In 1969, Gujarat was the scene of a riot between Hindus and Muslims between September-October. Unofficial reports count 2,000 dead and more than 48,000 people who lost their belongings. (Gayer, Jaffrelot 2012, 53-60). In 2002, other violent acts called "Gujarat pogroms" escalated in February-March and recorded 2,000 deaths and 2,500 injuries (Jaffrelot 2003).

<sup>18</sup> During those desolate decades, many areas within the walls were converted to agriculture and animal breeding, while the ancient gardens and wells became neglected. This situation continued even during the first decades of British rule, and the land was left vacant for many years despite a partial re-colonisation of the city.

<sup>19</sup> The 'restoration' work involved the complete reconstruction of entire portions of the wall, using incongruent materials with the pre-existing ones. In spite of this, this technique was wrongly identified by the AMC officers as "anastylosis". Furthermore, the AMC did not prepare a unified project that would take

into account both the methodology of the intervention and the location of the various phases. There is no graphic documentation and no detailed specifications about the procedures to be followed, according to the specific conditions of the wall and the variable situations of the context.

<sup>20</sup> <https://thewire.in/politics/ahmedabad-heritage-city-bjp>, Accessed on 15th April 2022.

<sup>21</sup> <https://worldpopulationreview.com/world-cities/ahmedabad-population>, Accessed on 15th April 2022.

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