

**OLD DELHI AND ITS
ARCHITECTURAL HERITAGE:
ADAPTIVE REUSE OF
HAVELIS IN SHAHJAHANABAD.**

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OLD DELHI AND ITS ARCHITECTURAL HERITAGE: ADAPTIVE REUSE OF *HAVELIS* IN SHAHJAHANABAD

**Master Thesis in Architecture Con-
struction and City**

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To my father.

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INTRODUCTION

Before starting my Thesis, I had the desire to combine two beloved aspects of my life: India and architecture. Since I had already the chance to visit this country, and since 2012 I totally fell in love with this reality, I wanted to find a way to conclude my academic career there.

Through professor Minucciani I had the opportunity to get in touch with the School of Planning and Architecture – New Delhi, in particular professor Chaturvedi, who supervised my work during my staying in Delhi. The experience on site has been basic for my Thesis. I have spent almost three months at the Department of Architectural Conservation (SPA), where I met Anuradha Chaturvedi, my co-tutor and Head of the Department of Architectural Conservation. Since the beginning of my experience, she involved me to the work of the Design Innovation Centre (D.I.C.), with some young Architects and Associates.

Their main project is called “wEConserve”.

They are making an App for the residents of Old Delhi, where many traditional courtyard mansions – called *havelis* - are under the threat of decay, dilapidation and inappropriate use.

The aim is to give the inhabitants a common platform that can help them to understand the value of buildings where they live, to aware them about appropriate solutions for conservation and maintenance of their heritage.

The app would give them easy access to remedial measures and creating a network among all the stakeholders: from *havelis* owners and conservation professionals to heritage material markets.

So, I have started working with them and thanks to their help, I could begin to know and discover Old Delhi or, as it is historically known, Shahjahanabad, which would have been the place where I would have spent most of the time during my experience in India.

After the first ten days made of talks, readings, walks around Old Delhi, meetings with professor Chaturvedi and professor Minucciani, who came to Delhi with professor Garnero for two weeks, I felt I was getting used to habits and “rules” of Delhi, and I started my work, having in mind the first main steps of my thesis.

Objectives

To understand the method and approach for my research at the Department of Architectural Conservation, I will describe the structure and the main steps I have followed since the first days:

- To study Shahjahanabad history and its urban morphology.

• To discover Heritage meaning and Conservation issue in India, from the history to the current debates.

- To investigate *havelis* in a specific neighbourhood of the historic city, called Dharampura, as suggested by professor Chaturvedi.
- To choose a *haveli* as my case study and think how my intervention could help to revitalize the architectural heritage in Old Delhi.

Methodology

To make my own documentation, I followed different ways and approaches:

- Looking for books, articles, magazines, theses and researches in several libraries, bookstores and online libraries to study the History of Delhi, with a focus on Shahjahanabad.
- Meeting with Architects, professors and students who work on topics related to *Havelis*, Old Delhi, Architectural Heritage and Adaptive reuse;
- Visiting Organizations, Offices, Departments, etc who are working on Heritage issue in Delhi, to better understand what they are doing and how they work on this issue.

• Spending my time in Shahjahanabad, inside the *haveli* I chose, and in the neighbourhood, for survey, to collect photographic documentation and do interviews to local residents.

Procedure

Here the most important steps of my work during my staying in Delhi:

1. Readings on Delhi and Shahjahanabad.
2. First visits in Old Delhi to discover the urban reality.
3. Collecting documentation on Heritage and Conservation issue in Delhi and taking part of conferences, events and Heritage walks.
4. Choice of the area and the case study on the base of few parameters I defined:

I was looking for a vacant or partially abandoned *haveli* where the historic architectural elements could be still visible and distinguishable.

Moreover, I would have preferred an *haveli* with a large main courtyard, as they were traditionally in the past.

5. Survey of the *haveli*: drawings and condition assessment.
6. Understanding of the special value elements of the building.
7. Interviews to the local community living and/or working in the surroundings of my site, to interact with them and better know the neighbourhood reality.
8. Comparison between spatial volumes available and compatible use.
9. Understanding of users and city needs to plan the intervention and define the new use.

Limitations

- Lack of surveys of *havelis* in Old Delhi to compare.
- Few information about transformation of Dharampura mohalla. Most recent deep researches come from 1980-90s.
- Unavailability of the most recent and complete DWG map of Delhi.

• Language has often been an obstacle during my surveys or visits in the neighbourhood.

Since most of the residents in Old Delhi don't speak English – and I don't speak Hindi – I couldn't access to many *havelis* or be free to ask them questions.

DELHI: HISTORICAL BACKGROUND

The National Capital Territory of Delhi (NCT), known commonly as Delhi, defines both a city and one of the union territories of Northern India.

It covers an area of 1502,58 sq. km and has almost 20 million of inhabitants.

As the second-largest city of its country, Delhi is subdivided in 11 districts, which included plenty of neighbourhoods. The first nine districts (Central Delhi, North Delhi, South Delhi, East Delhi, North East Delhi, South West Delhi, New Delhi, North West Delhi, West Delhi) were formed in 1997, then in 2012 two new areas were added (South East Delhi and Shahdara).

The present Delhi is the result of the amalgamation of successive cities built at different ages.

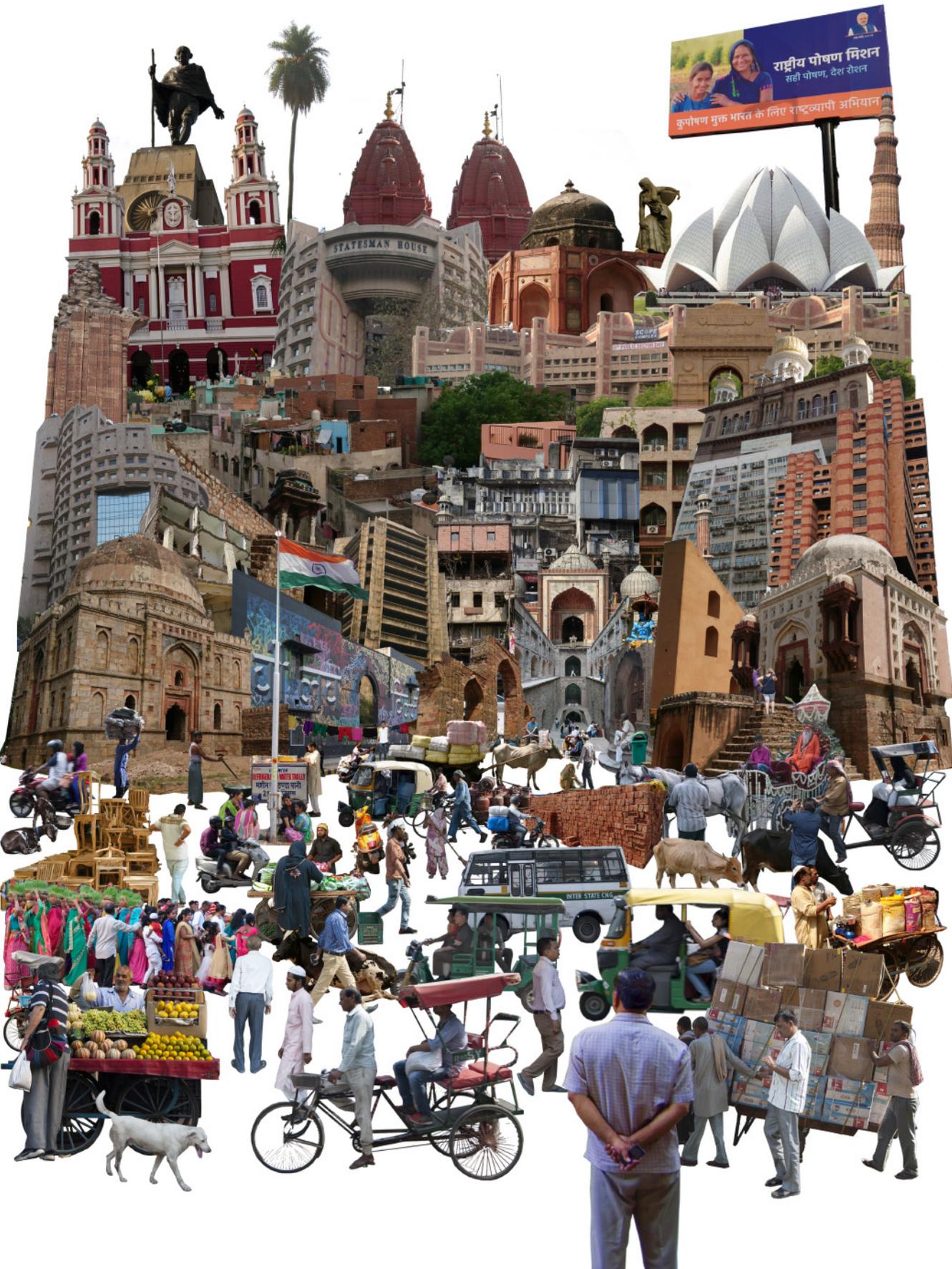
Indeed, the so-called “Delhi triangle” - a 150 sq. km area bounded by the Awaralli hills on the south and west and the river Yamuna on the east – was since ancient times the point of convergence of important trade routes of the Northern India. Its strategic position attracted several dynastic empires to build their capitals here.

Unfortunately, it is impossible to identify the first time the name “Delhi” appeared. An old tradition identifies Raja Dhilu or Dillu as the founder of Dhilli or Dilli, more or less at the beginning of the first millennium A.D.¹, but according to the most famous theory, the first city came up around the middle of the 8th century A.D. by the Tomar Rajputs and it was called Dilli or Dhilli or Dhillika.²

1. Aziz, *Origin and Growth*, p. 103, mentioned in Blake, *Shahjahanabad The Sovereign City*, p. 6.

2. Sharma, *Delhi*, p. 15, mentioned in Blake, *Shahjahanabad The Sovereign City*, p. 6.

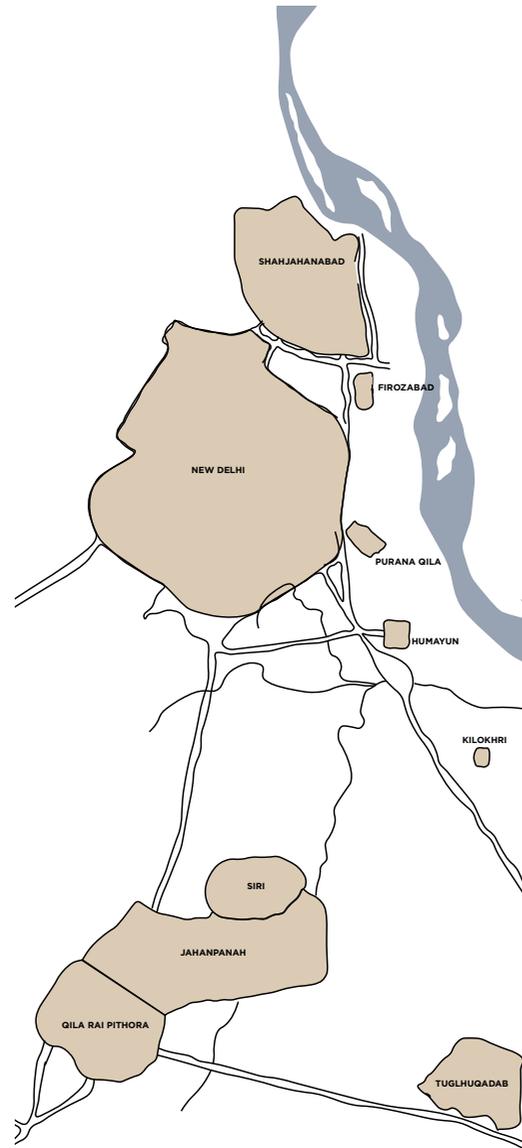
On the left: A collage showing the social and historical layers of Delhi.



Historians refer that at least eight capital cities have been settled by different rulers over the last millennium in the perimeter of the “Delhi triangle”.

Evidences of the eight cities of Delhi can still be found across the landscape of the city. Today we can easily distinguish the last two settlements: Shahjahanabad (1639) and New Delhi (1911). The first six cities were Lal Kot (10th Century), Siri (1303), Tughluqabad (1321), Jahanpanah (1327), Firozabad (1354), and Purana Qila (1533). Due to land encroachment, lack of water, migrations, epidemics and poor governance some of the old settlements could not survive until today, while some still have some remnants of historical ruins.

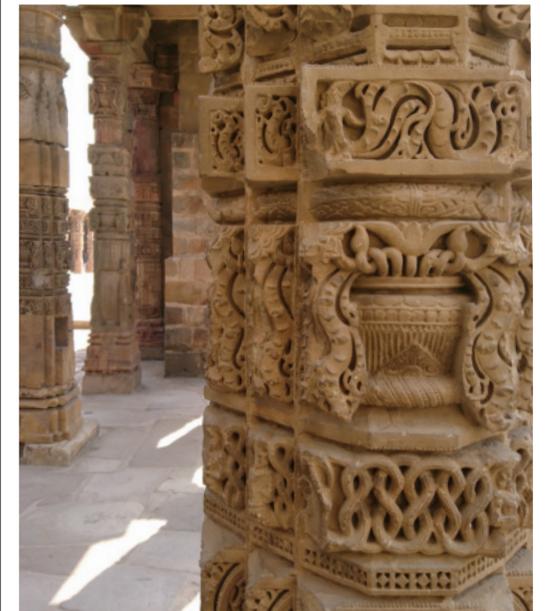
Layers of the different cities can be recognized thanks to several principles like construction systems, design, techniques, architectural elements and materials. Indeed, each dynasty was used to add variety to the previous typologies of plinths, domes, columns, brackets, *chhajjas*, etc.



Lal Kot

It is recognized as the first city of Delhi and was established by the Tomar dynasty in 1060 A.D. It means Red (*lal*) Fort (*kot*) and its founder, Anang Pal, chose the barren and empty hills south of the current New Delhi, a place isolated and hardly accessible, to establish its fortified city. It has been estimated that about 5-6 thousand of people lived here, covering an area of 3,40 sq. km. With the extension of the fortification to East, the city was later known as Qila Rai Pithora.

Within the historical walls we can still find traces of temples pillars and tanks. The famous Iron Pillar (a 7m high pillar from the IV century) might have also been brought to Delhi by Anang Pal and it is still standing today next to Qutb Minar, within the famous Mehrauli Archaeological Park.



Stone carving details in Lal Kot



Stone carving details in Lal Kot

Siri

Located 4,4 km north of Mehrauli, Siri is considered the second city, founded by the Sultan Alau'd-Din Khilji in 1303. Covering an area of 1,70 sq. km, it can be considered the first city built by Muslims. Its founder chose a circular shape, so the high city walls formed an oval and along them seven gates were erected. To provide water to Siri, a great tank, today known as Hauz Khas, was demanded by the Sultan.

No remains of buildings and structures can be found today, except some ruins of the city walls. It is interesting to notice that the water tank still exists, and it is surrounded by the so-called Hauz Khas Village, an affluent neighbourhood of Delhi, with restaurants, café, bars and pubs. The picture on the right shows the view from the ruins. (Photo by author)

Tughluqabad

It is known as the third city of Delhi, Tughluqabad was built over a period of only two years by Ghiyasuddin Tughlak, in 1320s. Placed on the rocky south ridge of the “Delhi triangle” and it had huge bastions and walls. There were inner walls, that contained the Palace, and outer walls, the Citadel, with residential and commercial neighbourhoods. It is interesting to know that due to water shortage, the city has never been totally occupied and then abandoned after five years from its foundation.

Today, due to an uncontrolled development of the built area, all the existing ruins have been demolished or buried under vegetation.

Jahanpanah

Since the main aim of the fourth city was to join the fortification of the older cities and guarantee protection to the population, the city was called *Jahanpanah*, that means “shelter of the World”. It had thirteen gates, made by the link of Lal Kot – the main urban zone – and Siri – the military area. Ghiyasuddin’s son, Muhammad Tughlak, founded in 1326-27.

Today there is very little left of the original walls and gates, while some ruins of the later intervention can still be found, and its surroundings are commonly known as *Chirag Delhi*.

Firozabad

Because the Mongol threat was not a risk anymore, the so-defined fifth city of Delhi was founded on the banks of the river Yamuna in the mid-XIV century. Firoz Shah Tughlaq chose to transfer his capital from Jahanpanah and to build a new city in the 1354, located about 13 km north of Qutb Minar. It was a large enclosure of high walls, containing palaces, gardens, mosques, pillared halls, *baoli*, some of them still in good condition. Two famous structures are the pyramid supporting the Asokan Pillar, an 8-meter-high 27 ton glittering golden monolith, and the Jami-Masjid, one of the biggest mosques in the Tughlaq times.

Today the old city is known as Kotla Firoz Shah, and it is situated close to Delhi Gate, the south-east corner of Shahjahanabad. The ground near to this site is used for international cricket teams and sports events.



View on the water tank at Hauz Khas



Ruins and heritage in Jahanpanah



Ancient mosque in Kotla Firoz Shah



Purana Qila

Purana Qila is considered the sixth city of Delhi and means Old (*purana*) Fort (*qila* or *kila*). The construction of the fort started in 1533 on the banks of Yamuna river by the second Mughal Emperor, Humayun. It is about 10 km away from the Qutb Minar and was originally called *Dinapanah*, that means “protection of the Faith”. The city stands on the site that is believed to be Indraprastha, the legendary capital of the Pandavas, heroes of the Mahabharata (IV-III centuries B.C.). It was erected within only ten months but then, Sher Shah Suri demolished the city and on the same place raised his citadel. Sher Shah completed his palace in 1545. It had three main gates which were double storied, built with red sandstone and surmounted by *chhatris*, dome-shaped pavilions.

The site was abandoned when Shahjahanabad was founded. Eventually it was occupied by a rural population, and in the early XX century the Archaeological Survey of India acquired and started to conserve the area. Today we can still see its huge walls, with monumental gates. Inside there is a small Museum, a mosque, a *baoli* and other interesting structures.

The picture shows the delicate stone carvings on the facade of the *masjid*. It is a scintillating combination of all the previous styles.



Shahjahanabad

Shahjahanabad is known as the seventh city of Delhi. The Mughal emperor Shah Jahan laid the foundation of this city in 1639.

When it was being inhabited, a wall made of mud was erected along the perimeter, covering an area of 5,90 sq. km, and eleven monumental gateways were built to allow people and goods to go inside the Walled City.

It was designed to have palaces, *havelis*, mosques, *bazaars* (markets) and beautiful gardens. Among all the new constructions, the Lal-Qila (or Red Fort) can be considered as the most prominent: it is situated on the right bank of the river Yamuna and it was the residence and the temporal seat of the power of the emperor.

Although Shahjahanabad became the “Old City” of Delhi when the British came, and the attention was shifted to new settlements further south-west, today it remains a vibrant historic city. The Red Fort, the main street called Chandni Chowk and Jama Masjid are still some of the most important architectural landmarks of Delhi.

On the left we can see the view on the Jama Masjid from the street.

New Delhi

The eighth city of Delhi was built by the British Raj, shifting their capital from Calcutta, or Kolkata, in 1911. It was placed on the south of Shahjahanabad, covering an area of around 12 sq. km. It was designed and built as a “garden city” by the architect Edwin Lutyens, with a geometric urban grid and boulevards, inspired by the plan of Baron Haussmann for Paris and L’Enfant’s for Washington.

Planned for a population of 70.000, the total population of New Delhi now exceeds 171.806.³

Indeed, the city exploded in all directions beyond the Lutyens’ boundaries with an exuberance that we could define “typically Indian”.

3. Demographic data from Census, 2001.



India Gate

SHAHJAHANABAD: THE WALLED CITY

Despite more than three-and-a-half centuries old, Shahjahanabad, which means “City of Shah Jahn” is still a vivacious city.

Established between 1639 and 1649, it kept its major streets and landmarks mostly intact. The history of this city starts in 1629 at Agra, a city about 200 km from Delhi. Here, Shah Jahan ascended the throne and from the beginning of his rule, he showed a certain interest at architecture. He commissioned plenty of buildings, spending time to examine the design of new constructions and personally supervising the execution of every project. Since he wanted to distinguish himself from all his predecessors, and the city of Agra didn't satisfy his ambitions, he chose to found his own capital. Indeed, Agra was not more suitable due to his land features, and the consequent erosion of the river banks. On the other hand, it became too crowded, with no wide roads, and the main gate was too small to allow people to access

the city, especially during processions and assemblies. So, the *mubandis* (architect-planners) were asked to find a new site in North India. Shifting to Lahore was considered for a while, but then rejected. Like Agra, it was too small and crowded. Soon after, a spot in the “Delhi triangle”, on the bank of the river Yamuna, was selected. This area had a long history as capital of empires, as I have mention above. Another aspect of this site was the spiritual importance: indeed, it was considered a holy place because it accommodated the resting places of many famous Sufi saints.

For a further understanding of the planning features of Shahjahanabad we need to refer to the ancient Mircea Eliade and to his “symbolism of the centre”. Moreover, we must go through the idea of a capital city as the centre of the world, or *axis mundi*. Several premodern civilizations cities were indeed considered to be located at the centre of the world: it was the place where the divine sphere communicated with priests and rulers.⁴ All these ideas influenced Hindu traditions too. Indeed, the capital cities of ancient India were considered sacred because they were the place of the Brahmic rituals, and the king was used to live there.

On the left: Extract from a map of Old Delhi, 1846. (British Library)

4. Eliade, *Myth of the Eternal Returns*, mentioned in Blake, *Shahjahanabad The Sovereign City*, p. 29.

During the ages these thoughts survived until the Mughals, and plenty of Hindu architects and builders working for Shah Jahan knew and believed them. Evidence of rites during the process of construction demonstrate the belief that capital cities were sacred places. Indeed, in 1639 the emperor's astrologers chose the day, hour and second to place the cornerstone, and they defined auspicious times for ceremonies and celebrations.⁵

Another important aspect to notice is that Shahjahanabad planning has been influenced by both Hindu and Islamic traditions.

From one hand, we can recognize the rules of Hindu architecture – called *vastu satras* – in the design of the street plan. These ancient treatises were the guidelines to build any kind of construction and to divide settlements. One of these texts – the *Manasara* – dating around 500 A.D. shows a design of a site fronting a river with a semi-elliptical shape, called *karmuka*, or bow.⁶ This drawing could probably have influenced Shah Jahan's architects.

On the other hand, some Islamic ideas came to India from Iran, through the Persian arts, like painting, music, dance and poetry thanks to the previous Mughal emperors. Moreover, during the ages, not only soldiers and administrators moved to India, but architects, musicians, poets and painter too. Not by chance,

the main builder of Shah Jahan was Ustad Hamid, a Persian architect who built the Red Fort in Shahjahanabad and the famous Taj Mahal at Agra.

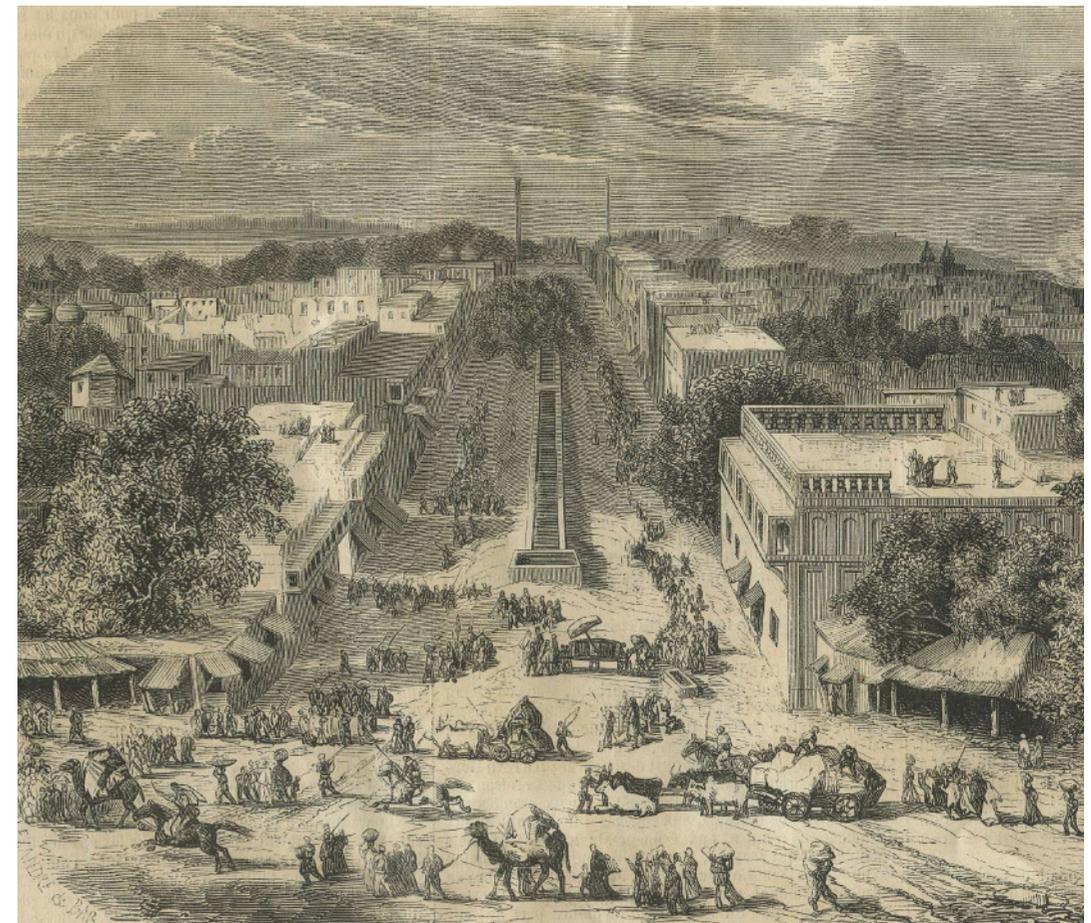
To go deeper to the cosmological context, where the Iranian architects worked during Shah Jahan time, we should read the *Rasail* (Epistles) of the *Ikhwan al-Safa* (Brothers of Purity). These are a collection of letters dating about X-XI centuries, where we can find the main principle of the Islamic architecture: the relationship between the Universe and man. It declares that, like both cosmos and human beings were defined, so also was the city. Stephen P. Blake wrote: "Man lives best, it was thought, in a physical environment analogous to him". It means that the city plan was conceived as an emulation of the human body. This theory can be easily recognized in the Shahjahanabad plan: indeed, the Emperor palace, the Red Fort – as the head - was the starting point of Chandni Chowk, the main bazaar - the backbone. Then the main mosque called Jama Masjid – the heart - was the place around the city grew, until it ends at the gates. Smaller streets – the ribs – connected all the buildings, like schools, shops, teahouses, bakeries, *sarais*, etc - the vital organs. Walls – the skin – were erected to protect properly the city.⁷

Besides the eight wide city entries have a symbolic meaning: the Walled City indicates the cosmos and the gates are the four cardinal direction plus four gates of heaven.⁸ The mixed influence we can recognise on the plan shows the character of the city:

Shahjahanabad, indeed, was a city ruled by Muslims but occupied by mostly Hindu people, and at the same time it was the capital of a Muslim empire in a strongly Hindu subcontinent.

Below we can see an aerial view of Chandni Chowk, when there was the central water canal in the centre of the street. (*Chandnee Chauk, principale rue de Delhi*, from *L'Illustration*, 1867)

- 5. Waris, *Padshah Namah*, mentioned in Blake, *Shahjahanabad The Sovereign City*, p. 30.
- 6. *ibid*
- 7. Ardalan and Bakhtiar, *The sense of unity*, mentioned in Blake, *Shahjahanabad The Sovereign City*, p. 35.
- 8. Blake, *Shahjahanabad The Sovereign Cit.*, p. 35.



Urban forms and pattern

Shahjahanabad was not founded on a completely free land and some neighbourhoods had already existed before Shah Jahan. So, it absorbed part of the previous buildings and road alignments and the population size was not predetermined before. It means that the Walled City could grow organically.

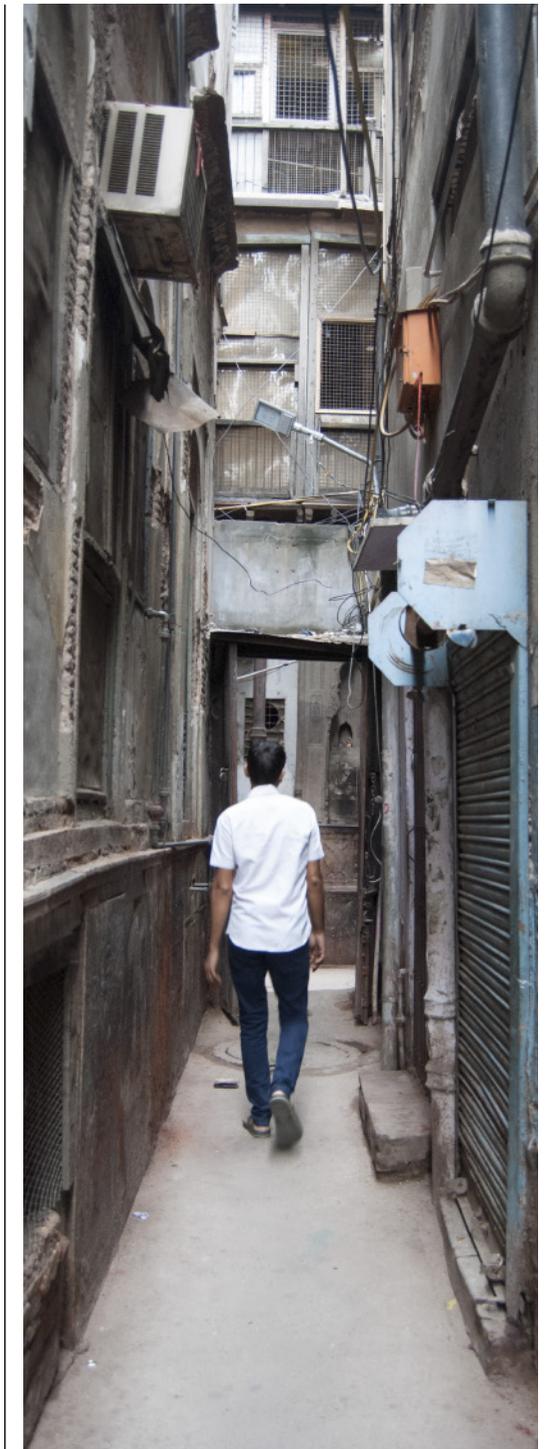


It is estimated that it accommodated approximately a population of 60.000 at the time of Aurangzeb – Shah Jahan’s successor.⁹

Five main arterials linking several gates and crossing different areas of the Walled City were made as the “spines” of major activities, mostly commercial.

The smaller and less important streets were made mainly to access to the residential areas.

In most cases, these roads were narrow and less crowded, to guarantee both privacy and security. This network made it possible the creation of social areas, called *mohallas* (neighbourhoods) and *katras* (commercial enclaves), where many cultural and socio-economic activities could take place. It is important to notice that this system of streets was designed for a pedestrian city, used by animal driven vehicles and people, as the picture shows. On the left we can see a graphic of the typical dense urban pattern of Old Delhi.



The major arterials specialised in different typologies of commercial activities, giving each area a distinct characteristic, as we can still see today.

It is interesting to notice that all the streets, except for the straight Chandni Chowk, twist and turn providing a sequence of fascinating views and experiences. The junction or crossing of two streets formed automatically a *chowk*.

We could say that streets were used as a corridor for movement but at the same time as an extension of activity spaces.

The picture shows a typical outdoor kitchen we can find along the narrow streets of Old Delhi. *Chai*, the flavoured india tea, is served here all day.



Since we cannot find a real hierarchy of elements in the urban morphology of the city, we could say that the spontaneous growth of the city in the centuries reflects the assimilative tendencies of Indian society, characterised by many religions, professional sectors, ethnic communities.

Within the Walled City everyone can find space without being privileged over the others.

Moreover, I believe it is interesting to notice how this city displays a synthesis of styles, that is the product of an exchange of cultures over the centuries. For instance, the lotus and kalash, two important spiritual elements for Hindus, became part of Muslims mosques and tombs, or Hindu and Jain temples in Shahjahanabad started to use the Mughal cusped-arch and domes. So, architecture of the Walled City cannot be considered neither Hindu or Muslim, but a fusion of both, generally defined as “Indo-Islamic”.

With the growing of Shahjahanabad, depending on socio-political aspects, and not dictated by imperial will, there was a tendency on many communities to live in the same neighbourhood. For example, plenty of artisans chose to live and work close to others of the same trade.

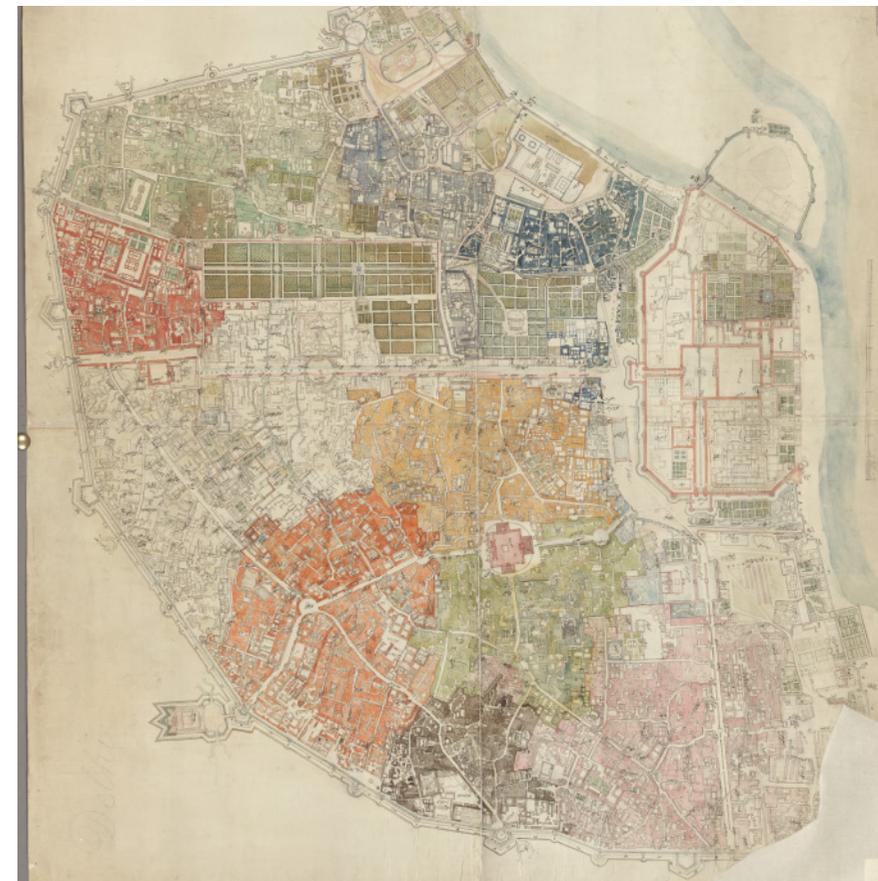
Today distinctive names given to these social areas identify them in the urban reality.

Some names of these *mohallas* derive from the specific *katras* or *kuchas* (lanes), like *Churivalan*, that means “bangle makers” or *Chipimara*, to indicate the “fabric printers”. One of the neighbourhoods that kept its occupational structure due to an imperial choice was *Dariba*, where Jain merchants lived: the Jain community has always been famous because they were the bankers of empires for ages. To keep them close to him, Shah Jahn, when he established his new capital, chose to build the main Jain temple in front of his palace. Today it is known as Digambar Jain Lal Mandir.

It is important to underline that *mohallas* subdivision is not so strictly and there are no physical boundaries that separate them. Indeed, analysing several historical and current maps, I realised that they showed different versions of demarcated *mohallas*. For example, the largest number of *mohallas* recognised is 44, in the Zafar Hasan’s list (1916). According to the historian Swapna Liddle, different studies identify a total of respectively 26, 19, 16 and 9 *mohallas*. Such different numbers are due to different criteria used to divide the Walled City: from occupational sectors to ethnic identities, or on the basis of streets and important landmarks.

So, if we consider the context of Shahjahanabad during the middle of the XIX century, we could say that the definition of “mohalla” should be seen as representing neighbourhood in a very loose sense of the term.

The most recent official plan was made in 1999 by the Delhi Development Authority who prepared a Zonal Development Plan for the city of Delhi. This plan recognizes the administrative boundaries, called “sub-zones”, and not *mohallas* anymore. In particular, in the Walled City there are the 15 sub-zones of Zone A and one sub-zone of Zone C.



On the map some *mohallas* of the second half of 1800 are marked. *Map of Old Delhi, 1846.* (British Library)

Landmarks

The Palace Complex

Known as the Red Fort (or *Lal Qila*), it is located at the junction of the main axes of the Walled City, running north-south and east-west. Originally it was planned on the banks of the Yamuna, while today the river is 300 meters far away.

The Fort has an irregular octagonal shape covering an area of 0,50 sq. km, with its twenty-one bastions and four gates: Lahori Gate, Delhi Gate, Salimgarh Gate and Khizr Gate. Walls are 18-22 meters high and 9-14 meters wide. They are characterised by the red colour of the sandstone used. Within the walls, several palaces and structures were built, like the *Moti Masjid* (Pearl Mosque), the Diwan-i-am, the main hall for public audiences, and then the *Chatta Chowk*, the main public market, and different pavilions.

Since 2007 it has been recognised as an UNESCO World Heritage Site, but unfortunately today we can see only the 20% of the original Red Fort Complex because of the British transformation who made here their army camp.



View on the Red Fort from Chandni Chowk





Chandni Chowk

The most famous *chowk* of the city is known as Chandni Chowk, one of the main commercial streets, with Faiz Bazar. Chandni Chowk was designed as a wide boulevard with a canal running through the centre. It runs westwards from the Red Fort to the Fatehpuri Majid, 1,5 km away, before continuing along the north side of the mosque for 500 meters more. The street has always been flanked by shops on both sides, selling any kind of goods, from home utensils to electronics, from books to clothes, etc.

Here we can still find many iconic buildings, mostly religious and institutional, built from the mid-XVII century to the early XX century, like the Digambar Jain Lal Mandir, already mentioned above, the Gurudwara Sis Ganj, a religious place for Sikh people, the State Bank of India, realized in the early 20th century, and the Central Baptist Church, built in 1858, one of the earliest churches in Delhi.

The name of the street come from the main square, once called *Chandni Chowk*, where it was erected in 1864 the Town Hall, the seat of the Municipal Corporation of Delhi during the British rule, until 2009 when offices shifted to Central Delhi. Today it is an empty building, still looking for a new function.

Everyday a huge amount of goods and products go through Chandni Chowk, as shown in the picture on the left, to reach different parts of the city.

Jama Masjid

Located south-west of the Red Fort, it was built during 1650s on a hill to lead on the Walled City. The visual dominance of Jama Masjid transcended the scale of time and no building in Shahjahanabad, including other religious buildings erected later, ever challenged the mosque in scale or height.

It is the most important mosque of the city, with three gates facing north, east and south, accessed by a series of steps. The façade of the mosque is a wonderful eleven-arched front and the red sandstone arches are supported on white marble columns. At either side of the façade, two minarets in red sandstone and white marble rise. The *sehan* (the main courtyard of the mosque) has a large marble tank in the centre meant for ablutions, called *hanq*.

We can notice that the eastern gate of the Jama Masjid is more decorated than the others because it was the gate through which the emperor entered the mosque.

In addition of being an important place of worship, Jama Masjid is a major landmark in physical, cultural, culinary and commercial terms. Indeed, it is located at the junction of important streets and around the mosque we can find shops, markets, hotels and visitor amenities as parking.

It is still the largest mosque in India and it can hold up to 25.000 people.



Changes and transformations

Morphology changes started from 1857, when the British Raj destroyed several buildings inside the Red Fort Complex and demolished wide residential areas, some peripheral walls and introduced the railway, increasing the number of industries and commercial trades. Here we can see the daily congestion of Old Delhi.

The introduction of the railway system can be considered one of the cause of the population growth started during the middle of the XIX century.

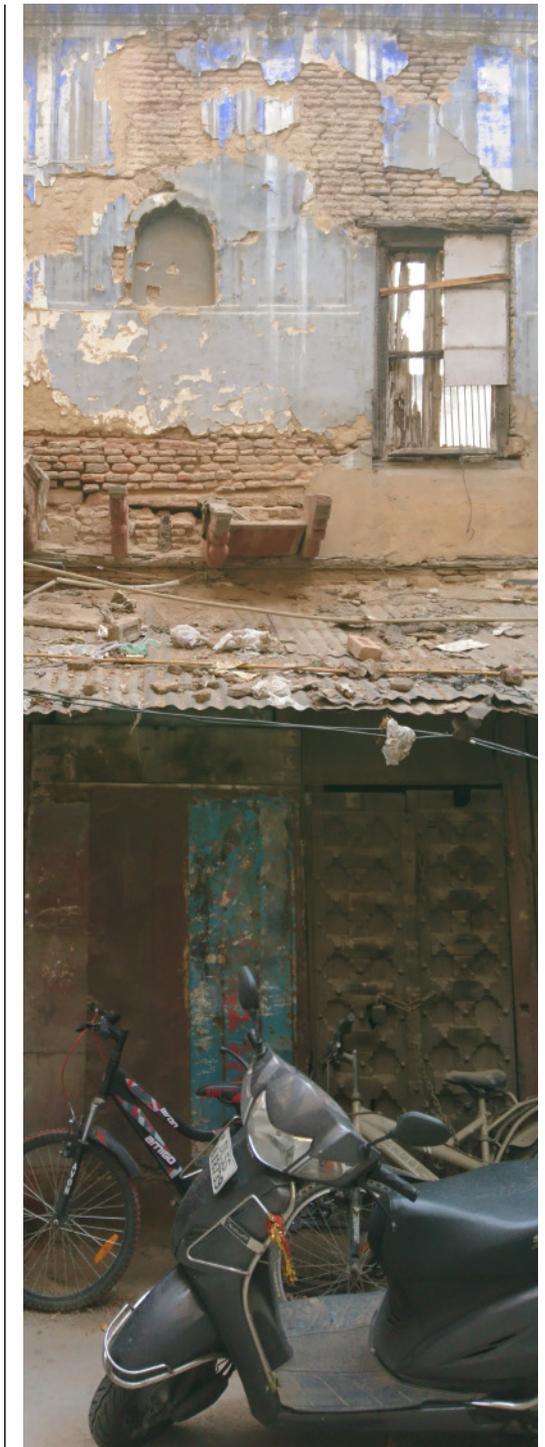


A wide transformation from residential to commercial areas, within the restricted dimensions of the Walled City, changed the character of Shahjahanabad, then known as Old Delhi when the British came.

So courtyard of *havelis* started to be used as storages or sometimes were covered or totally transformed. Soon after commercial shops extended their activities on the street frontages, with their stuff and advertisements, often without taking care of the overhead delicate architectural elements, as brackets or arches.

Since many buildings were dilapidated and the quiet atmosphere of several mohallas completely changed, many residents chose to move out from Old Delhi.

Current low rents are surely a reason why many owners chose to undertake any repairs of their buildings. Consequently, the range of maintenance is very poor and collapse of buildings or portions of them is quite common.



Consequences of this huge transformation regards also transports and streets system. Indeed, as already mentioned, the urban pattern of roads was planned for pedestrians. Nowadays, the same network is used for slow and high-speed vehicles together, from pedestrians and bicycles to scooters, motorbikes, *rickshaws*, cars, and buses. Congestion, parking and traffic became urgent issues to deal with daily life in Old Delhi. For instance, it important to consider that Chandni Chowk, the main commercial street, has no parking for delivery or loading. Moreover, noise pollution has significantly increased, especially in the narrow streets crossed by scooters and motorbikes.

Another element of change regards the demography of the Walled City. At the time of Shah Jahan there were 250-300.000 persons, within the walls and 36 *mohallas*. In the nearby suburbs soldiers, merchants, servants was used to live. They were about 100-150.000 persons.⁹

Due to migration and famines during the second half of the XIX century, it touched the lowest amount of people, around 100.000.

The maximum peak of more than 400.000 persons was reached in 1961.

The last census of 2011 estimated 158.000 inhabitants within Shahjahanabad.

Daily traffic around the streets of Shahjahanabad

“The conflicts and contradictions created need to be resolved urgently, otherwise the situation may reach a crisis point and pass beyond redemption”¹⁰

These are the words of Bijit Ghosh, who wrote an interesting report of Shahjahanabad in 1980. He described a reality that we can mostly recognize today when we walk



Example of *haveli* that requires urgently intervention

around Old Delhi. He added: “A comprehensive study of scale, proportions, details, as well as the architectural expression of existing buildings need to be done. This study should be a basis for any urban renewal or for rebuilding of any part of the Walled City.”

During the last forty years, and especially since the end of the XX century, many efforts have been done to start a debate on the reality of Old Delhi and its needs. Documents, books, articles, publications have been written about that, but only a few turned into a tangible action.

So, I would like to add my voice saying, once more, that Shahjahanabad needs must urgently be listened to.

A call to action must be started by the local communities in collaboration with professionals and NGOs to save the heritage of the historic city.

Time is already over.

9. G.E. von Grunebau, *Islam*, mentioned in Blake, *Shahjahanabad*, p. 356
10. Blake, *Shahjahanabad*, p. 67.

HAVELI: AN EXAMPLE OF BUILT HERITAGE

“If you look down from the air, or from flying a kite off a high roof, a North Indian town presents a cell-like appearance. Some cells are large, others small, and they are clustered together sometimes regularly, and sometimes with what seems complete randomness. Between run the arteries of the town, branching ever smaller to penetrate among the clusters.”

“These cells are the *haveli* courtyards, some spacious - perhaps with gardens - and grouped to form palatial mansions, others crammed into their plot so that their central space becomes little more than a light well and ventilation shaft.”¹¹

These words from Giles Tillotson can help to have a first idea of the reality of Shahjahanabad and its typical urban pattern.

11. Glynn, *The Haveli - a social history*, p.1.



Haveli is a word of uncertain origins, but probably coming from Persia. It is usually used to describe the North Indian version of inward-looking courtyard house.

They were the typical large houses of noblemen, the smaller version of the royal palaces during the Mughal era. On the other hand, the smallest were often homes, and probably offices too of important merchants.

This kind of mansion indicates not only a wealthy condition, but a specific way of life, characterised by social and climate issues too. It was a life made on traditions, many of which were born before the arrival of Mughals.

The most distinguishable element of *havelis* are certainly their elaborate gateways placed on the front.

Indeed, the main entrance had always been an important element of design, thanks to an arched opening - usually the foliated or cusped *churidar mehrab* - and door panels treated with decorations. As we can imagine, the degree of ornamentations and details depended on the richness of owners. The access was often characterised by a high plinth that was used to ensure privacy. The height of the plinth increased as the width of the access lane narrowed down.¹²

On either side we could find a platform, called *gokha*, where everyone, even strangers, can sit or rest their load.¹³

***Haveli* can be considered a cellular internal space, where the shape is given by the streets surrounding and the courtyards inside.**¹⁴

For ages, *havelis* were much bigger than today, and they could have a ramp to allow horses to ride into the central courtyard. To receive important guests, there was always an important room, like a columned hall opening on the main chowk or garden. Decoration and ornaments style of the *havelis* always depended on the architectural fashion of the surroundings, or social group, but also on the taste of the specific owner, that could not be the same of the local traditions.

12. Ghosh, *Shahjahanabad - Improvement living conditions*, p. 18.

13. Prasad, *The Havelis of North Indian cities*, p. 3.

14. Prasad, *The Havelis of North Indian cities*, p. 5.





Usually the outdoor spaces were more important than the internal ones, so courtyards were placed at the centre. The formal choice was not just a physical issue, but it had also symbolical and spiritual reasons. Moreover, it often had a well and a tree. (See the picture in the top right).

If we read ancient documentation regarding traditional buildings, we discover that every cell of the plan matrix was considered the home of a specific divinity; the creator, called *Brahma*, always occupied the main central cell where no construction was permitted.

It is interesting to notice that, during Shah Jahan times, more or less one quarter of the Walled City was used for internal open courtyards.

Due to the hot and dry climate, these spaces were planned in order to guarantee ventilation and cool internal temperatures. The dimension of the courtyards varied depending on the size of the buildings. Moreover, the open areas allowed children to play inside the mansions, without need of going on the streets. We must notice that in the past there was no need of open public spaces as it is now.

Courtyards planning was important to guarantee the privacy from outside, but at the same time it provided the necessary interior privacy between women and men. Architectural solutions to separate men and

women can still be recognizable today.¹⁵

If possible, women were kept to their own inner part of the house, called *zenana*. This could be a back courtyard, or an upper floor. High walls with *jalis* (screened windows) helped to maintain discretion, and hanging *chiks* - bamboo blinds - and curtains at the arches provided also shade or warmth.

***Havelis* were designed to alleviate the worst heat peaks of summers, with several kind of spaces, from external courtyards and terraces to verandas and inner rooms.**

Through breeze was stimulated: that's why traditionally arches and openings did not have doors. Only store-rooms had doors and sometimes they were put at the top of the stairs, for security reasons.

15. The segregation of women is due to the *purdah* system. From the Persian word *parda*, it means "veil" or "curtain", and indicates literally and metaphorically the separation of women and men. After Muslim conquests, the *purdah* system started to be common in India – both in imitation of the Muslim rules, and for security reasons during invasions.



Kazanchi Haveli: the courtyard still has the central tree and tank.



A typical courtyard with arches and small *jalis* on the top. Here the decay is evident.

Every space could have many uses at different times of the day and depending on the season.

For example, the family members could sleep on the roof during summers, or in rooms in winter, or furthermore have a rest in the basement during hot days, and in the courtyard in cold months. Thus, we can't recognize a specific room we could call "bedroom". Plenty of other functions followed this "scheme", and courtyards were the most multifunctional areas where almost all activities could take place. Today we can still notice this interesting attitude, hanging around the lanes of Old Delhi, as the picture below shows.

We can find a variety of solutions rounding the courtyard. The first large room we see entering the *chowk* is called *dalaan* or *mahal*: it is characterised by three arches separated by columns. The side rooms, called in Urdu *sebenchi*, are smaller and usually used as kitchens, stores and bathrooms.

If the *haveli* had more than one floor, traditionally the lower floor was used for business and work, where men stayed. Then, on the first floor, a balcony or terrace run around the courtyard, giving to the family rooms, which were usually set back. These inner parts were used for several activities: from sleeping to sitting or working.



Outdoor bedroom.



When you walk around Old Delhi and you look up, you can find colorful *jharokhas*.

If the ground floor was used by men for business, kitchens were placed upstairs. On the last floor, roof terraces were commonly used for outdoor sleeping and for recreational activities, as kite flying, drying food and clothes and pigeon baiting. Some smaller courtyards might have been covered by an iron grill.

Another important architectural element is called *jharokha*.

It indicates the projected bay windows, supported by brackets, placed on upper stories, characterised by arches and thin columns. They were considered devices to be between the street and the house. That's why they were often filled with *jalis*, to look out without being seen, providing privacy for those sitting behind – usually ladies – and to catch any possible breeze. *Jharokhas* were the best place for aristocratic women to watch ceremonies.

As *dalaans* and *jharokhas* show, the baluster columns were usually combined with a **nine-cusped arch**, another distinguishable feature of the Shah Jahan time. Indeed, this kind of multi-cusped arch had no precedent in the Indo-Islamic architecture and it is commonly known as the Shahjahani arch".



View on the rooftops of Old Delhi. On the background we can recognise the Jama Masjid.

The most common materials to build the walls of *havelis* were the *lakhori* bricks, lime and stucco.

This typology of bricks started to be widespread during Shah Jahan and is quite flat. Dimensions are from 12x6x3 cm to 10x17x5 cm. Then, this typology of brick has been replaced by the “modern” bricks (10x22x7,5 cm), brought by the English during the mid-late XIX century. See the picture to see the differences.

Lime, or *choona*, realization process is quite interesting: used for laying bricks, plastering and grouting, it is made with *bajri*, sand, and *surkhi*, brick dust. This is the basis for mortar, or *masala*. To obtain lime, all these ingredients are grounded together, usually for days, using a mill powered by a buffalo, or a bullock. Traditionally all the additives were organic: eggs, cane sugar, lentils and a fibrous plant called san. Internal walls were typically 40 cm thick, while the external were about 50-90 cm.

Shahjahanabad *havelis*, as many other Northern cities, used red sandstone for columns, brackets and slabs.

They were usually prefabricated accessories.

Roofs and floors were made of several layers and materials: the lowest were timber beams (about 10x10 cm) spaced at about 40 cm, then stone slabs, followed by a compacted topping of earth, a combination of lime, brick dust, sand and some additives.

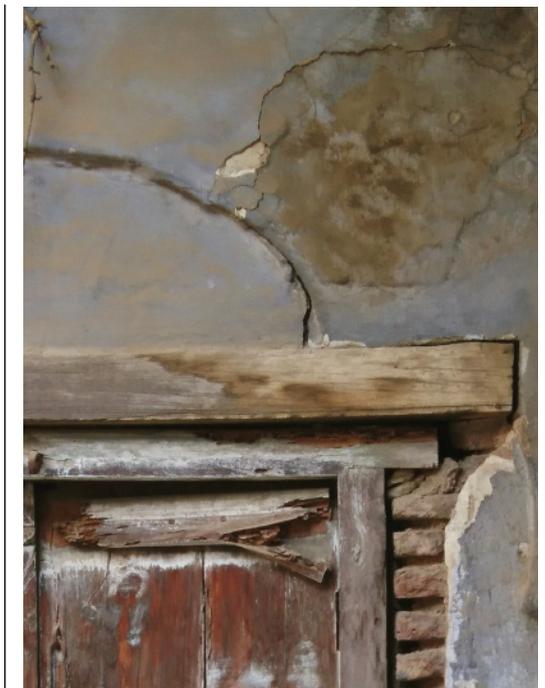
Timber was used for beams, before being substituted by steel ones, balconies structure and some architraves for doors, as we can see in the picture.

In some areas there were traditions of painting *havelis* with frescos.

Plenty of quite well conserved cases are still recognizable in a small area of Rajasthan, called Shekhawati. Here the great time of *havelis* was the mid and the late XIX century, when they were the status symbol of the Marwaris family. Paintings adorned the grandeur facades and the smallest elements, like niches, arches, brackets, etc. Interiors were more elaborated, with the use of glass and colours.



Red sandstone for columns and ornated capitals.



Timber used for door panels and architraves.



We see *lakhori* bricks (on the top) and modern ones.



Lime (on the top) and white plaster, used to paint columns.

Havelis were built by master masons without the recourse to drawings, and their construction was based on the long-standing Indian manner.

In 1913, Sanderson, during his studies about surviving of architectural traditions, mentioned the Assistant State Engineer who said that the designers of many famous *havelis* in Jaipur “didn’t believe in plans”. Sanderson found some masters in Delhi who were used to draw only rough plans to show the organization of rooms. Sometimes, if the client was an important family, they drew the front elevation too. Moreover, the ornamental details were drawn only if they were teaching students.¹⁶

Masters were paid a charge for materials, and themselves employed the masons who worked under them, visiting the different sites in their charge for a few hours each day.¹⁷

During 1980’s Sunand Prasad, an Architecture student from S.P.A. and other architects interviewed several old masons in Delhi. They concluded that a *haveli*’s plan was usually based on an arrangement of the family needs and site conditions, considering also some spiritual planning principles.

Muslim *haveli*’s plans were often claimed not to have been influenced by superstitious influences, but, for example, Mekhoo

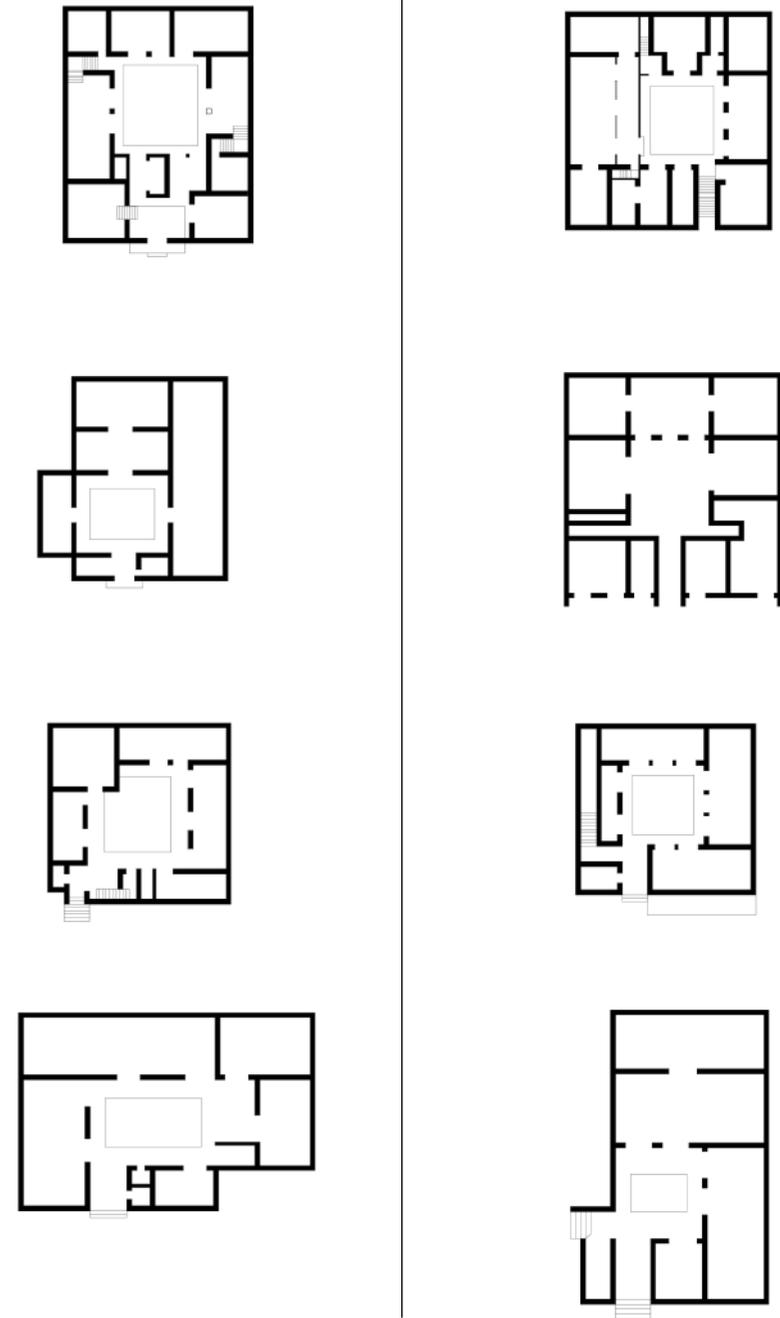
Ram, an old Hindu craftsman in Dehradun (250 km from Delhi) said: “Without *jotish* (astrology) you cannot build...you can spend twice the money, but your house will not bear fruit. The first thing is the land. By its aspect you have to decide whether the house will face North, South, East or West and calculate its plan accordingly. Say there is a road here and the West is there, you will apply a West calculation; but these things are very old, you can’t imagine. Things were never done without *jotish*.”¹⁸

Other superstitions suggested, for instance, the location of the kitchen and water storage on the right side of the main courtyard, and the organization of windows, doors and wall niches in axial sequence.¹⁹

Due to the handmade and artisanal methods of *havelis* construction, if we analyse plenty of *havelis* belonging to the same region, we can notice main common features, but at the same time many typologies and thousands of combinations, with exceptions and different rules. Indeed, as Sunand Prasad wrote: “There are in the end few prescriptions, and practicality is never sacrificed to geometrical purity.”²⁰

Eventually, it is interesting to notice that plenty of the patterns made by spiritual diagrams, as *mandalas*, are universally well-known and we can find them in both West and East architecture. They are widespread all over the world probably because they are considered the reflection of the natural world, used to explain and justify pleasing forms.

16. Tillotson, *Indian Mansions*, p. 14.
 17. Sanderson, *Types of Modern Indian Buildings*, p.7 and p.13.
 18. Prasad, *The Havelis of North Indian cities*, p. 10.
 19. Pramar, *Haveli*, p.105.
 20. Prasad, *The Havelis of North Indian cities*, p. 10.



Drawing showing several typologies of havelis in Shahjahanabad

Families who were used to live in the *havelis* were characterized by such a complex social organization. Household head was usually a nobleman, or a landowner or an important merchant. He was used to live with his extended family, composed of numerous members, and then servants and sometimes slaves too. His wife had to supervise all the servants, ladies and activities running in the haveli during the day. For example, she had to organize the store rooms and all the arrangements for celebrations and festivals.

In case the woman was widowed, she could lose all her power on the household management, with some exceptions, like when the oldest son was still too young. Another interesting issue, since most of families living in the *havelis* were Muslim, is that polygamy was generally restricted to the very rich.

Usually a large haveli could accommodate about 200 members, including also uncles and cousins.

Servants could live in, not including those recognized as outcasts, like sweepers and washerwomen, called *dbobis*. Despite of these large joint families were used to eat all together, ladies generally did not start their meal until the men had taken their fill. If they had special guests, men ate separately, while servants often cooked and ate in their own areas.

If the *havelis* belonged to a Hindu family, there was always a specific room for the *puja*, the main worship ritual for Hindus and a *tulsi* (holy basil) bush in the courtyard, holy to the divinity Vishnu.

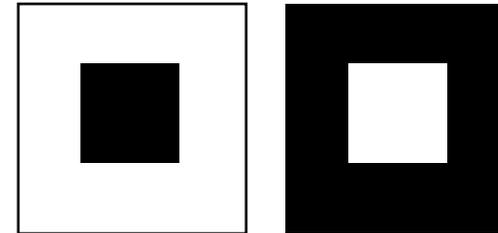
During festivals and celebrations, the *havelis* could host plenty of guests, for different days and nights. To guarantee a place to stay and sleep for everybody, the haveli was able to enlarge its own spaces: for example, thanks to stone rings built into the walls, curtains could be hung to cover courtyards or terraces and wooden platforms could be used as beds.

Havelis are typical mansions of urban areas, more than rural, even if we can find them also in the country.

The “introvert” configuration of this typology suggests that *havelis* developed with cities.

It can be also notice from the narrow roads and *galis* that bring to the *havelis*, breaking down the structure of the different neighbourhoods. As the streets become smaller, so the space becomes more private, intended only for local people. That’s why the narrowest lanes were once closed by gates. In 1970’s it was still quite common to see in Shahjahanabad locked gates during the night, while today most of them are not used anymore, but still exist. So, the urban *havelis* have no private outdoor space between them and the public streets.

We could consider it as the opposite of the European model of the “villa”, as the drawing shows.



On the left the European model, with the built portion placed at center of a open space, or garden. On the right, the Indian model, with the main courtyard surrounded by the building.

This aspect can be one of the reasons why, going through the pedestrian road of Shahjahanabad, it is not easy to understand the boundary between private and public spaces. As already mentioned, many gates are always open, allowing everybody to get in narrow streets or blind alleys. During my surveys I had tried to see everything and go everywhere, but sometimes I felt like I was in someone’s home, even if my feet were still on the public street.

So, I have realized that probably private and public spheres touched each other, without understanding a real and clear edge.



Regarding the relation between private-public and outdoor-indoor spaces, it is interesting to mention all those narrow, dark and steep stairs, rising from the edge of the streets. As the picture belows shows, they directly allow people from the sidewalks to access upper floors, without a real edge. Indeed, event if sometimes they are closed by shutters or doors, they are usually open, as an extension of the public street.



For three centuries the control of havelis passed from one generation to the next, and only few changes in the pattern of daily life took place.

Until the joint-family system was diffuse, innovation was discouraged. Indeed, *havelis* affairs were managed by the oldest man of the family and when he died, control passed to his son. Since the new head of the household was grown in a place full of traditions and habits, he could keep them alive, and that's happened for ages. The joint-family and caste structures kept traditional life-style almost intact, despite of local troubles and political disorders of the XVII, XVIII and XIX centuries.

After the middle of the XIX century, the Mughal Empire faded and was replaced by the British Crown. After the rebellion of 1857, the British planned intervention in Old Delhi and systematically took properties and buildings within the walls, they restructured and sold them. For example, they converted the Red Fort, once the Royal Palace, into a military camp, and demolished most of the mansions, mosques and pavilions inside. Land outside the Walled City, once used for gardens and farms, were divided and distributed. (Refer to the map at p. 38).

The latter part of the century saw a remission of the *havelis* structure to a modern and more ordinary home. From huge quarters in the early XIX century, a

half century later, *havelis* dimensions were strongly reduced becoming modest places with only two or three small courtyards. Some of them were further fragmented to shops and workshops.

Before 1857, the British civilians were living within the walls, especially in the northern and eastern portions of the city. Then, they moved out of Shahjahanabad to the north, in an area called Civil Lines. Then, in 1864, the Delhi Municipal Committee was established, and public constructions flourished. So, they widened streets, and introduced the railway system. To realize the railroad extensive areas of the Walled City were demolished to make room for it. New materials - like the modern bricks - and construction systems and typologies - like the semi-circular arches - brought changes to the *havelis*. The open pavilions surrounding the courtyards became rooms with wooden doors and stained glass. Iron and steel were introduced for railings and beams.

By the turn of XX century the city of Delhi was much more fragmented, and all the traditional social systems came under attack.

The seeds of change were already rooted before the Independence (1947) but the event brought a strong acceleration of this process of social transformation. When the British left, traditionalism was seen as something

related to underdevelopment and to the unhappy recent past.

India was looking forward to a new era of modernity, and the Western model was the only example available.

Delhi suffered strong urban and physical transformation due to social, economic, and political reforms. With the establishment of the Lutyens' New Delhi (1911), Shahjahanabad was considered as a portion of the city to hide to the shining modern capital. Indeed, new job opportunities brought by the British encouraged men to live away from their homes in the historic centre, and slowly traditional employments were replaced by job related to business and civil services. We have also to mention the 1930's Depression and the consequent decrease of the land value, forcing the population to find new sources of income.

Due to the increase of Westernization and the change of work forms, the large joint-families structure broke up. The decline of this system had both social and physical consequences.

The fragmentation of *havelis* was premised on decreased levels of power and wealth, but also on a wide change of the family structure. Today only few *havelis* are still run by a single-family unit and huge *havelis* have been slowly divided in several apartments or shops.

It means, for example, that some members of the family chose to set up commercial activities, allowing strangers to access the once-private core. Some portions of the buildings may be rented out or sold to people not interested or aware of *haveli* history. So, without an overall control and maintenance, communal areas often quickly decayed, and many incorrect alterations or encroachment took place. Sometimes *havelis* became just a portion of a bazaar, or godowns, or simply abandoned.

The underestimated value of *havelis'* ornamental details is a further threat, because owners and tenants often intervene without thinking of all the issues related to heritage conservation and architectural/structural problems. They might just solve the single problem temporarily, without considering all the consequences they should: it could be a crack or the demolition of a wall or of an arch to widen a room. On the other hand, some vacant or partially abandoned *havelis* have been robbed of their doors and shutters, making them more vulnerable to the weather, vandalism and to the growth of vegetation that can loom.

Nowadays old cities centres are no more inhabited by wealthy people, due to commercialization, noise and air pollution, traffic congestion and many other issues already mentioned.

***Havelis* are often neglected by the Municipalities, even if they can still show their past splendour, and they are a potential solution to regenerate Old Delhi.**



Man sitting on the steps of a vacant and locked *haveli*.

Today, as twenty years ago, living in a *haveli* is not considered attractive anymore: people prefer to live in modern suburbs “colonies”, as Civil Lines in New Delhi. As Tillotson says: “The garden-city planning of Lutyens’ Delhi has proved more influential than the Mughal houses of Shah Jahan’s.”²¹ During the colonisation, the British Raj introduced several norms to encourage their new typology of house, the villa. These regulations committed that every site had to maintain a border of land on the edge. It means that houses could not be joined together and there was no room for inner courtyards.

The strong desire of innovation and “modernisation” was largely demonstrated by the Government’s decision of Le Corbusier as the Architect to plan and design the new capital city of Punjab, Chandigarh, established in 1951.

The preference to the Western style can be also found in replacing traditional architectural elements, as the *jharokhas* and *chabutras*, which marked the fronts of streets of historic cities, with high metal gates.

***Havelis* became associated to backwardness, often related to restrictions due to the *mohallas* or family traditions.**

They were considered not fitting into the Western sense of individual privacy. Moreover, with the installation of all the electric fans, air conditioners, and air coolers, all the original open spaces lost their value. With

the spread of cars and motorbikes, parking became an issue and, due to the small size of the streets, cars got stuck in the narrow lanes.

We could say that Old Delhi, like many others old Indian cities as Jaipur or Ahmedabad, is not a pleasant place to live anymore. Due to social and economic transformation, large consequences influenced the daily life of historic centres.

Reasons are many, and I realized there were plenty of issues also during my interviews I did: the pressure of population growth, the increasing commercialisation replacing the residential function of wide areas of the city, traffic and air pollution, water supplies; the lack of facilities and fire security, the accumulation of rubbish everywhere, water and electricity supplies are unreliable and there is no space to allow ambulances to access most of the narrow streets. Residents of Old Delhi are dealing with all these kinds of problems, despite their strong sense of belonging and sense of pride, I have often perceived when I met local people. “For better or worse - as Sarah Tillotson says – the life-style which created the *havelis* has vanished.”

Many old families chose to move out, some *havelis* built for one family now accommodates several families together. Sometimes owners chose to keep the property without living there, and no granting the necessary maintenance. Some of them, eventually, have been demolished or turned into warehouses or factories. Signs of decay and ruins can be easily found going through Old Delhi lanes.



Haveli demolished or collapsed.

Even if we can still perceive the grandeur and beauty of the past, the general feeling is quite sad.

Some havelis in Shahjahanabad still maintain their original forms and design, while most of them have been totally or partially altered, without any chance to recognise the authentic version.

The most famous *haveli* is located in Chandni Chowk and is called Lala Chunnamal ki Haveli. Built around 1857, it suffered little damage during the rebellion. Despite the ground floor accommodates commercial activities, its very large front rise above them. Inside we can still find two courtyards, while the gardens and the verandas buried.

21. Tillotson, *Indian Mansions*, p. 164.



Lala Chunnamal ki Haveli.

Not all *havelis* are in decline or abandoned. Many of them are still homes of numerous families, who often cannot afford to live in other parts of the city. Encroachment and lack of maintenance are daily problems and living conditions are not always good. People live in very small apartments. According to my personal experience, during my surveys,

I met an old lady lived in only 13 sqm, while a 4 members family was used to live in a 24 sqm apartment.

Some original architectural elements does not fit anymore to the current lifestyle: for example, the staircase is traditionally quite narrow and the rise can be 25-30 cm high.

During the last five years some isolated examples of preservation or transformation took place in Delhi. The approaches are quite different. Attention on adopting traditional and/or modern materials, the new uses and their consequent space's alterations, the preservation of original architectural elements, and the impact on local

communities: these are some of the aspects I have considered during my analyse of some case studies I will show at the end of the next chapter, where I am going to explain what Heritage is in India and to show the current situation about conservation and reuse of the Built Heritage in Delhi.

HERITAGE AND CONSERVATION IN INDIA

Discovering that in many languages of India, the word *kal* means both yesterday and tomorrow made me think a lot. Indeed, according to my previous experiences in India, I had always perceived that this is a country of contrasts, where the extremes often live together. We could find plenty of reasons and examples to explain that. Although I would not be able to give a complete answer, I will try to share my observations, focusing on the reality of Delhi and its architectural heritage.

During ages of history this city - even if it would be more correct defining it as “megacity”²² - gathered such an extreme heterogeneity of people, with different social and religious backgrounds.

Layers by layers, we have today the result of a fusion of successive cultures, and the accumulation of experiences and traditions, that are sometimes so different among them, but that still coexist in the same place, one close to each other.

Let’s think for example to Delhi’s history: the capital of a country, where nowadays 80% of the population identify themselves as Hindus²³, has been ruled for about three centuries by an Islamic Empire, followed by the British Crown for almost one century. We can only imagine how many traditions, customs, languages, knowledges, religions, etc lived or are still living in a megacity as Delhi, with its nearly 20 million of people.

The coexisting of such different realities I could see around India, and especially during my staying in Delhi, has always fascinated me, and taught me how diversity can live together.

The first reason why I chose to work on *havelis* in Old Delhi was because I wanted to discover and learn about these Indo-Islamic mansions, placed in such a dense urban area.

22. ONU, *The World's Cities*, p. 4.

23. https://en.wikipedia.org/wiki/Hinduism_in_India

Since many of them are in bad conditions or need urgent interventions, I had the desire to understand how they are perceived today, by both authorities and local communities.

Old Delhi is still home to hundreds of havelis (the number is not precise, but they are approximately 300-500.)²⁴

We could say that everyone in Shahjahanabad, residents and tourists, have experience of these buildings, since there are 65-70 havelis/sq. km and their front gates are quite distinguishable.

Before going deep to discuss about today *havelis* and why they should be preserved, it would be better making a step back to understand the history of conservation in the Indian context, and to learn how Heritage is defined.

Despite the first attempt of conservation took place in the III century when Emperor Ashoka ordered to conserve and protect natural resources, including wild fauna, and then, during the XIV century, Firoz Shah Tughlaq demanded to protect old buildings, the current principles of preservation and conservation were introduced by the British rule.

Starting from 1765, the East India Company attempted in different ways to preserve historical structures. These efforts were largely focused on the Northern area of India, like Delhi and Agra, where the Mughal Empire was.

We can easily imagine that European colonization, especially the British Crown between 1757 and 1947, had such a deep effect overall Indian society. Many scholars studied in different disciplines the impacts of the transformation that took place with the colonization, trying to understand its rooted dynamics.

Although it is a large and complex phenomenon that cannot be easily explained because of all the simultaneous and inner forces, it is important to consider all the points of views and both negative and positive consequences this transformation brought.

Since I am not able to deal with all the impacts, I would like to consider the British Raj like the last layer of a thousand-year-old syncretic culture. Indeed, as I have already mentioned, India has been always accommodated different dominions, each one with their specific influences on the Indian society and culture.

With the British colony, India had once more the chance to underline how adaptable are all the qualities of the indigenous civilization, that had always accepted and adapted external influences for millennia.

The result is that fusion of customs, habits, languages and experiences I have mentioned above, that makes India a unique layered reality.

Definitely something has been gained, something has been lost, and it is the task of contemporary scholars to understand and evaluate the consequences, and, when it is still possible, to suggest better ways of dealing with current issues.

In 1861, the Archaeological Survey of India, known as ASI, was established by the British.

The first aim was to survey and collect the documentation of the architectural heritage around the country. The first surveyor was Alexander Cunningham, and he can be considered a pioneer of archaeological exploration. His works, studies and field reports were then useful to shape the guidelines of the “modern” conservation in India.

When we read “modern” it refers to the colonial establishment, in opposition to the existing traditional knowledge.

These were generally considered “primitive” by the British, who ignored all the typical buildings maintenance tools and defined new strategies to conserve Indian antiquities.

Cunningham was replaced by James Burgess in 1885, when simultaneously the English John Ruskin and William Morris were laying the foundations of conservation ideology in their mother country. Then in 1902, John Marshall became the director of the ASI.

Then, with the publication of *The Ancient Monuments Preservation Act*, in 1904, the ASI was recognised as a legal entity for the protection of monuments. This document was based on the *British Ancient Monuments Acts* promulgated in 1882, thanks to the initiative of Lord Curzon, the Viceroy of India. Even if he was an acute exponent of conserving Indian antiquities, at the same time he strongly believed in the supremacy of the British knowledges. So, his attitude showed some kind of duty rather than empathy with Indian civilization products.

After Independence in 1947, the British approach was easily inherited without questioning by the ASI.

We can surprisingly notice that the post-Independence text (1958), *The Ancient Monuments and Archaeological Sites and Remains Act*, is almost a literal replica of the previous colonial act, and that the 1923 Marshall's *Manual* is still used and guides the work of the ASI today.

24. <https://economictimes.indiatimes.com/magazines/panache/old-delhi-now-richer-by-300-heritage-buildings/articleshow/50159872.cms>

The *Conservation Manual* is one of the most important documents about conservation practices in India, written by John Marshall, who collected all the best British practices and tried to adapt them with the Indian context. As Menon says: “John Marshall was a product of his times.”²⁵ His mission was to transfer the English culture and knowledges to the Indian colony.

With the Great Exhibition of 1851 in London, the British decided to develop the local craft skills and make them modern.

It meant introducing industrial processes to gain more benefits from Indian products. They established the Department of Science and Arts, to bring tools and to influence design schools, museums’ collections and architecture all over the country.

Despite the large power and influence of the British Crown, only a fraction of the Indian built heritage was taken into account.

Still today the ASI protects only around 6500 buildings, on a National area of more than 3 million sq km.

It means that hundreds of thousands of relevant monuments or buildings are still not legally recognised as “heritage” and protected. So, these unprotected objects are often under the responsibility of the individual owners who, optimistically, take care of them with traditional ways of maintenance. At the same time, it can happen that landowners cannot afford to pay local builders and they find cheap solutions, that usually make the conditions worse. At very least, owners do not care of the buildings at all, leaving them to decay and to invasive vegetation overgrowth.

I would like to highlight an interesting point of view that Menon states: “It is also one of the paradoxes of globalization that even as it imposes transnational values and processes on local cultures, it gives these cultures a “presence” they never had before. While it could be argued that colonialism was also a process of globalization, important differences have been noted in the area of post-colonial disciplinary studies.”²⁶

Globalization is a large and complex topic that has impacts and influences on several aspects of a culture, but I would like to simplify it and consider it as a tool that allow people to discover and learn about these old merged cultures.

I strongly believe that awareness of what is lost and what can be still done for empowering traditions is an important tool and process in the

25. Menon, *Civilizing India's Past* p. 69.
26. *ibid*, p. 73.

field of conservation and Heritage.

A mechanism of re-evaluation was started with the foundation of the Indian National Trust for Art and Cultural Heritage in 1984, known as INTACH. Established as an NGO its main aim was working on the thousands of examples of built heritage not covered by the ASI, or its state-level counterparts.

INTACH was the first in India to recognize the urgent need of conserving historic cities and heritage zones within contemporary cities.



INTACH Heritage Walk at Janhapanah.

Today INTACH has offices and centres all over in India and I had the chance to get involved with them, at the Delhi Chapter Office, where I have met Ms. Annabel Lopez – the Project Coordinator – and Dr. Swapna Liddle, who helped me to start my researches and gave me some tools to discover and learn about heritage, conservation, current projects, and of course *havelis* in Shahjahanabad.

INTACH has several divisions and teams working on different aspects of Heritage: from the Architecture to the Art&Materials, then Crafts, Tourism and Nature. It works also on the Intangible Cultural Heritage,

trying to preserve and share all those forms that define the identity of a community, like oral traditions, arts, rituals, indigenous knowledges that risk disappearing.

Another important branch regards the Heritage Walks. According to my opinion this initiative has a great impact on the population: when I participated to some Sunday mornings walks, I saw people getting involved and being really interested.

One of the goals of INTACH is to make citizens aware of the relevance of the historical and cultural environment.



Group picture after the walk at Lodhi Gardens. (Photo by INTACH)

They started in 2005 conducting people in various parts of the city, explaining the history of the places, showing hidden spots, telling interesting stories and events, making everyone, from the child to the old lady, from the European tourists to people from Delhi, curious and interested in what surrounded them.

Moreover, I strongly believe that sharing and making people aware of the historic value can help encourage local communities to preserve their own heritage, making them feel proud of their reality.

Getting involved with INTACH activities made me appreciate once more Heritage, and I was fascinated by their statement we can read on their website:

“INTACH’s mission to conserve heritage is based on the belief that living in harmony with heritage enhances the quality of life, and it is the duty of every citizen of India as laid down in the Constitution of India.”²⁷

I have already mentioned the word “Heritage” many times, but I think it would be better to define it. Indeed, if we generally talk about “conservation”, in India as in

many other parts of World, most of the people associate this issue with a monument or a famous building, like a landmark. For example, Indians always think to the Taj Mahal at Agra, symbol of history and heritage.

“Monument conservation” is not equal to “Heritage conservation”.

Indeed, although the first attempt of preservation and conservation regarded single buildings or famous landmarks, it is always important to keep in mind the wider concept of “Heritage”, where sites, cultures, natural elements as landscape, artefacts, streets, etc are included. In a report called *Identification and documentation of Built Heritage in India*, published by INTACH, Divay Gupta writes: “Cultural heritage refers to tangible and intangible manifestations of our history charting human evolutions.”

Gupta, a conservation architect and director of the Architectural Division of INTACH, New Delhi, explains the process of identifying heritage through three main concepts:

Significance: it shows the importance and the value, related to history, architecture, engineering, archaeology, cultures of a community, a region or a country. There are plenty of aspects to consider, from relevant people or the representation of their work, to specific architectural style, construction typologies and technological innovations.

Integrity: it means the historic authenticity of a property. Original identity must be

27. <http://www.intach.org/about-mission.php>

evident by the survival of physical elements and significant features that still exist since the beginning.

Context: it is important to know and analyse the historic context to better understand the role of a property as product of its time. It means we must also consider the history of the community, region or country to which the property belongs.

Due to a fast and uncontrolled urban development, the ASI replied with the promulgation of a rule that prohibits any development or construction within 100 metres of a protected monument and allowed only controlled development within the next 200 meters. Unfortunately, this action froze the slum-like zone surrounding all those dense parts of the city where plenty of protected areas are placed.

Many critics and debates brought the ASI to attempt a mitigation of its rule, by setting up a professionals committee to adjudicate development projects in the proximity of protected monuments on a case-by-case principles. This arbitrary approach was then considered “an exercise’s of ASI’s powers”²⁸ and it was revoked.

Since in most case Legislation, like a Bill or an Act, is not required for Heritage conservation, and the only regulations area usually made by the Town and Country Planning Organization, we must consider another important document called

Then Gupta shows all the different typologies of Heritage, explaining why the process of documentation is such an important and delicate phase to face. It is important to recognize that all this work is based on the researches of ICOMOS and its “principles for recording of monuments, group of buildings and sites”, ratified in October 1996.

Model Building Bye-Laws, published in 2016 by the Ministry of Urban Development, New Delhi. It contains legal tools used to regulate buildings design and constructions. Since India has still plenty of small or medium towns which don’t have any building bye-laws or regulations, many issues came up from these realities, like uncoordinated urban development and encroachments, that caused uncontrolled disorders. So, the TCPO has prepared this document to guide the State Governments, Urban Local Bodies, Urban Development Authorities, etc.

Within this text we find a chapter about Heritage, with the title: *Conservation of Heritage Sites including heritage buildings, heritage precincts and natural feature areas*.

Here we can find some definitions I am going to report, because they gave an idea of some important aspects of conservation in India.

“Heritage building” means and includes any building of one or more premises or any part thereof and/or structure and/or artefact which requires conservation and/or preservation for historical and/or architectural and/or artisanry and/or aesthetic and/or cultural and/or environmental and/or ecological purpose and includes such portion of land adjoining such building or part thereof as may be required for fencing or covering or in any manner preserving the historical and/or architectural and/or aesthetic and/or cultural value of such building.

“Conservation” means all the processes of looking after a place so as to retain its historical and/or architectural and/or aesthetic and/or cultural significance and includes maintenance, preservation, restoration, reconstruction and adoption or a combination of more than one of these.

“Preservation” means and includes maintaining the fabric of a place in its existing state and retarding deterioration.

“Restoration” means and includes returning the existing fabric of a place to a known earlier state by removing accretions or by reassembling existing components without introducing new materials.

“Reconstruction” means and includes

returning a place as nearly as possible to a known earlier state and distinguished by the introduction of materials (new or old) into the fabric. This shall not include either recreation or conjectural reconstruction.”²⁹ Then there many prescriptions, restrictions and penalties about interventions on Heritage buildings, but I would like to underline the issue about the owner’s responsibility. Indeed, the document affirms that “it shall be the duty of the owners of heritage buildings [...] to carry out regular repairs and maintenance of the buildings. The State Government, the Municipal Corporation or the Local Bodies and Authorities concerned shall not be responsible for such repair and maintenance except for the buildings owned by the Government, the Municipal Corporation or the other Local Bodies.”³⁰

This statement is one of the main cores of my Thesis. Indeed, it is hard to imagine how the Municipality of Delhi thought to solve the problems of decay, encroachment, traffic, fire security, and many other urban issues of a reality like Shahjahanabad, just saying that “every owner shall have the duty of repairing and maintaining its own heritage building”.

Many times, walking through the lanes of Old Delhi I got the impression to be in a place where nobody was taking care of the reality surrounded me. Now I can easily understand why: because of a total lack of interest by the Governments to preserve an historical and cultural treasure as Old Delhi.

28. International Workshop, *Cultural heritage as Civilizing Mission*, p.75.

29. TCPO, *Model Building Bye-Laws*, p.143

30. *ibid*, p.144

At the same time, they did not restrain the commercial activities that settled without any control all over the Walled City, making old residents moving out to escape from dangerous and bad living conditions. This phenomenon is quite complex and many factors are involved, so now I am going to focus on those local people living in Shahjahanabad who might choose to intervene on their *havelis*. How does it work?

If you own an *haveli* it might be inserted in a Heritage List.

More specifically, in 2010 the Delhi Government, with the Urban Development Department identified nearly 750-770 heritage sites (buildings, sites and natural features) to be listed. It means they must be protected and preserved, and any transformation, alteration or partial demolition must be approved by the Heritage Conservation Committee. Then, in 2015 the Municipality of Delhi (MCD) added approximately 300 heritage properties in Old Delhi. Most of them were private belongings, only few were municipal or public. All of them were selected and graded depending on their architectural and heritage values. As we can read in an article published by *The Economic Times*, on 13th December 2015: “The list includes notable *havelis* like Namak Haram ki Haveli in Chandni Chowk as well as gateways in Old Delhi’s *mohallas* that had not been included earlier. Most of the properties are from the Colonial period, but some date back to the Sultanate and Mughal eras. Most of the *havelis* are located in the congested lanes of Sitaram Bazaar,

Khari Baoli, Kucha Pati Ram, Hauz Qazi and the Jama Masjid area.”

The journalist Richi Verma explained the general conditions of those *havelis* just notified: some were in good conditions, but plenty of them were in ruins, falling in pieces because owners were not taking care of. He added: “The objective of the survey was also to identify these heritage *havelis* and give their owners incentives and support to preserve them.



Haveli gateway hidden by hanging cables and signs.

The final list has been sent to Shahjahanabad Redevelopment Corporation, which is framing policies to give incentives to *haveli* owners for maintaining the buildings as well as financial assistance.”³¹

Unfortunately, during the last years, the situation did not change much. Indeed, meanwhile, some old *havelis* collapsed due to bad conditions, lack of maintenance or illegal intervention in the surroundings. Indeed, on July 2018, the Minister Vijay Goel declared that “at least 44 notified heritage properties in the Walled City have fallen prey to unauthorised construction.” And then: “*Havelis*, including those having historical significance, have either been converted into commercial complexes or multi-storeyed residential buildings.”³²

Let’s now understand how listing works: based on the extensive surveys done by INTACH over the last 30 years, buildings, open spaces, urban artefacts have been selected based on several criteria, like their historical, cultural, architectural relevance and existing conditions. Then the List is controlled and supplemented by a Commission of the Municipality, like MCD or DDA, on the advice of the Heritage Conservation Committee. Then, before being finalised, there can be

also objections and suggestions from the public to be taken into account.

Not all the heritage buildings are to be considered the same. Some buildings are more valuable than others. To define the criteria, there are three grades, that implicate diverse ranges of historic importance, different typologies of intervention and prescriptions to follow.

With the MCD Notification of 25th February 2010, all these buildings have been graded as Grade I, II & III, and cannot be demolished. Any alteration or repair work requires a written permission of the Heritage Conservation Committee. Moreover, in case of any demolition, owner must ask a formal consent from the MCD commission.³³ All the following information about the Grades can be found on several documents made by the Municipality of Delhi.³⁴

31. <https://economictimes.indiatimes.com/magazines/old-delhi-now-richer-by-300-heritage-buildings/>

32. <https://www.hindustantimes.com/delhi-news/44-heritage-havelis-in-old-delhi-face-threat-says-union-minister-vijay-goel/>

33. DHMS, *Regulations for HERITAGE*, p.8.

34. *ibid.*

Grade I

Definition: it comprises buildings and precincts of national or historic importance, embodying excellence in architectural style, design, technology and material usage and/or aesthetics; they may be associated with a great historic event, personality, movement of institution. They have been and are the prime landmarks or the region.

Objectives: Grade I buildings richly deserve careful preservation.

Scope for changes: No interventions be permitted either on exterior or interior of the heritage building or natural features unless it is necessary in the interest of strengthening and prolonging, the life of the buildings/ or precincts or any part or features thereof. For this purpose, absolutely essential and minimum changes would be allowed and they must be in conformity with the original.

Procedure: Development permission for the changes would be given on the advice of the Heritage Conservation Committee.

Vistas/surrounding Development: All development in areas surrounding Heritage Grade-I shall be regulated and controlled, ensuring that it does not mar the grandeur of, or view from Heritage Grade-I.

Grade II

Definition: Heritage Grade-II (A&B) comprises of buildings and precincts of regional or local importance possessing special architectural or aesthetic merit, or cultural or historical significance though of a lower scale in Heritage Grade-I. They are local landmarks, which contribute to the image and identity of the region. They may be the work of master craftsmen or may be models of proportion and ornamentation or designed to suit a particular climate.

Objectives: Heritage Grade-II (A & B) deserves intelligent conservation.

Scope for changes:

Grade-II(A): Internal changes and adaptive reuse may by and large be allowed but subject to strict scrutiny. Care would be taken to ensure the conservation of all special aspects for which it is included in Heritage Grade-II.

Grade-II(B): In addition to the above, extension or additional building in the same plot or compound could in certain circumstances be allowed provided that the extension/additional building is in harmony with (and does not detract from) the existing heritage buildings(s) or precincts especially in terms of height and façade.

Procedure: Development permission for the changes would be given on the advice of the Heritage Conservation Committee.

Vistas/surrounding Development: All development in areas surrounding Heritage Grade-II shall be regulated and controlled, ensuring that it does not mar the grandeur of, or view from Heritage Grade-II.

Grade III

Definition: Heritage Grade-III comprises buildings and precincts of importance for townscape; that evoke architectural, aesthetic, or sociological interest through not as much as in Heritage Grade-II. These contribute to determine the character of the locality and can be representative of lifestyle of a particular community or region and may also be distinguished by setting, or special character of the façade and uniformity of height, width and scale.

Objectives: Heritage Grade-III deserves intelligent conservation (though on a lesser scale than Grade-II and special protection to unique features and attributes).

Scope for changes: Internal changes and adaptive re-use may by and large be allowed. Changes can include extensions and additional buildings in the same plot or compound. However, any changes should be such that they are in harmony with and should be such that they do not detract from the existing heritage building/precinct.

Procedure: Development permission for the changes would be given on the advice of the Heritage Conservation Committee.

Vistas/surrounding Development: All development in areas surrounding Heritage Grade-III shall be regulated and controlled, ensuring that it does not mar the grandeur of, or view from Heritage Grade-II.

An important and useful tool to consider it the *Conservation Plan*, a tool useful to translate problems and issues into a tangible action plan.

As suggested by INTACH, it should contain information to help plan the conservation and restoration actions and design the repairing works, additions or existing alterations. Then it would be useful to develop a programme for regular maintenance and to generate an assessment of the project costs.

It is generally made by a team that involves architects, specialists like structural engineers and historians, and of course the owners and tenants. We should underline INTACH would recommend choosing a Conservation Architect as coordinator of the works.³⁵

All the guidelines to prepare a *Conservation Plan* can be found in manual entitled *Conservation of Heritage Buildings in Shahjahanabad - A Manual for Owners & Occupiers*, written by Aishwarya Tipnis, and published by INTACH (September 2018).

35. INTACH, *Handbook for Conservation*, p. 21.

The booklet, available both in English and Hindi, wants to aware people who live or own *havelis* to understand the value of their properties, and at the same time to help them to care and take opportune decisions to maintain their heritage buildings.

It contains several chapters on different topics, explaining easily how *havelis* are traditionally built, with their constructions systems and materials. Moreover, it includes a part of frequent questions by *havelis* owners, with all the needed answers. Topics are about regulations, protection, maintenance of heritage buildings, list of the authorities and agencies to refer for permission for repairs, and then guidelines to keep their *havelis* preserved and maintained, etc.

I had the occasion to have a look to the draft of this book during my staying in Delhi, and it was quite useful to set up my work and analyses of my site, for example evaluating the “special value elements” of the *haveli*, the current conditions and degrades, the most urgent threats and issues, and to imagine the future of the building.

The booklet has been published quite recently and it had been distributed among *havelis* owners and residents at the Town

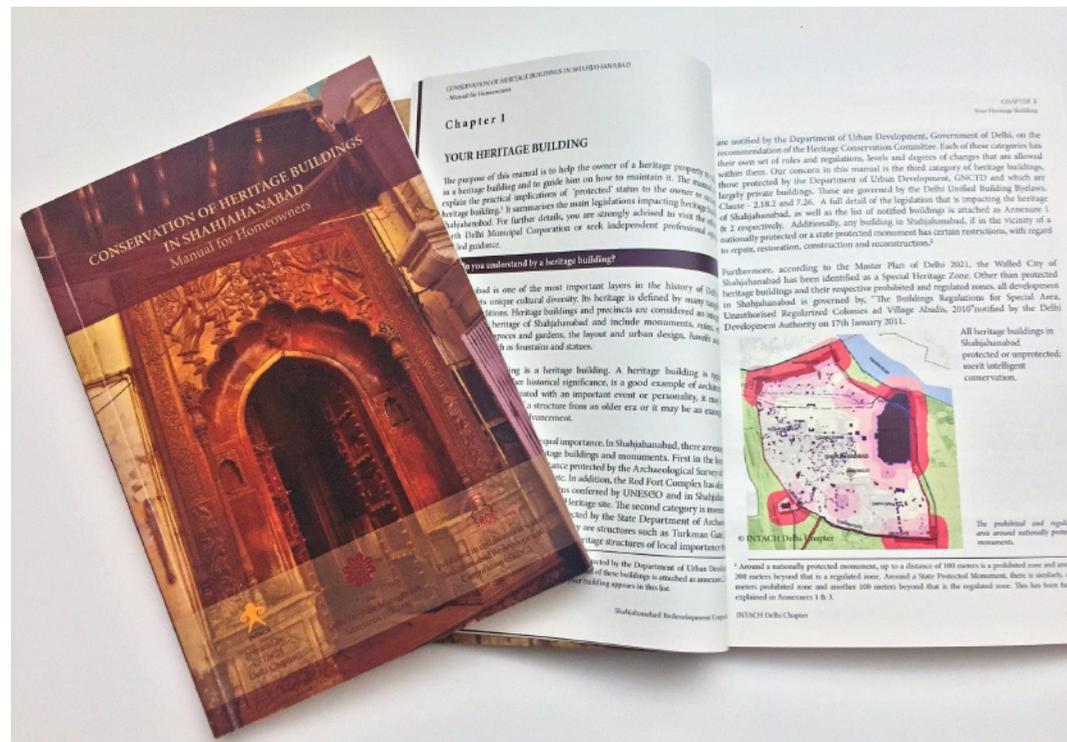
Hall in Old Delhi, during a workshop on *Conservation of Heritage Buildings in Shahjahanabad*, conducted by INTACH and in association with Shahjahanabad Redevelopment Corporation (SRDC) and organised by the North Delhi Municipal Corporation (NDMC), on 22nd September 2018.

This event was an important chance to involve several stakeholders together and discuss issues about the “heritage tag” and its implications. The main goal was making residents and owners aware of the value of their buildings, where conservation and protection must be the priority. Indeed, most of the population of Old Delhi does not know about the process to achieve permissions for repairs or interventions on notified buildings.

People usually feel the *heritage tag* as an obstacle and not like a benefit, especially because of financial reasons.

Authorities and INTACH professionals, during the workshops, encouraged owners to repair, restore and reuse their traditional mansions and answered *havelis* owners’ questions on several topics.

It might be only the beginning, but I personally believe that a meeting between residents, owners, authorities and professionals was an important step to deal with an urgent situation, that cannot wait anymore.



Cover and inside of *Conservation of Heritage Buildings in Shahjahanabad - A Manual for Owners & Occupiers*. (Photo by INTACH)

During my researches and survey, I have often read or heard of owners complaining that they felt the “heritage tag” like something imposed by the Authorities, without never being involved or consulted. If it is true, it is a shame that in the last decades, residents and owners have never been included in a meeting to explain them the policy-making process for preservation and its implications.

There are many collateral problems and issues about heritage buildings and their conservation in Old Delhi.

For example, land ownership issues. It means that many buildings are built on different properties, so that owners cannot sell their buildings. Then, most of the *havelis* are located in areas with dilapidated sewage and drain systems, bad water supplies, overhead hanging electricity wires, parking issues, air and noise pollution, etc. About that, residents complain a complete indifference from the Government who should intervene.

Then, financial issue must be considered. Indeed, many Old Delhi *havelis* owners don't have the money to afford works in their buildings. It was quite shocking when, during an interview, I got the following answer from a woman.

“We barely have money to give food to our children, how are we supposed to deal with repairs and interventions costs in our homes?”



Rubbish and overhead hanging cables.

Of course I did not have any answer for her, but I realised that I had to know more about tax incentives and concessional loans from the Authorities. I could not believe that the Municipalities or the other Agencies working on the conservation of heritage buildings did not consider any kind of economic assistance. I discovered that, on the paper, some tax benefits for private people who choose to preserve their built heritage shall be provided. In particular, I read that the Shahjahanabad Redevelopment Corporation (SRDC) realised a *Preliminary Project Report* looking for concessional loans for the Revitalisation of Shahjahanabad using funds from the Asian Development Bank.

More specifically, the report expects to allocate a “average concessional loan up to INR 10 million³⁶ to 400 notified heritage buildings so as to stimulate private investments for adaptive reuse of these buildings for conforming economic activities.

Assuming approximate expenditure of INR 500 million towards procurement façade and interior restoration of heritage building and infill construction to maintain visual integrity of the area.”³⁷

Even if some steps were taken, things then stopped.

As I have mentioned above, INTACH was the first organization to work on the valorisation of the historic cities and their built heritage. Moreover, while UNESCO recognizes more than 200 World Heritage Cities, the ASI has never recommended any Indian city, even if many of them could potentially be appropriate for that nomination, for comparable antiquity and historical value, for instance.

In 2012 the Government of India has sent the application to UNESCO to include Delhi's Imperial capital cities – New Delhi and Shahjahanabad in the “Tentative List” to be nominated as World Heritage Cities.

INTACH Delhi Chapter was called to prepare the dossier, in consultation with national and foreign professionals, finalised at the beginning of 2014.

36. It is equal to nearly 120.000 €.

37. SRDC, *Revitaliation of Shahjahanabad*, pp. 44-45.

During the 39th Session of the World Heritage Committee meeting, held in Germany at the end of June 2015, the nomination was withdrawn by the Ministry of External Affairs, without consulting the State Govt.

On the website of Hindustan Times newspaper, we can find an article of August 2015, where the journalist declares: “The Centre has not withdrawn the nomination of *Delhi’s Imperial Capital Cities* to the UNESCO World Heritage list but only requested the UNESCO Secretariat to postpone the nomination, said Union Culture Minister Mahesh Sharma.”³⁸

As we can easily imagine, this sudden decision left heritage experts disappointed. A.G. K. Menon, one of the Conservationist Architect who worked at the Nomination dossier, declared in 2017:

“Out of more than 220 World Heritage Cities, not a single one is in India. This is because our understanding of urban heritage does not exist.”

I have been looking for further information about reasons of this decision but only a few articles can be found online. One of them declares that the Ministry pulled back the proposal because it was considered “Anti-development”. Indeed, the nomination covered two main areas, Old Delhi and the so-called Lutyens’ Bungalow Zone (LBZ). This zone is considered a very valuable real estate and the builder lobby has a great influence in financing elections and this decision could be a way to return favours.

However, this choice made me think that Heritage and conservation are not considered relevant issues, or something to invest or to incentivise. The belief that the UNESCO tag could slow down or stop the growth of Delhi, according to my opinion, is quite superficial. Since financial aspects must be considered, being declared as a Heritage city would surely have effects on the Tourism. Indeed, as Menon declared during an interview: “Statistics show that a declared Heritage city brings in 2-3 times as much tourism. Taj Mahal and Humayun’s Tomb, both World Heritage Sites, are major attractions.”

If havelis today are falling down because of a total lack of interested by the different stakeholders, the UNESCO nomination might have been a chance to give them a new life.

Finally, I would remind that there are already some existing local rules that prevent the construction in some zones of Delhi, as LBZ and the Walled City, because they contain some “Heritage Zones”, as mentioned in the *Delhi’s Master Plan 2021*. This label recognises them as “an area, which has significant concentration, linkage or continuity of buildings, structures, groups or complexes united historically or aesthetically by plan or physical development.”

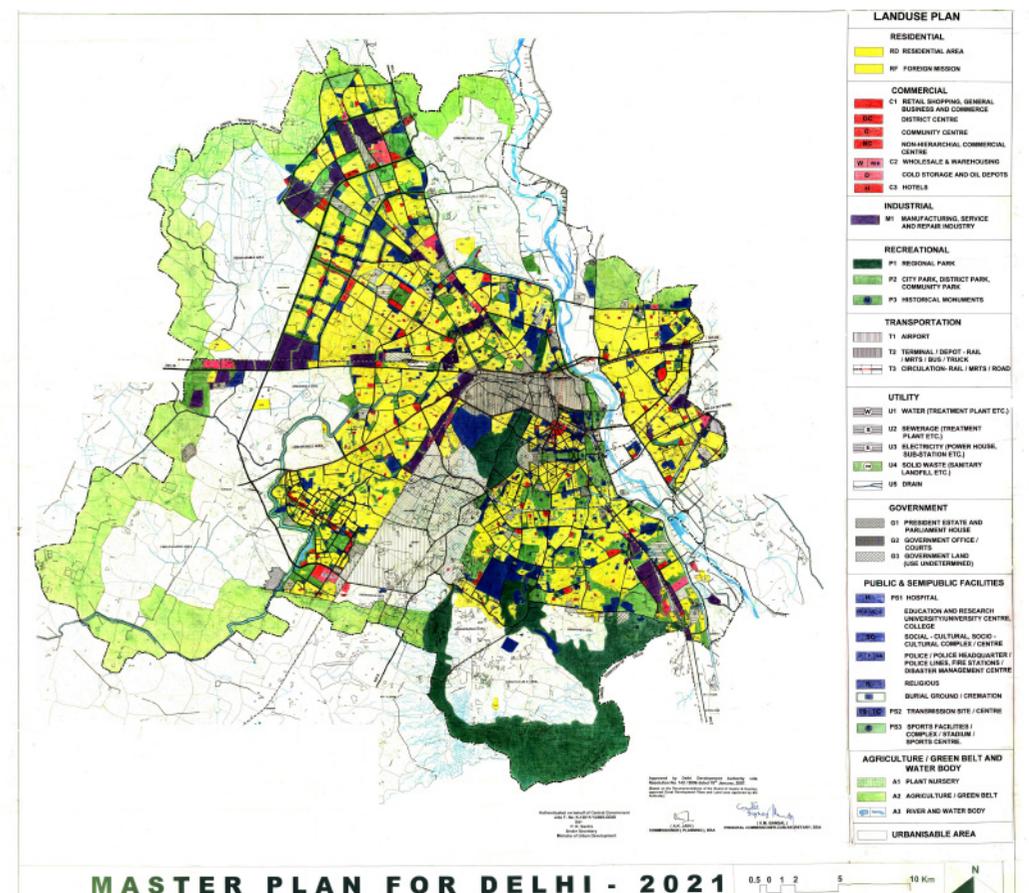
Let’s focus now on the reality of Shahjahanabad, to deeply understand the current situation and the planning for the

future of the Walled City given by the Master Plan. The Plan defines some “Special Areas”:

1. The Walled City;
2. The Walled City and extensions;
3. Karol Bagh (an area on the west of Old Delhi).

All of them have in common a mixed land use and similar built forms, like narrow circulation spaces and low-rise high-density developments, mainly used for residential, commercial and industrial reasons.

38. <https://www.hindustantimes.com/delhi-news/delhi-s-imperial-capital-cities-unesco-nomination-not-withdrawn/story>



Land use map - Master Plan for Delhi - 2021 (Image by DDA)

Moreover, these areas have already an established use and still an active economic role within the City.³⁹

The expected strategy for these areas would like to keep and develop the mix-use activities appropriately, giving some restrictions and regulations.

The main goal for this area is “revitalize the glory of the Walled City and its economic&tourism potential.”⁴⁰

So, to regenerate the Walled City, the Plan proposes “to regulate and shift noxious and hazardous wholesale trades and industrial activities from this area. Traditional areas in the Walled City need special treatment to conserve its heritage value while retaining the residential character.”⁴¹

Some interventions to restructure the street pattern in residential areas are proposed. For instance, 30-50m long streets shall have a minimum of 3m width and 30m long street should be at least 4.5m wide.

The Chapter 10 is intitled *Conservation of built heritage* . I have found it really interesting because it shows the principles and main features of the Walled City and underlines many issues that should urgently find tangible solutions. I will report an extract of the chapter:

“The built heritage of [Old]Delhi is an irreplaceable and non-renewable cultural resource. Besides being part of life for many, it has educational, recreational and major tourism

potential. It enhances Delhi’s environment, giving it identity and character. It encompasses culture, lifestyles, design, materials, engineering and architecture. The Heritage resources included symbols of successive civilizations and cities that came up over the millennia.”⁴²

As declared by the Plan, working on conservation should be focused on protection, nourishment and promotion of the built heritage by all citizens and transmitted to the future generation. We cannot think that the preservation and care of a culture is only a duty of the Municipality and politicians. Of course, laws and regulations are necessary, and politicians should recognise the values of the built heritage and incentivise the population. Indeed, I think communities’ involvement should be one of the first aim of any intervention in a Heritage area.

If we do not stimulate people to cooperate and make them aware of the relevance of keeping alive cultures, traditions, heritage buildings, etc, any reuse or renovation action would not bear fruits.

39. DDA, *Master Plan of Delhi - 2021*, p. 26.

40. *ibid*, p. 52

41. *ibid*, p 27

42. *ibid*, p. 101

As architects, we should demonstrate in a tangible way how Heritage does not mean only “past” and “history”, and it should not be only referred to famous landmarks. Moreover, we should show how the heritage value of an area, with its buildings, facades, streets can give benefits to the whole community, and not just a small elite. It is important to maintain an integrated approach between human and economic development, travelling together on the same direction. For example, nowadays in India Schools of Architecture and Planning include “Conservation” as a central subject in their curricula. Documentation and reports of Indian heritage has expanded, and many conservationist architects and professionals are greatly working

to preserve and conserve the Indian cultural heritage. As mentioned above, the management of Heritage is not only a political or financial issue. That’s why it should involve all the different stakeholders, from the Municipalities to professionals, from politicians to local communities.

Some projects involving the citizens have already taken place in the last years, organized by the School of Planning and Architecture of New Delhi, INTACH, other smaller NGOs or professionals. I would like to mention an event organized by a Conservationist Architect, called Aishwarya Tipnis, and her studio in 2014. The “Lime Workshop” was initially planned as a small event, but then it had a great affluence.



Picture of the *Lime Workshop* in 2014. (Photo by A. Tipnis)

Involving more than 100 architecture students. It was organized with a lecture, followed by a practical demonstration and hands-on work to make lime mortar. So, young people had the chance to get information about this traditional material, still used, and be practically involved in the process.

During my staying at DIC office, I have been involved in the organization of a Workshop whose aim was showing residents how to use properly chemicals for restoration.

I would like to focus the attention to the conservation and reuse of *havelis*, referring to three specific examples I came into contact. The first case is the most famous in Shahjahanabad. Indeed, looking for information about “*havelis* in Old Delhi” on Google, most of the references regard this specific site. I am going to explain the history and the intervention, but also some critical aspects.

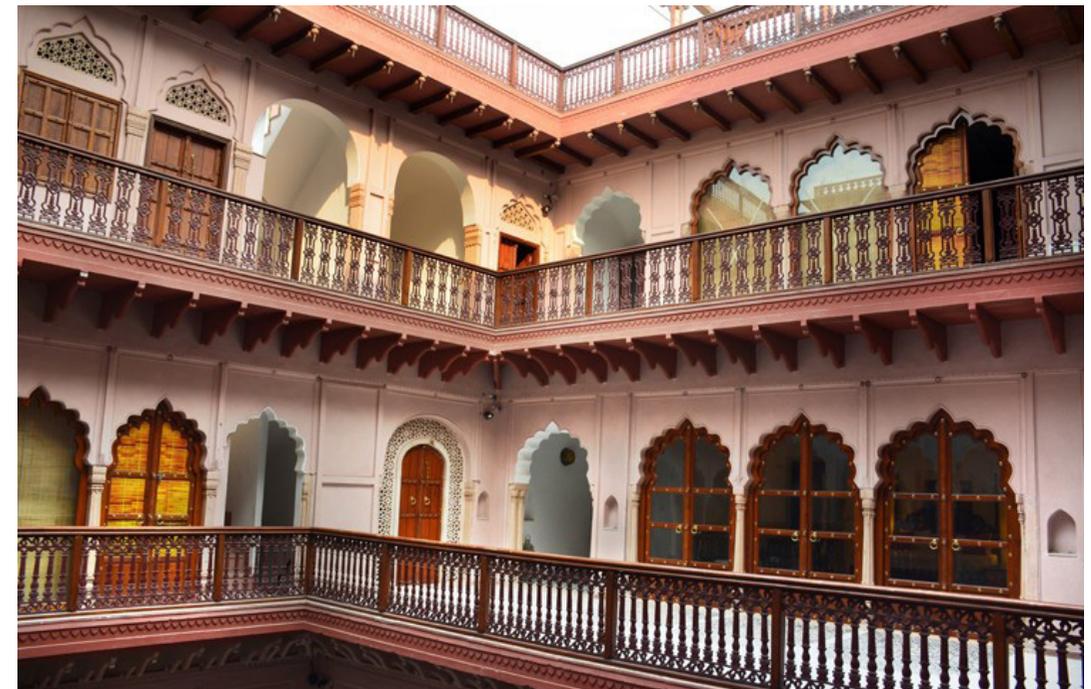
Goel Saab ki Haveli, popularly known as **Haveli Dharampura**, was built in 1887. Originally it had 60 rooms, surrounding the main central courtyard on three stories. The ground floor is characterised by rooms designed for commercial activities on the street, while all the residential spaces are inside, after climbing few steps and going through the beautifully decorated gateway. Before restoration, it had all the traditional features of *havelis*, with a mix of medieval and contemporary architecture, decorative patterns and details on arches, beautiful floral carving on the walls and wooden doors. Until 2009 this *haveli* was just another dilapidated traditional mansion in Shahjahanabad, as many others around Chandni Chowk

lanes or Jama Masjid. Four years before a politician, called Vijay Goel, bought this property from a Jain family, but he did not touch the building for a while. Then in 2008 he chose to intervene and restore the *haveli*. It took six years to renovate and make a 13-rooms “heritage hotel”. On the website of the new hotel we can read: “While restoring the *haveli*, top priority was given to retaining the original character and maintenance at the same time. All conservation work followed basic principles such as minimum intervention in the historic fabric and respect historic evidences adopted in various international charters for the conservation of heritage sites and monuments. All new repair followed traditional methods of indenting, replacing damaged stone with new in same material with same carving and refitting undamaged stone in its original location.”⁴³

The pictures on the right show the entity of the intervention and the previous status of the building, in 2008, and today. (Photos by Dharampura Haveli website).

This example is widely known by the people of Old Delhi and the renovation was a big chance to make people aware of the bad conditions of *havelis* and the urgent need of action.

43. <http://www.havelidharampura.com/restoration-of-haveli/>



Moreover, it was not just a private who chose to intervene, but a politician. So, the impact was certainly broader and aware citizens all around Delhi. At the same time, some debates took place as consequence of this intervention. I will share two main points of view I came into contact during my experience in Delhi: one belongs to the local community I met during my interviews around *Dharampura moballa*, the neighbourhood where the new hotel is. The second one comes from my professional involvement at the Department of Architectural Conservation at School of Planning and Architecture. I have asked 30 residents to imagine a new function to give *havelis* a new life, suggesting four different conversions: a Heritage center, a Museum, a Craft workshop and a Hotel. More than 50% of the people, referring to the hotel function, told me: "Not at all". Asking further explanations, I realized that the neighbourhood is mainly lived by Jain people, who are vegetarian. So, the first issue is that a restaurant for foreigners means non-vegetarian food and alcohol drinks around the area. Moreover, some residents complained the fact that the politician Vijay Goel actually did not invest his own money but public funds to renovate his individual building, instead of intervening on wider urban issue. About that, I could not find further information or proofs. On the other hand, studying and working at DIC office, I had experienced what conservation and valorisation of built heritage mean for Indian professionals, like architects, teachers and students. Among all my researches and talks, I have always felt a common characteristic: a deep attention to the inner value of the site, with its multi-layered historical background. It means considera-

tion to materials and traditional construction systems.

If we intervene with new materials, we must pay attention to all the possible consequences.

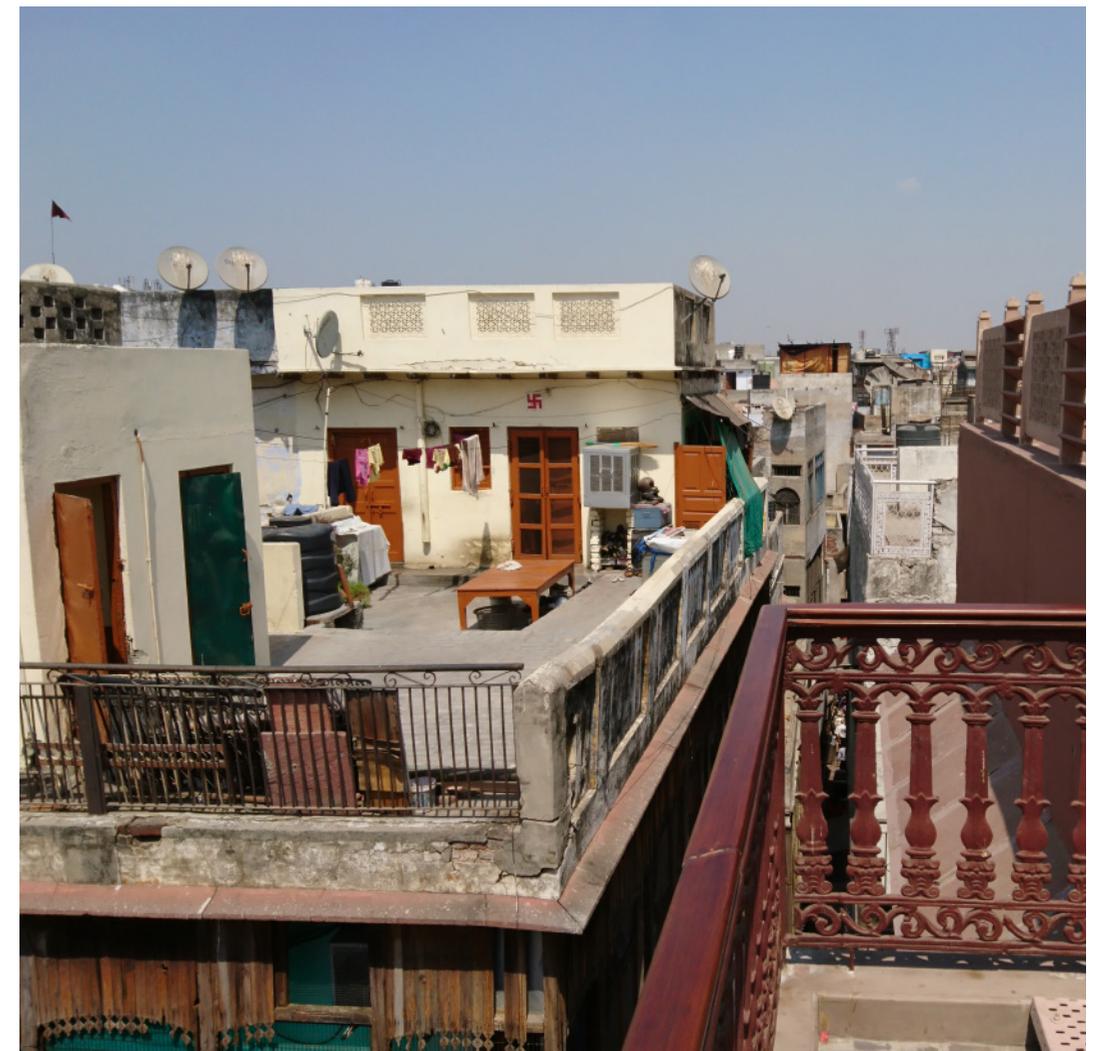
For example, cement-based mortars are today generally used in new constructions. If they are applied to historical buildings - as in the case of *Dharampura Haveli* renovation - they might have bad effects, because local mansions are traditionally built with organic materials. The combination of these materials could make walls not breathable as they were originally, and consequences might affect the indoor climate comfort, so that further electrical supplies, like AC systems, are required.

Moreover, new uses for *havelis* should consider all the main architectural features, like the wide variety of spaces, from courtyards to terraces, from larger open spaces to smaller inner rooms. So, if we consider the modern standards requested nowadays to convert buildings to hotels, they can be very destructive for the essential characteristics of the structures.

According to my opinion, renovation and regeneration of *havelis* does not mean reconstruction of the original version. To give a new life to those mansions, valorisation of traditional features must be a prerogative, but without re-making what does not exist anymore, as it looked like.

Today, entering in the *Dharampura Haveli*, we can admire the beauty and the splendour of a *haveli* as it might be 200 years ago. At the same time, we are not able to recognise the authentic elements that have been kept, those that have been replaced and the new one added recently, because they all look the same, often covered by plasters.

So, I would conclude saying that I consider this intervention such a relevant example because, despite some arguable approaches, it raised awareness and made people talk about *havelis* in Old Delhi.



View on the surroundings, from the terrace of *Dharampura Haveli*.

The second case I heard of, it's the renovation of a private *haveli*, called **Seth Ram Lal Khemka Haveli**. Located close to Kashmere Gate, north of Old Delhi, it dates to the 1850s. The current family purchased it in 1920 and then, in 2010, the present owner bought out his cousin and renovate is, as private house. Since he belongs to a typical Indian joint family, he chose to arrange the house to accommodate all their sons and families.

In May 2010, the owner involved the Conservationist Architect Aishwarya Tipnis for the intervention. At that time, he was not aware that his building belonged the *Heritage List* and his request was just to "modernise"

his mansion. Ms Tipnis soon realised that the *haveli* had much more potential to preserve and highlight to make a charming "heritage home". Adopting a *Conservation Plan Approach*, with all the measured drawings and analyses of the building evolutions, and with the permissions from all the Authorities involved, the works began at the end of 2013, until 2016.⁴⁴ On the right (top) we can see a picture during works. (Photo by A. Tipnis) During my interview to the Architect, she shared some issues she had to deal with: for example, her client wanted to use cement because "more durable and strong.". It took a while, but she finally convinced him that the best solution was the lime mortar.

I consider this case quite interesting because it shows how a private, through the help of professional, can be involved into the "Heritage process" and, eventually, can be proud of the value of his own building, becoming an example for his community.

The last example is called **The Walled City Cafe**, placed close to Jama Masjid. The intervention goal was repairing and giving a new life to a 200-years old *haveli*, that has been vacant for almost 12 years. Keeping the spaces and the main features, the family chose to open a Cafe. When they could not find or afford the use of traditional elements, they replaced with new ones. For instance, "some Belgian glasses had to be replaced but we could not get the exact ones in India. Two of the panels are original and with the rest, we kept the colour scheme intact." declared

the owner.⁴⁵

I chose to mention this case because it is the first *haveli* reused as Cafe and lounge in Old Delhi, and it demonstrates how it can be worthy intervene on *havelis*, even if with little resources.

On the bottom right, the Cafe at dinner time.

44. <http://thehaveliproject.blogspot.com>

45. Adila Matra, *Why you should visit this unique haveli-turned-cafe in Delhi*, *Indiatoday*, 8th July 2018. <https://www.indiatoday.in/lifestyle/what-s-hot/story/why-you-should-visit-this-unique-haveli-turned-cafe-in-delhi-1280552-2018-07-08>



As we can perceive from the examples above, an important change in the last decades is that protection and conservation of cultural heritage is not restricted to government affairs anymore.

NGOs, activists, professionals and ordinary citizens have started getting involved to fight for safeguarding their heritage, from decay and demolition.

When common people feel, eventually, they are losing their own identity and roots, might start to react.

INTACH is doing an important job, working with the different stakeholders, involving citizens in its activities, talking about heritage value to everyone, and not only among professionals and politicians.

Since I have already mentioned some of the actors who today are concerned with the protection of the built heritage in Delhi, like INTACH and the ASI, I would like to refer to other relevant realities working on this field and their duties.

GNCT Delhi Department of Archaeology & Museums

It works on preservation and conservation of those monuments excluded by the action of the ASI.

They do surveys, documentation, acquisitions and protections of monuments, and archaeological excavations and

explorations.

It manages the Museums of Archaeology in Delhi and it has undertaken restoration works on private monuments and historic buildings. Moreover, it collaborates with local authorities to regulate e restrict the development areas around the protected zone of each State monument.

D.D.A. (Delhi Development Authority)

It is concerned with the preparation of Master Plans and Zonal Plans, which contain heritage conservation prescription and regulations.

It has expressed and financed the application of proposals for designated heritage resources, in collaboration with INTACH and other organizations.

M.C.D. (Municipal Corporation of Delhi)

It has been working on implementation of drawings of Shahjahanabad to have an accurate base to formulate all recommendations necessary for the conservation and regeneration of the Walled City.

In collaboration with other organizations, it is working to demarcate the properties placed within the “prohibited areas”, to protect monuments of national relevance in MCD areas.

D.U.A.C. (Delhi Urban Areas Commission)

It works on recommendations for preservation and development of the “aesthetic quality of urban and environmental design within Dehi”. It provides guidelines to local bodies for all projects regarding the skyline of the city, including those areas surrounding the

historical areas or buildings. Moreover, it has a restricted advisory role and can reject non-conforming projects.

C.P.W.D. (Central Public Works Development)

It has responsibilities for the conservation and maintenance of government owned historic buildings in Delhi. Its offices own over 70.000 drawings made by Lutyens and other architects for urban planning and buildings within the New Delhi area.

H.C.C. (Heritage Conservation Committee)

It is the Commission to consult to grant any permission for development, engineering interventions, alterations, additions, repairs, renovations, partial or total demolition of any part of a listed building, natural site or area.

Aga Khan Foundation for Culture

It is part of the Aga Khan Development network and is concerned with contemporary design, community empowerment and development, reuse, restoration and conservation of areas as landscapes.

Delhi Waqf Board

It one of the most relevant property owners in the historically important areas like Old Delhi and several localities, including mosques, tombs, green areas, commercial and residential properties.⁴⁶

See the Attachments at the end for a more complete list of authorities, agencies, professionals and NGO'S, made by the Department of Architectural Conservation (SPA).

46. CPWD, *Handbook of Conservation*, pp. 51-56.



DHARAMPURA MOHALLA

This is one of the most prosperous areas of the Old City. It is mostly a residential area, characterised by some commercial streets and small industries can be found everywhere, hidden in small dark rooms if we follow the narrow lanes in the inner parts of the *mohalla*.

Historically it belonged to a wider area of the Walled City, known as *Dariba*, whose jurisdiction is marked out in orange in the Map at p. 22 and p. 31, starting from Jama Masjid boundaries and spreading north. It was founded during Shah Jahan's time, when the emperor invited the Jain merchants to establish their business within the Walled City. So, *Dariba* accommodated many Jain families, with their activities, defined as *kothi*, residential buildings, as *havelis*, and commercial complexes, called *katras*. To return the favour and to keep an eye on them, the Emperor erected the famous temple Digambar Jain Lal Mandir in front of his Royal Palace.

The name of this area is due to his main landmark, an important market called *Dariba*

Bazaar, today known as *Kinari Bazaar*, famous in the early XIX century for selling gold laces, gold and silver fabrics and spangles, as referred by the historian Swapna Liddle. This part of the city had always been characterised by specialist bazaars and shops where artisans worked and sold their goods. Moreover, there were jewellers, shops of cloths, fireworks makers, cloth printers and many other fascinating activities took place in *Dariba*.

Despite of a majority of Jain and Hindu merchants who lived and owned properties, *Dariba* was not an exclusive area to them.

There has always been a very mixed population, important feature of this locality, as we can still notice today by the different worship places and residences.

During Shah Jahan's time, one of the architects of the Red Fort, called Ustad Hamid, had erected his marvellous *haveli* in *Dariba*, 100 meters away from the North gate of Jama Masjid. Unfortunately, by the XIX century the mansion disappeared, and only the main gate survived. That's the reason why the surroundings are still known by his name, as *Ustad Hamid ka Kucha*. During the history some transformations took place in this area. The most important happened after the Revolt of 1857, when the British Raj chose to demolish an area

(covering more than 400 sqm) close to the Red Fort to provide a security camp for the army.

During the second half of the XIX century, *Dariba* was one of the localities affected by the pressure of growing population, most evident in the south areas of Chandni Chowk. Poor transport facilities kept commerce and banking activities confined to Chandni Chowk, and only from 1890s traders and shopkeepers started to move out to the Western suburbs.

After moving the capital to Delhi, in 1912,



People playing cricket at *Ustad Hamid ka Kucha* on Sundays.

land value in Chandni Chowk was very high in comparison to many parts of the Walled City and its suburbs. In this historical phase, many lands and properties surrounding Chandni Chowk were given back to Hindu and Jain merchants and bankers as they were during Shah Jahan's days. At the same time many houses and *havelis*, which had belonged to Muslim nobles, were purchased by rich Hindus and Jains.

Eventually, in the late XIX and early XX centuries both old families and Marwari immigrants clustered in this area, always characterised by a wide heterogeneity of population.

***Dharam* means religion and *pura* means neighbourhood.**

The name is easily explained by the variety of religions that have always been in this area. Mentioned in several documents of the XVIII-XIX centuries, it is located south of Kinari Bazaar and on the east side of Maliwara *moballa*. It preserves its largely residential character with lanes where we can still see plenty of *havelis* with their beautiful ornate gateways. Many of them accommodate commercial activities, especially on the ground floor, but a substantial amount of *havelis* has not been readapted. As I have already mentioned, due to an uncontrolled development and a lack of urban plans, some *havelis* are vacant, few of them have recently disappeared, due to collapse or demolition, and many are in bad conditions.

Dharampura is famous for its jewellery spread around Kinari Bazaar.

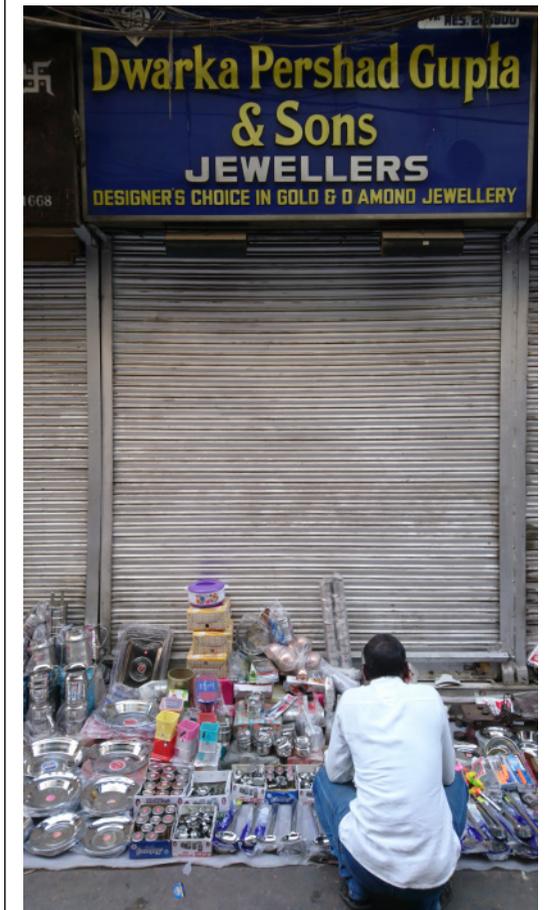
Kinari means “trimming” or “edging” and this is the place where people come from every part of Delhi to purchase every kind of jewel or items, like bangles or beads. Moreover, this market is famous for wedding accessories. Indeed, people is used to say: “No wedding is ready without a trip to Kinari Bazaar for some bling.”

Another important landmark is placed on the corner of Chandni Chowk and it is called “Old and famous jalebiwala”: it is a sweet shop, famous for its “jalebis”, made by deep-frying flour batter, characterised by a spiral shape, which is then soaked in sugar syrup.

Between Jama Masjid and Kinari Bazaar there is also a small area, called Chah Rahat, characterised by many shops selling several typologies of handcrafts. Then, we can find Chawri Bazaar, famous for paper products. Many Jain temples are still recognizable around Dharampura, thanks to their wealthy ornate facades and large sizes. It is interesting to notice that, despite the main shrine is usually on the first floor, the ground floor is rarely used for commercial activities. They generally have a very detailed gate, traditionally with stone-carvings decorations, a large courtyard and the shrine rooms have painted ceiling. If we remove our shoes before entering, we can visit them and still appreciate late-Mughal decorative features like ribbed domes, the so-called *bangla* roofs, and elaborated columns. Moreover, Jain tem-

ples are not only worship places but act also as interaction area for the Jain community, becoming cultural node for Jain festivals and daily rituals.

With the Zonal Development Plan made by the DDA in 1999, Dharampura is recognized as part of the Sub-zone A-23, including Malliwada (or Maliwara) and Kinari Bazaar. Through this document we notice another important issue of the *moballa*. Main roads width is usually around 4-6 meters, and many narrow streets are less than 3 meters in width. It means that most of the streets are considered “pedestrian” friendly, even if



Street market, when shops are closed, on Sundays.

motorbikes and scooters are allowed as well. According to my experience, no-trespassing signs do not exist in Old Delhi, so vehicles go everywhere they can, until they get stuck in the narrow lanes. Sometimes I saw the Police on the street corners to regulate the traffic, during the weekend days, for example, avoiding motor vehicles to access some parts of the city. At the same time, the concept of “pedestrian” is quite loose, since motorbikes and scooter are usually allowed to access narrow lanes.

An important recent development for the whole Old Delhi regards the arrival of the Delhi Metro, with three lines crossing the Walled City and several stations spread within the historical centre. It seems it is helping decrease the traffic congestion and parking issue, connecting some important

landmarks of the old city. The closest stations for people living in Dharampura are Jama Masjid or Lal Quila to reach the Violet Line, Chawri Bazaar to get on the Yellow line, that are at walkable distance from the neighbourhood.

Due to the lack of recent information about this *mohalla*, neither books or online articles, I chose to look for further details about the neighbourhood reality through some interviews to the local community. Since most of the people living/working in Old Delhi rather speak English, I had to ask for some help to Jithin and Damini, two of my colleagues at DIC, who translated the questionnaire and interviewed people with me. It was a great experience, even if I could not be always part of the dialogues. We had the chance to ask people about needs



Horse-drawn carts are still used to carry goods around the city.



Lane of Kinari Bazaar.

and problems of the area, and if any recent transformation in Old Delhi had good or bad impacts on their daily lives; then we talked about heritage and *havelis*, to better understand if they were aware of the issues regarding the preservation, conservation and reuse of this buildings, and their opinions about.

It was important to meet and talk with residents, because most of them shared their sense of belonging to the place.

For example, talking with old men or women, they showed their nostalgic feelings and memories of the beautiful Old Delhi it was 50 years ago.

The bond people have with the mohalla made them stay here during the years, despite of many urban issues and living conditions problems.

Interviews have been an important tool to discover the urban reality and some of the matters can be find in the following graphic.



"Since I have always lived here, my roots are here. I feel attached to my neighbourhood. I have everything I need, also great food."

Mr. Gopal - 81 y.o. - Govt retired

"Streets are too narrow so that rickshaws can't access everywhere. It means less clients and tourists."

Mrs. Neelima- 60 y.o. - general store owner

"Scooters and motorbikes go everywhere and cause a lot of noise pollution. Solution to solve traffic congestion inside the mohal-las should be found soon."

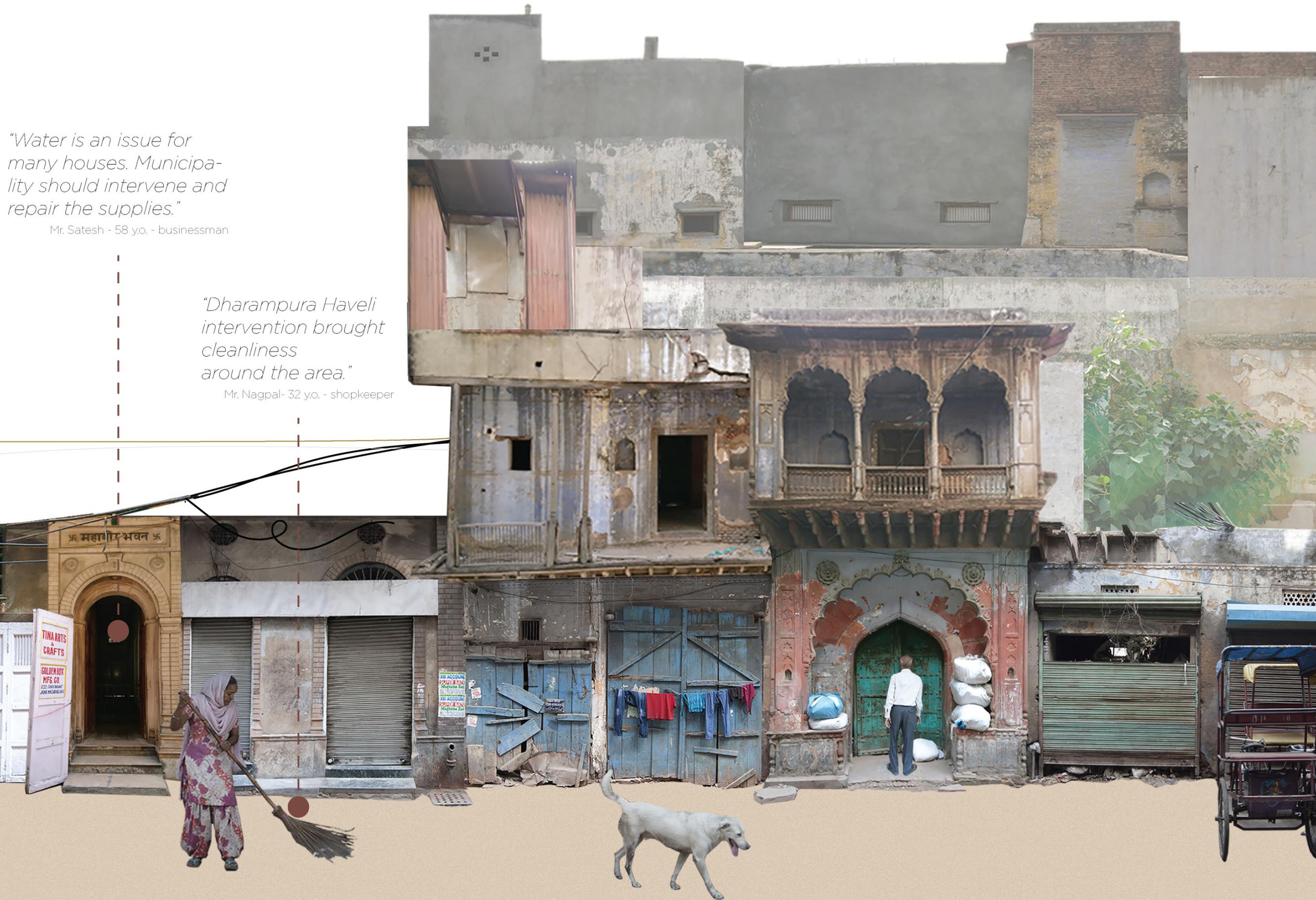
Mrs. Nisha - 53 y.o. - shopkeeper and Mrs Pratima - 49 y.o. - tailor

"Water is an issue for many houses. Municipality should intervene and repair the supplies."

Mr. Satish - 58 y.o. - businessman

"Dharampura Haveli intervention brought cleanliness around the area."

Mr. Nagpal- 32 y.o. - shopkeeper



"Streets are too narrow so that rickshaws can't access everywhere. It means less clients and tourists."

Mrs. Neelima- 60 y.o. - general store owner

"People should repair and maintain havelis, but many residents can't afford it for economic reasons. Municipality should intervene."

Mr. Sunil - 52 y.o. - shopkeeper

"Old Delhi needs infrastructures and facilities like schools or hospitals."

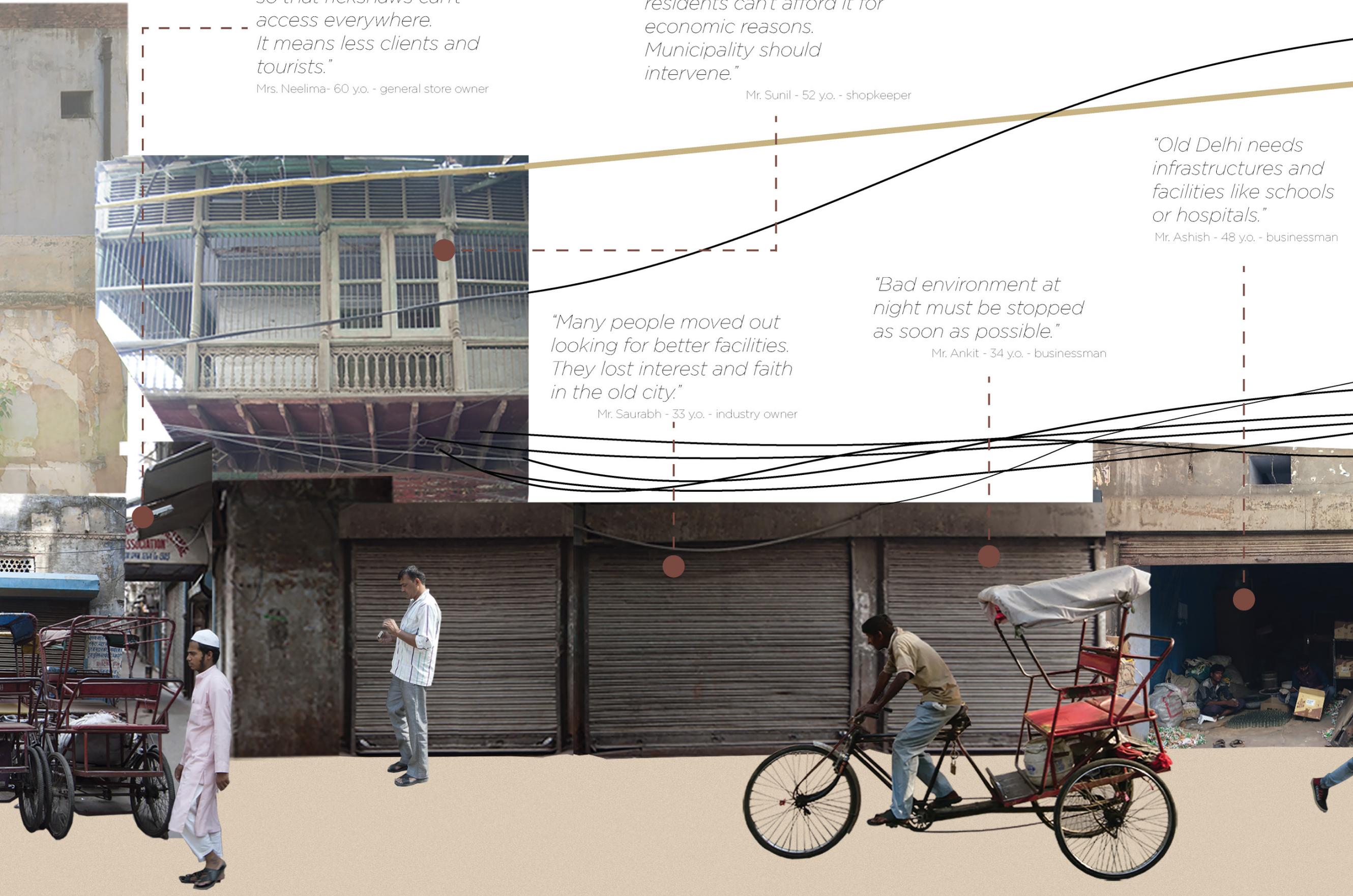
Mr. Ashish - 48 y.o. - businessman

"Bad environment at night must be stopped as soon as possible."

Mr. Ankit - 34 y.o. - businessman

"Many people moved out looking for better facilities. They lost interest and faith in the old city."

Mr. Saurabh - 33 y.o. - industry owner



"Bad street lighting and lack of safety are two important problems of the area."

Mr. Ankur - 31 yo. - shopkeeper

"I was born here. I feel a sense of brotherhood living with all my close friends, relatives and the community."

Mr. Anupam- 42 yo. - manufacturer

"Modern technologies are missing in Old Delhi. They could attract especially young generations to stay."

Mr. Varun - 21 yo. - teacher

"There is huge lack of safety due to all these electrical wires. Most of them doesn't work anymore but nobody remove them!"

Mr. Ankur - 31 yo. - shopkeeper



"Due to lack of consensus between tenants and owners, havelis often are not repaired."

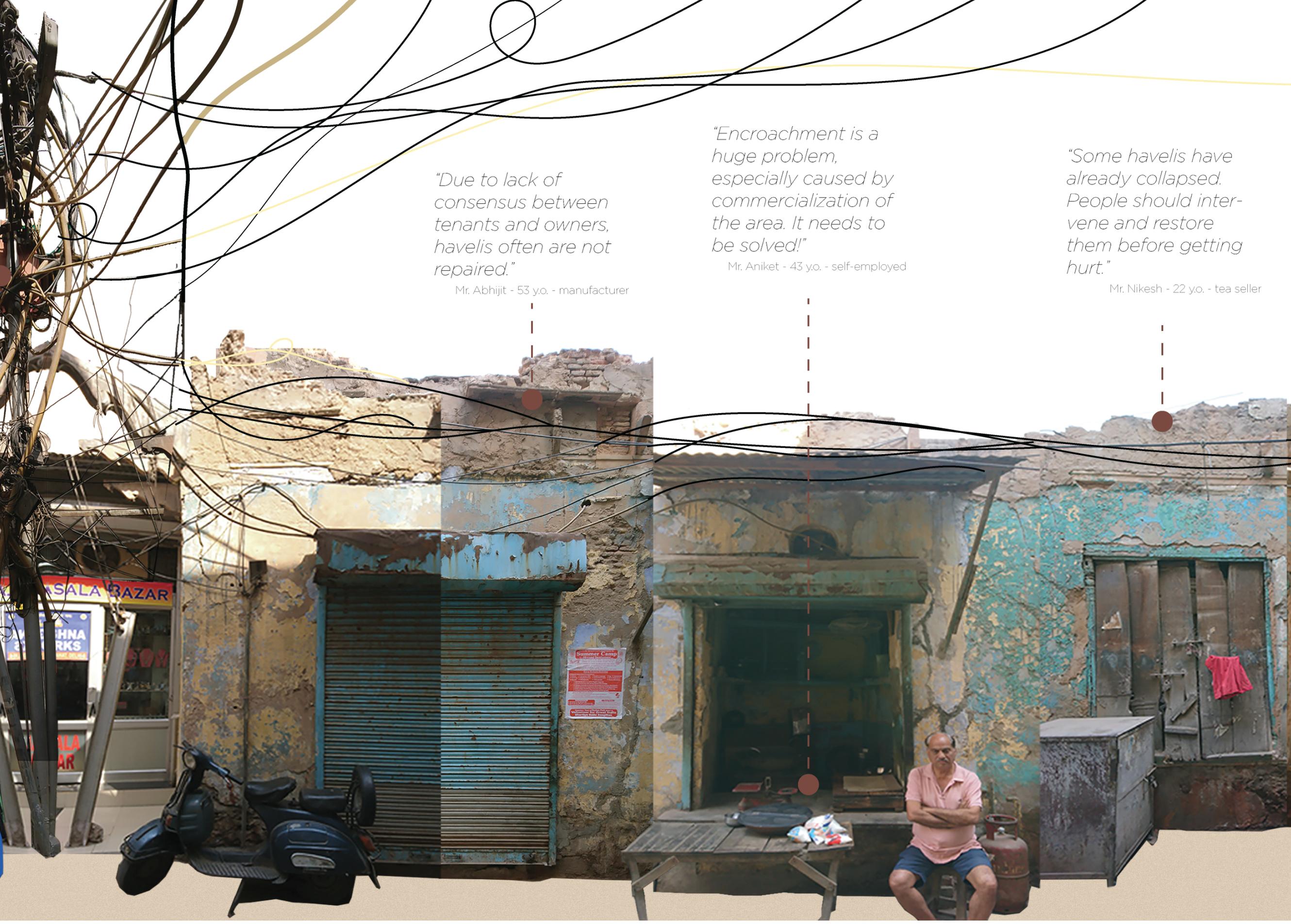
Mr. Abhijit - 53 y.o. - manufacturer

"Encroachment is a huge problem, especially caused by commercialization of the area. It needs to be solved!"

Mr. Aniket - 43 y.o. - self-employed

"Some havelis have already collapsed. People should intervene and restore them before getting hurt."

Mr. Nikesh - 22 y.o. - tea seller



“Haveli 1225 is in ruins but retains an impressive gateway with *jharokha*. The gateway is relatively simple in its ornamentation and has a foliated arch dalan opening with floral mouldings defining the foliations, spandrels, apex and the cornice band. It has a recessed pointed arch doorway with the original timber door intact. The *jharokha* above has three arches with wrought iron railings.”⁴⁷

The first time I saw this *haveli*, I thought it was completely abandoned since the main door was locked, and cars, scooters and rickshaws were parked in front of the main gate. I didn't know yet there was a secondary entrance on the side, a narrow road – 2 meters wide. Here, the wooden door was completely open and, followed by my colleague Jithin, who helped me later for the survey, I went inside and reached the first floor, where there was a balcony running around the main courtyard, placed on the ground floor.

I immediately fell in love with this place. I could glimpse some beautiful arches on the ground floor, that was completely abandoned and in an evident status of decay.

Those parameters I had in mind regarding the choice of the site were followed: a wide courtyard, surrounded by a whole empty portion, placed on the ground floor. Then, many original elements could still be easily recognised.

I asked residents the permission to survey the buildings, explaining the reasons of my work. At the beginning everyone seemed quite happy of my research and kindly invited me to see also the flats and the workshop.

Unfortunately, it was not always easy to access all the parts of the *haveli*.

Indeed, since the ground was vacant, it was considered not totally safe and the owner of the small factory denied me to go downstairs. So, we ask professor Chaturvedi to write a letter saying that residents or owners would not have any responsibility if something happened to me or my colleagues. It worked, for a while, but soon after, I realized that local people were not so happy to have me going around their building, so we chose to collect all the measures and photographic documentation as quickly as possible. I remember the last time I went

47. This description is extracted by an unpublished volume about all the listed *havelis*, made by INTACH.



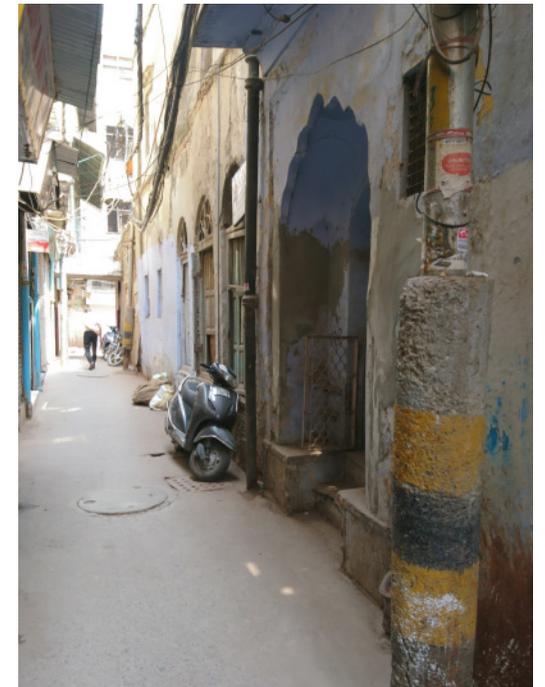
there: it was lunch time, sun was shining and there were around 45° C: I took more than 1500 pictures to be sure I would have enough images of all the hidden spots and details. Surveying the *haveli* needed time, since I could not access all the rooms, ground floor was full of rubbish and I did not have all those tools necessary for survey. So, through drawings and measuring tape, I started my work and analysis of the *haveli*.

On the first floor, walls seemed painted recently, with a bright pink surface. Here, on both main sides of the *haveli*, some people live. One 13 sqm flat, with the bathroom placed on the balcony, is occupied by an old lady. On the other side, a 4-members family is staying in a 24 sqm apartment.

On the west, in opposition to the front side, a small pipe making factory is placed. The last floor accommodates terraces running around the main courtyard on the ground floor and around the smaller ones, located on the first floor. Here few rooms have been built later, probably as storages. At the beginning the general conditions of the *haveli* seemed not too bad: indeed the areas where people work and live show some kind of maintenance and better status. Once I went to the ground floor and to the vacant portion of the first floor, I realized that the current situation was much worse. Indeed, this part of the building, where a warehouse was until 2000-2003, was in a evident status of decay, full of rubbish and some part were already collapsed, as a wall along the staircases, or two slabs.





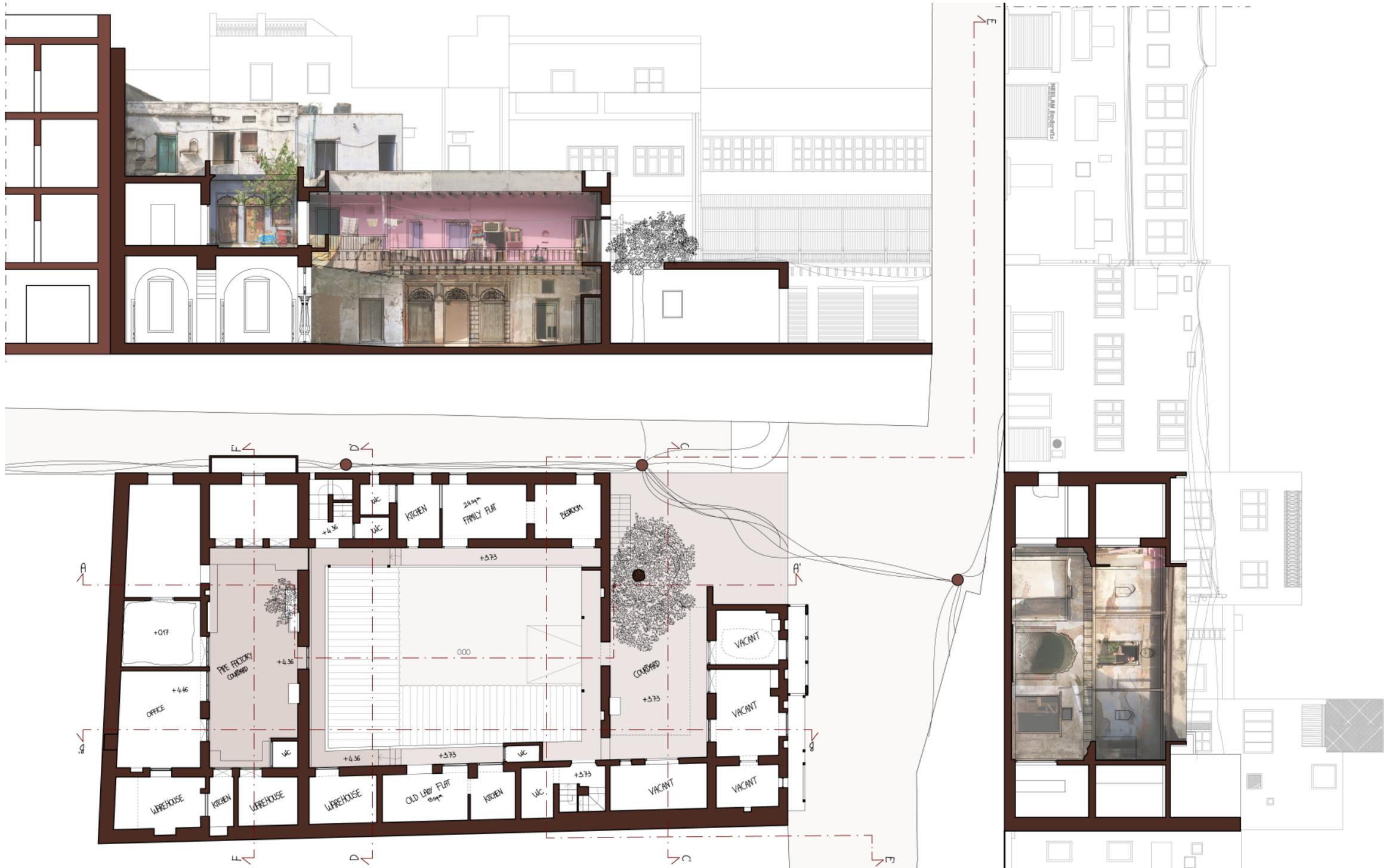




Ground floor plan - scale 1:200



Front elevation - scale 1:200



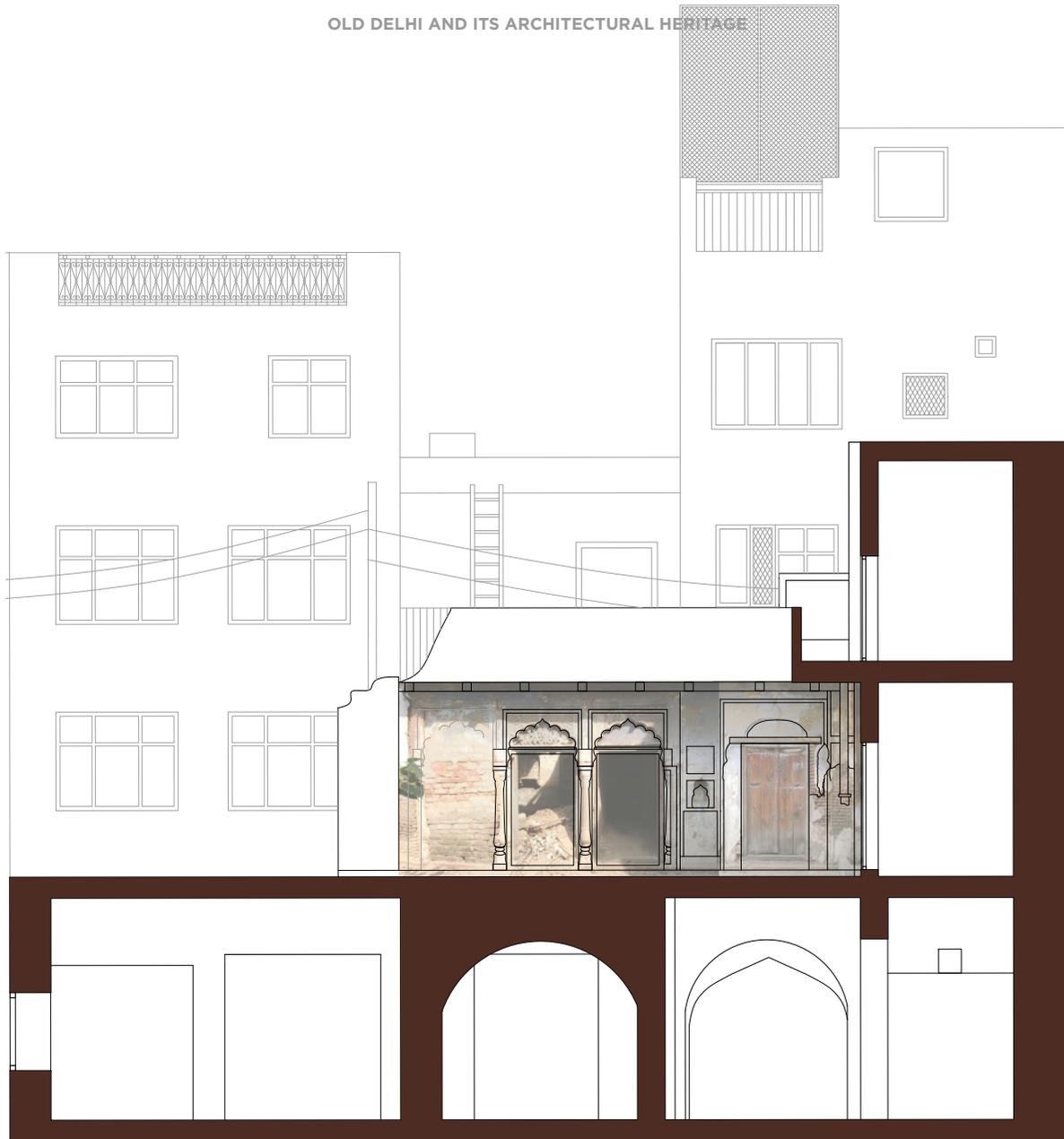
First floor plan, section A-A' and section E-E' - scale 1:200



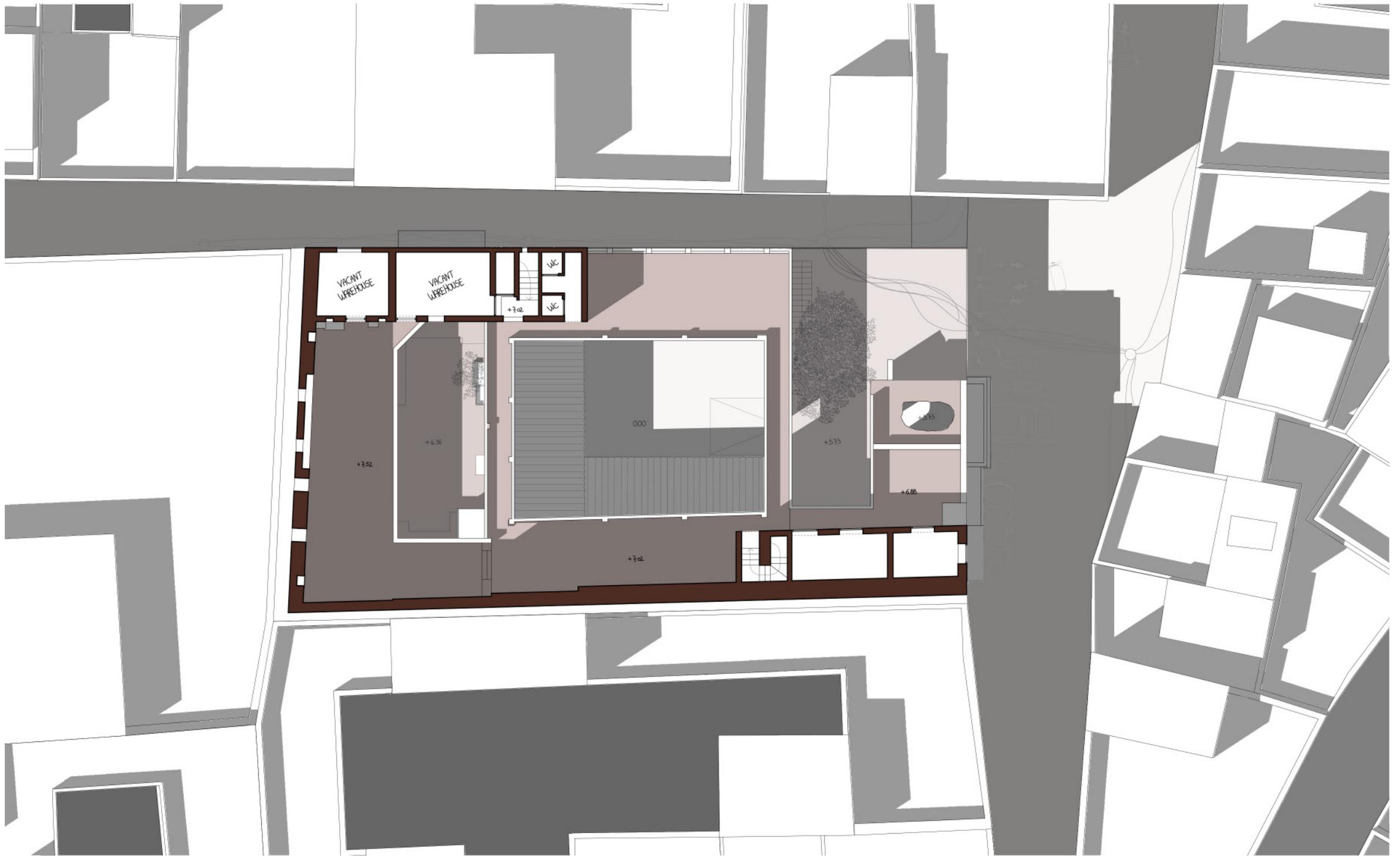
Section B-B' - scale 1:100



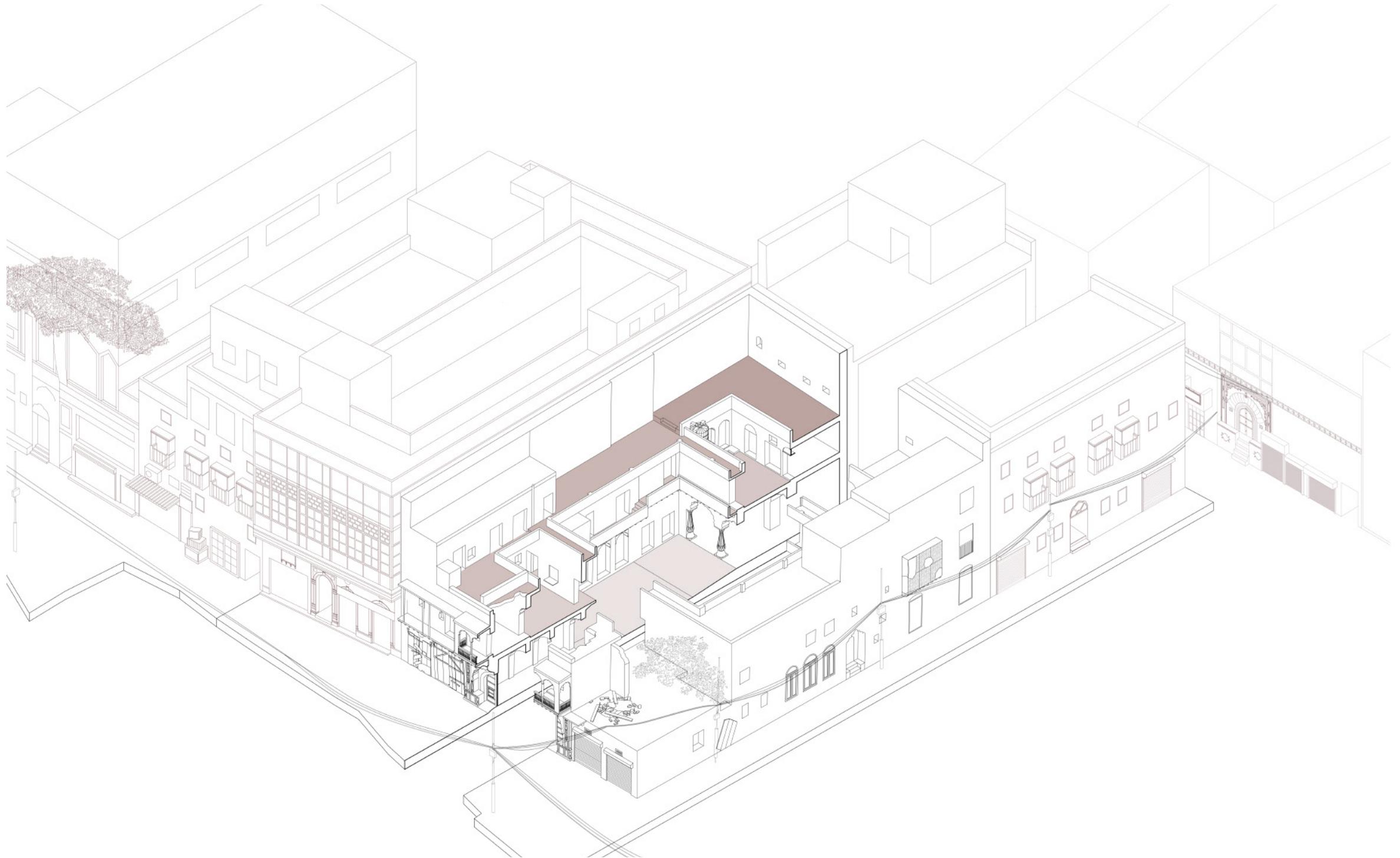
Section D-D' - scale 1:100



Section C-C' - scale 1:100



Second floor plan - scale 1:200



Exploded axonometry of the Haveli 1225.

RETHINK HERITAGE

Since the first times I went to Old Delhi, I could see beauty and valuable architectural elements around the mohallas. Then, talking with residents, I realized that usually people had interest at saving, repairing or giving new life to *havelis*, but they never mention the word “heritage” in their talks. If me or my colleagues tried to use this word, people generally get scared because they know Government put many *havelis* in the so-called “Heritage List” and for most of them it means that they cannot do anything in their houses, neither paint or make any change. Since they were not involved in the process of Listing, they were just forced to accept it, without sometimes really understanding.

On the other hand, I met lots of people who really care about *havelis* and their heritage value: professionals, architects, historians, etc who are working to save them. They usually live and work in different parts of Delhi, not often close to Shahjahanabad. This fact surprised me a lot, because I was expecting to find many realities working on *havelis* and heritage in Old Delhi, rather than spread far away.

So, thanks to my experience, based on visits on site, talks with residents, *havelis* tenants, workers (from doctors to tailors, from shopkeepers to businessmen), I realised the need of RETHINKing HERITAGE, since it looks like this issue involves people who don't know the real meaning of that, or they don't have those tools useful to deal with it, and on the other hand, there are plenty of experts working on that, who are placed far from the reality.

Since there an urgent need to make owners, tenants and everyone in the history city aware of the current problems, I think that is would be fundamentals starting from here, within Shahjahanabad.

Moreover, I realized how important is spending time with people if you want them feel comfortable and aware of something, so that they can feel involved. So, for instance, to work on heritage and havelis, making a strong bond between local communities and professionals as Conservationist Architects, the best way would be staying within the Walled City. That's why, since I was looking for a way to reuse and revitalise *havelis*, my first reflections for the future of my site included a so-called "Heritage Building Centre" where:

- people could work on Heritage and conservation
- everyone could go to learn and share knowledge about tools, materials, maintenance, history of *havelis*, etc.
- people could meet and build network among all the stakeholders - from local people to professionals.

Several ideas came to my mind during my staying in Delhi. For example I also thought to bring back the original use of *havelis*: a mix of public and private use, with a residential portion on the upper floors and some commercial activities on the ground floor. Since commercialization is a problem in Old Delhi and the surroundings are full of small shops selling every kind of good, I did not want to "commercialize" once more this part of the city. At the same time, I needed to find something that could give income to local residents and be attractive for potential investors.

Asking for advice to prof. Chaturvedi she suggested not to reintroduce the residence in my *haveli*, since most of the people would not move to an *haveli* nowadays, for all those

reasons regarding the historic city I have mentioned above, from lack of facilities, to traffic problems, from pollution to water supply issue, and so on. Studying the context and questioning myself about the intervention, I chose to plan it not as a whole transformation where the building would be totally closed for a long time, but step by step with small or medium interventions, to keep alive the *haveli* as much as possible.

The main point of my design method is the conservation combined with the valorisation of the main architectural elements.

We can recognize nine-cusped arches, open courtyards, the relation between outdoor and indoor spaces, brackets, niches, the *jharhoka* on the 1 floor, the central front gateway, including also the colonial additions (semi-circular arches and modern bricks). To revitalise the building, I have followed the approach of keeping all the historic layers, from the oldest Mughal elements to the later additions, with just few demolitions. So, the first action would make the *haveli* safe, after a careful analyse of the condition assessment of every architectural elements, from slabs to brackets, from walls to sandstone columns. Then, renovating the existing indoor spaces and intervening on the north-east corner of the building, I would try to link all the different parts of the building, characterised by

a variety of spaces, small and bigger, indoor and outdoor.

I have considered only a few demolitions of not historical or relevant walls, to widen some rooms and to eliminate some additional elements that hid important architectural elements, for example some toilets and a pump, placed in front of a door. I made a list of some specific actions to restore and revitalize the *haveli*, urgently needed to avoid further collapse:

- Removing of the metal awnings and electrical fans on the ground floor.
- Removing of the tree and the vegetation around the building.
- Take all the trash and rubbish out of the *haveli*.
- Restoration of the portions of slabs who collapsed.
- Restoration of the *jharhokha*.
- All the drain pipes must be fixed and accurately linked to the general drainage system.
- Restoration of the external walls that blow up and have several cracks.

My intervention would like to be a pilot project to show how conservation and reuse can live together, through the revitalization of the cultural heritage of Old Delhi. Since I believe it is necessary to make people aware of the beauty and the historic relevance of the *havelis*, I decided to reuse the site to make a centre where all activities are about culture and conservation, in a way that it could be repeated in other *havelis* without being always the same. It means that every *haveli* could be used for cultural

purposes in different ways, each of them with a different approach, but always related to culture and local traditions or crafts.

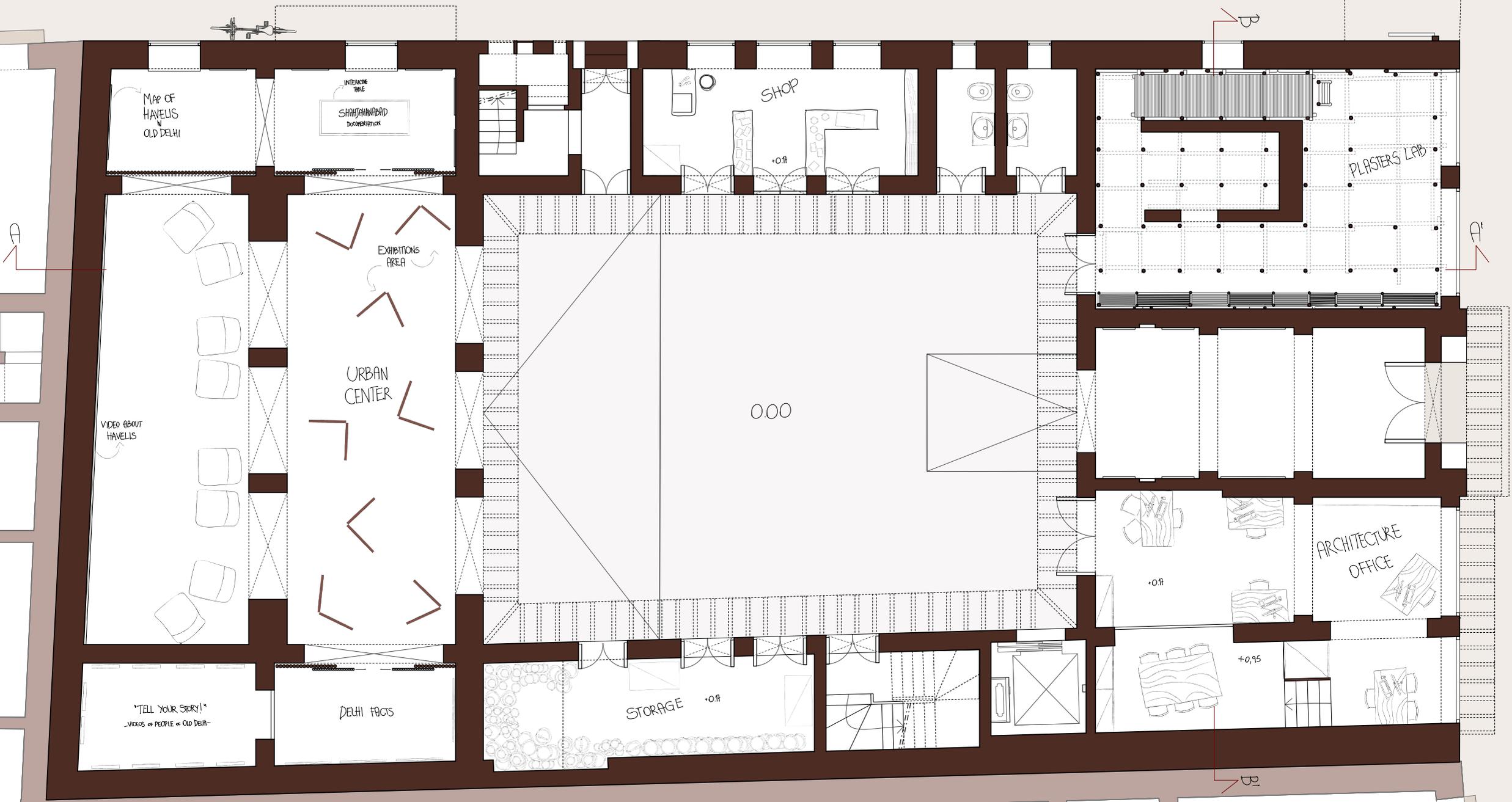
My goal is to create a place where everyone can refer to, both for consulting for conservation works planning, and for learning how to repair and maintain *havelis*.

So, on the ground floor, close to the public street, I would provide a space for Conservationist Architects and experts working in the field of Heritage and conservation: here residents can come to ask further explanations about the Conservation Plan approach, or to require a specific intervention due to a crack or a damage they could have noticed in their own building.

The ground floor would accommodate also an Urban Center, whose aim is to show the history of Old Delhi, to demonstrate the heritage value of *havelis* and all the transformation processes taking place in the City. As many other Urban Centers, the main goal would be raise awareness of those aspects of the city usually known only by professionals. Instead, this place would like to communicate with everyone, tourists and residents. That's why I proposed to use some digital medias, as screens showing videos of residents who could share their experiences or stories living in Old Delhi. Then a video projection about *havelis*, their history, the current situation and what is happening for preserving and renovating them. Finally, this area would be used for public events and exhibitions: for instance, students of the Department of Architectural Conservation could show their final projects at the end of the semester.



Front elevation - scale 1:100



Ground floor plan - scale 1:100



Section A-A' - scale 1:100

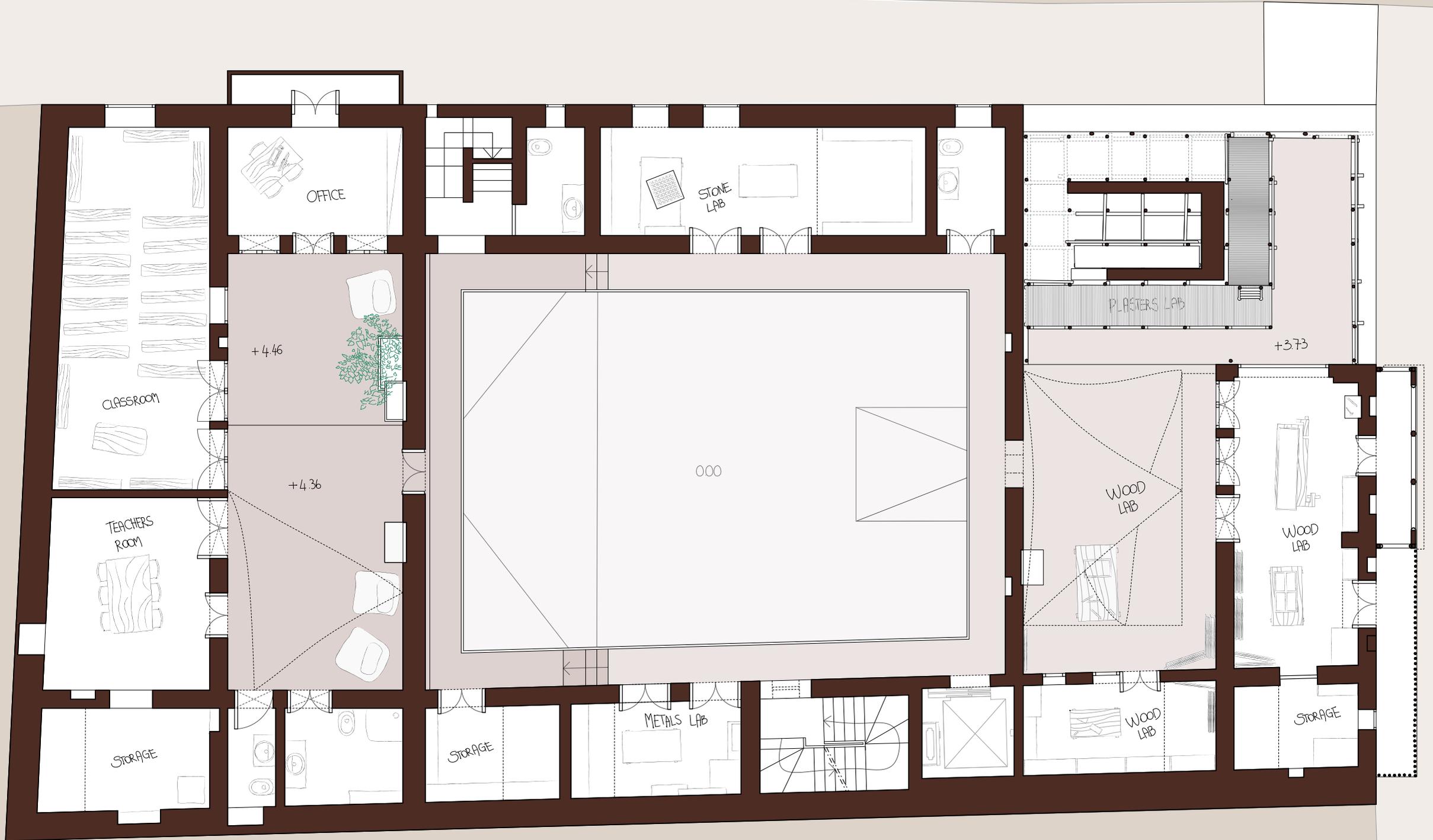


On two sides of the main courtyard, we could find a small shop selling tools, raw materials and do-it-yourself products useful to intervene in *havelis*. The courtyard would be used, as it was, as

an extension of the indoor rooms. It means that, depending of the events, it could be used by the shopkeeper to display his goods and products, or for public events taking place in the Urban Center.

The first floor would be used, with its existing rooms and courtyards, to accommodate laboratories where students, trainees, young craftsmen and ordinary people can learn techniques and tools to

deal with the conservation and maintenance of *havelis*. I would introduce four different laboratories, working on timber, plasters, stone and metals, the most common materials we can find in a *haveli*.



First floor plan - scale 1:100



The main courtyard.

Since most of the work is hands-on, I thought to reserve only one bigger room for front-class lectures, while most of the rooms would be used to learn and work at the same time.

I chose to keep the original use of courtyard as an extension of the rooms, so activities would take place both indoor and outdoor. To reduce direct sun light in the small courtyard, I introduced some tensioned fabric ceilings.

The main core of my intervention is the bamboo structure located on the north-east corner of the *haveli*, already visible from the front side. Since all the activities I have provided regard to the life of buildings, I chose to realise a construction site, as an extension of the existing spaces given by the historical *haveli*, where people can work.

The peculiarity of this structure, located on the front side, is that it would look different

quite frequently, because the bamboo scaffoldings would move from the bottom to the top of a C-shaped empty volume, made of bricks.

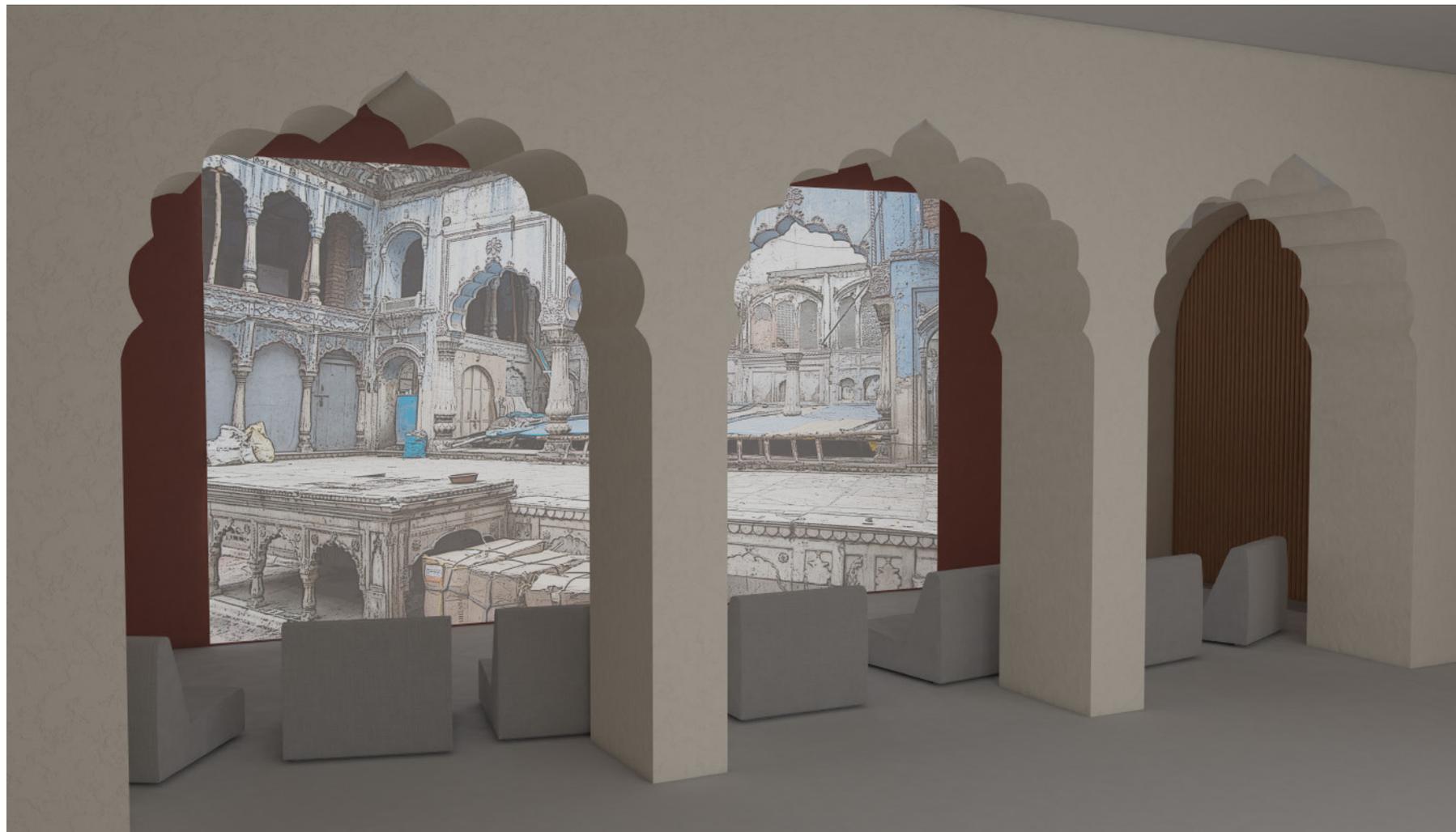
The reasons behind the choice of realizing a bamboo scaffolding within my *haveli* were double: from one side, I wanted to be more sustainable as possible, both in an environmental and financial way, so I chose to use local materials like bamboo and bricks.

At the same time, despite the common materials, I had to clearly distinguish my intervention from the pre-existing heritage building.

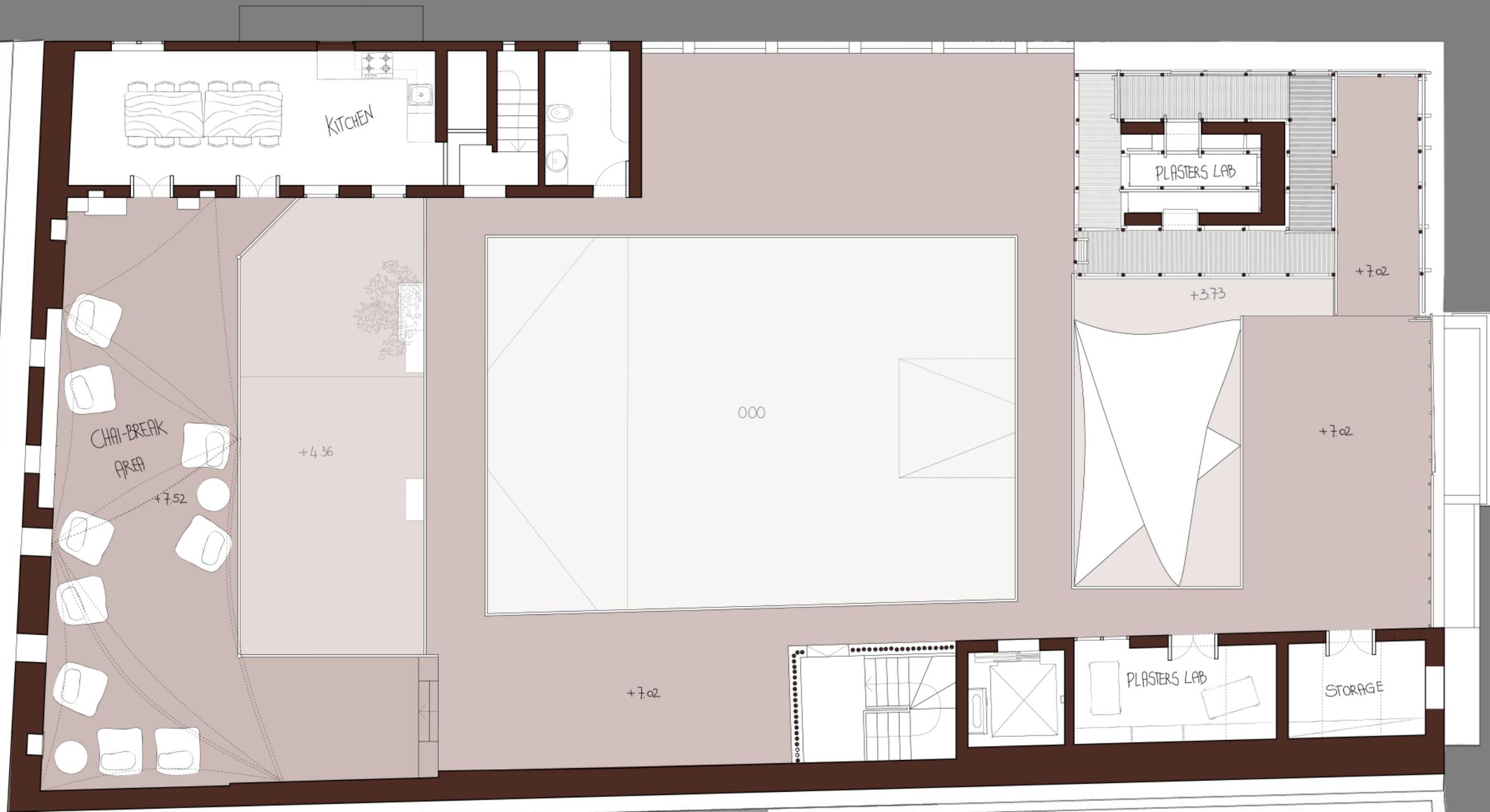
On the other side, I wanted to denounce the current bad conditions of *havelis* in the historic city. Indeed, I chose to leave the existing empty walls on the ground floor, where a tree grew during the last decades, and erect my new structure within the boundaries. This approach would like to report that something is missing because it has lost, as it is visible if we look the front elevation: the symmetry once existing is gone, probably due to a collapse or a demolition.

The temporary looking of the bamboo structure and the fact it would change frequently are very important. Indeed, my will is that, whoever would walk in front of the *haveli*, looking up at the bamboo structure, could think it is a common restoration scaffolding. But then, if or she will pay more attention to what is happening within the *haveli*, he/she will realize it is not just a temporary structure, but a living place where people are learning how to save the beauty and value of *havelis*.

Thanks to all experts and common people I met during my visits in Old Delhi, I strongly believe the Walled City needs a place like this, where the revitalization of *havelis* start from their own self, without huge transformations, but keeping in mind the historical and cultural importance of these buildings. At the same time, involving local communities since the first steps of any intervention should be compulsory, otherwise any project would bear fruits.



Urban Center.



Second floor plan - scale 1:100

On two sides of the main courtyard, we could find a small shop selling tools, raw materials and do-it-yourself products useful to intervene in *havelis*.

The courtyard would be used, as it was, as an extension of the indoor rooms. It means that, depending of the events, it could be used by the shopkeeper to display his goods and products, or for public events taking place in the Urban Center.

The first floor would be used, with its existing rooms and courtyards, to accommodate laboratories where students, trainees, young craftsmen and ordinary people can learn techniques and tools to deal with the conservation and maintenance of *havelis*. I would introduce four different laboratories, working on timber, plasters, stone and metals, the most common materials we can find in a *haveli*.

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the front side, is that it would look different quite frequently, because the bamboo scaffoldings would move from the bottom to the top of a C-shaped empty volume, made of bricks.

The reasons behind the choice of realizing a bamboo scaffolding within my *haveli* were double: from one side, I wanted to be more sustainable as possible, both in an environmental and financial way, so I chose to use local materials like bamboo and bricks.

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CONCLUSIONS

Writing a conclusion of such an intense experience is not such an easy task. Indeed, the work behind this Thesis has been for me a professional experience full of human involvements. Living for three months in a reality as Delhi, was not simple. Even if I had already been in India, this time I had to create my own routine in a city where everything looked so diverse, and complex to understand for several reasons. Even if sometimes I felt lost, then I found my place, thanks also the help of new friends I met. That's why I hope one day to visit Delhi and, hanging around Shahjahanabad, to see once more the early morning breakfasts, made in front of the gates of havelis, on the street. Moreover, I would like to see again the beautiful detailed carvings on the sides of doors, or I hope to enter a courtyard, look up and see people, with their uncertain and curious eyes, staring at me, foreigner. I cannot imagine being once more in Delhi and not see any more the fascinating alleys of the Walled City, filled with its *havelis*. That's why I still strongly believe that, despite the decay we can easily see around, Old Delhi can still be saved. Firstly, because many residents are attached to their *mohallas*, they feel a sense of belonging to the place where they grew. If they could share these

feelings to the younger generations and, with them, find a way to make everyone aware of the cultural heritage that surround them, it would already an important first step to save Old Delhi. That is the reason I thought that incentivizing and involving residents to save their own *havelis* could be worthy. It would be a chance to make craftsmen proud of their skills; in collaboration with architects and historians, everyone could share their own experience and knowledge, working in the same direction to save havelis from vanishing.

During the last months in Delhi, newspapers, experts and some Local Bodies brought to light this urgent debate. So, I would say that even if a small group of people would start to act in a tangible way, with a few resources, it could bear fruits and, step by step, more residents would feel involved.

To those who think that there is no hope for Old Delhi, I will reply saying: "The beauty of the cultural and architectural heritage of Shahjahanabad is still there. If you can't see it, it is probably just behind a crumbling sign."

GLOSSARY

Bagh: garden

Baoli: step-well

Bazaar: market

Chabutra: platform

Chajja: usually a horizontal stone slab supported on brackets, projecting from the wall

Chhatri: dome-shaped pavilion

Chowk: courtyard, or generally, the crossing of streets.

Churidar mehrab: cusped or foliated arch

Dalaan: main living room

*Divan-*khana**: men's room or portion

Dhobi: a washerman

Gali: alley

Gokha: sitting platform on both sides of the main haveli entrance

Gurudwara: the worship place for Sikh people

Haveli: a traditional courtyard mansion type constructed in Shahjahanabad and North India during the Mughal period.

Hauz: water tank

Jainism: a non-Brahmanical and non-violent religion which grew out of Hinduism at the same time as Buddhism.

Jali: pierced screen

Jami Masjid: Friday mosque

Jharokha: a projection bay window or balcony with cupola

Katra: commercial enclave

Kucha: lane

Madrasa: school, college, academy, a place for learning.

Mahal: palace, in Hindu havelis it is the principal room

Mardana: men's room or portion

Mehrab: arch

Masjid: mosque

Mohalla: neighbourhood

Puja: worship, a term used by Jains and Hindus

Purdah: it indicates the custom of segregation of women

Sarai: inn for travellers

Sehan: courtyard

Sehanchi: small rooms along the side of the courtyard

Zenana: women's area of the house

BIBLIOGRAPHY

Papers and reports

INTACH, Nomination to UNESCO's List of World Heritage Cities, ASI, 2014

DUAC, *Rejuvenation of Shahjahanabad – City Levels Projects*, 2017

CPWD, *Handbook of Conservation of Heritage Buildings*, 2013

PEARL, *Urban heritage in Indian cities*, 2015

UNCRD, *Research Report Series no.9 - Conservation based development of Shahjahanabad: The Historic Capital City of India*, 1995

DDA, *Master Plan of Delhi 2021*, DDA, New Delhi, 2010

Delhi Heritage Management Secretariat, *Regulations for HERITAGE-LED DEVELOPMENT in the WALLED CITY OF SHAHJAHANABAD*, 2015

DDA, *Walled City Shahjahanabad Planning issues and policy frame*, 1984

A.K. Jain, *Regeneration and renewal of Old Delhi (Shahjahanabad)*, 2004

SRDC, *Revitaliation of Shahjahanabad (Walled City of Delhi) – Preliminary Project Report*, 2015

Madan Mohan, *Spatial data modelling in GIS for historical restoration and conservation of cultural*

heritage of seven cities of Delhi, Jamia Millia Islamia (Central University), New Delhi

TCPO, *Model Building Bye-Laws*, Ministry of Urban Development, New Delhi, 2016

ONU, *The World's Cities in 2016 – data booklet*, 2016

Sarah Glynn, “*The Haveli - a social history*”. *Architecture of Rajasthan*, Edited by Giles Tillotson, Bombay: Marg, pp 102-111, 2001

Shyam Chainani, *Heritage conservation, Legislative and organisational policies for India*, INTACH, 2007

Divay Gupta, *Identification and Documentation of Built Heritage in India*, INTACH, 2007

Kulbhushan Jain, *Conserving Architecture*, AADI Centre (Ahmedabad), 2017

Bikram Kumar Dutta, Sanhita Bandyopadhyay, *Regeneration of Heritage Urban Space of Delhi, Shahjahanabad, the Walled City*, REAL CORP, 2012

Books

Stephen P. Blake, *Shahjahanabad The Sovereign City in Mughal India 1639-1739*, Cambridge University Press, 1991.

Shama Mitra Chenoy, *Shahjahanabad: A City of Delhi 1638-1857*, Munshiram Manoharlal Publishers, 1998

Swapna Liddle, *Chandni Chowk: The Mughal City of Old Delhi*, Speaking Tiger, 2017

Narayani Gupta, *Delhi between two Empires*

1803-1931 - *Society, Government and Urban Growth*, New Delhi: Oxford University Press, 1981

Vijay Goel, *Delhi: The Emperor's City Paperback*, Om Books, 2003

Prasana Kumar Acharya, *Indian Architecture according to the Mansara Silpa Sastra*, London: Oxford University Press, 1927

Bijit Ghosh, *Shahjahanabad - Improvement of living conditions in traditional housing areas*, 1980

Ebba Koch, *Mughal Art and Imperial Ideology*, Oxford, 2001
(chapter "The Delhi of Mughal prior to Shahjahanabad as Reflected in the Patterns of Imperial Visits, pp 163-182)

Eckart Ehlers, Thomas Krafft, *Shahjahanabad/ Old Delhi, Tradition and Colonial Change*, Manohar, 2003

Sarah Tillotson, *Indian Mansions: A Social History of the Haveli*, Oleander Press, 1998

Gordon Sanderson, *Types of Modern Indian Buildings*, Allahabad, 1913

V.S. Prammar, *Haveli: wooden houses and mansions of Gujarat*, Ahmedabad, 1989

Kireet Patel, Reena Shah, Reenal Agarwal, *Arayish : wall paintings of Shekhawati*, CEPT University, 2006

Aishwarya Tipnis, Ashok Lall, *Vernacular Traditions: Contemporary Architecture*, The Energy and Resources Institute (TERI), 2012

Jyoti Hosagrahar, *Indigenous Modernities: Negotiating Architecture and Urbanism*, Routledge, 2005

Adam Hardy, *Havelis - A Living Tradition of Rajasthan*, Shubi Publications, 2004

Aishwarya Tipnis, *Handbook for Conservation of Heritage Buildings in Shahjahanabad - A Manual for Owners & Occupiers*, INTACH, 2018

Pavan K. Varma, Sondeep Shankar, *Mansions at dusk - The Havelis of Old Delhi*, Spantech Publishers, 1992

International Workshop on Cultural Heritage and the Temples of Angkor, *Cultural heritage as Civilizing Mission: From Decay to Recovery*, Michael Falser Editor, 2011

Theses

Surbhi Gupta, *Havelis of Shahjahanabad, transformation over time*, 2006

Jyoti P Sharma, *Colonial intervention and urban transformation: a case study of Shahjahanabad / Old Delhi*, Leicester - De Montfort University, 2005

Sunand Prasad, *The Havelis of North Indian cities*, PhD Thesis, The Royal College of Art, London, 1988

Maps

1739: Stephen P. Blake, *Shahjahanabad The Sovereign City in Mughal India 1639-1739*, Cambridge University Press, 1991.

1830-57: http://www.columbia.edu/itc/mealac/pritchett/00maplinks/modern/modern_index.html

1910-12: "Delhi Survey 1910-11-12" by Mr A.J. Wilson of Survey of India, from India Delhi Town and Country Planning Office Collection."

Websites

<http://www.monumentsofdelhi.com/cities#Indraprastha>

<http://www.indiastudychannel.com/attachments/6179-seven-cities-of-delhi>

<http://www.columbia.edu/itc/mealac/pritchett/00maplinks/modern/delhimaps/delhimaps.html>

<http://www.infochangeindia.org/environment/153-environment/background/8946-india-s-culture-of-conservation>, seen on 15/10/2018

<https://www.financialexpress.com/india-news/preservation-townhall-old-delhi-haveli-owners-urban-experts-debate-value-of-heritage-tag/1322912/>

<https://www.hindustantimes.com/delhi-news/a-workshop-for-heritage-structure-owners-of-shahjahanabad-on-how-to-renovate-properties/story-7DzqpH278bsyfnSxT0NdbO.html>

<https://timesofindia.indiatimes.com/city/delhi/workshop-to-save-walled-city-heritage/articleshow/65906009.cms>

<https://www.ndtv.com/delhi-news/to->

[preserve-old-delhis-heritage-havelis-owners-to-attend-workshop-1920062
https://www.hindustantimes.com/delhi-news/old-delhi-haveli-owners-express-concern-over-heritage-status/story-DlaC5qUD4sun9GCCCh6kCxM.html](https://www.hindustantimes.com/delhi-news/old-delhi-haveli-owners-express-concern-over-heritage-status/story-DlaC5qUD4sun9GCCCh6kCxM.html)

<https://www.hindustantimes.com/delhi-news/kejriwal-govt-ready-to-pour-cash-on-old-delhi-havelis/story-msKzLoi4cipWZtV9tqmXUN.html>

<https://www.hindustantimes.com/delhi-news/ten-years-after-inception-old-delhi-revamp-body-comatose/story-DugR9nycYuuPBlaLufTSCP.html>

<https://www.hindustantimes.com/delhi-news/delhi-s-imperial-capital-cities-unesco-nomination-not-withdrawn/story-IVSejvLh8R9FixGvQQwpGM.html>

<http://www.havelidharampura.com>

<http://thehaveliproject.blogspot.com>



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Here we are to the real conclusion of my experience. Since many persons have been involved, I would like to start in English and conclude in Italian, to say thanks to all those people who helped me to achieve this result.

I would like to start with professor Anuradha Chaturvedi, because I am glad she shared with me her knowledge and love for conservation and heritage issue. Moreover, I would like to thank her for pushing me to do better and go deeper during my researches in Delhi at DIC. Then, I need to say “thank you” to Chun Chun (I am not sure how to write it, actually!) for his smiles and kindness he always showed me during my time at the Department.

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Let's now turn to Italian, to say “Grazie” to my Italian supporters.

Ringrazio la professoressa Minucciani, per avermi accompagnato (anche fisicamente!) in questo percorso di tesi; le sono immensamente grato per tutto il tempo ed energie che ha speso per questo lavoro. Ringrazio il professor Bonino e Valeria Federighi per i loro consigli e ispirazioni sempre utili.

Ringrazio mia madre, per la mamma e donna che è, per l'esempio che insieme a mio padre mi hanno sempre dato. Se oggi, con forza e determinazione sono arrivato a questo traguardo lo devo anche a loro.

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