

**Reviving an ancient urban district of Tehran
with a contemporary landscape design
derived from Persian garden carpet and
miniature painting traditions.**

by

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A thesis
presented to the University of Waterloo
in fulfilment of the
thesis requirement for the degree of
Master of Architecture

Waterloo, Ontario, Canada, 2021

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Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Abstract

This comprehensive urban landscape design proposes to revive one of the oldest neighborhoods of Tehran, called Borazjan, located in the historical district of Oudlajan. In recent decades, the ancient urban fabric of Tehran has been altered significantly due to the new policies, economic alterations, and modern urban planning procedures. Likewise, Borazjan Alleyway has lost its former glory. Due to a failed square construction project in Borazjan, many valuable historical buildings were ruined and abandoned. But many outstanding ornamental elements remain on the walls around the site.

Since the 1970s, several revitalization plans were proposed, and most of them failed because they sought to change the existing situation by refusing culture and history and destroying the old to build up the new modern projects that contrast with the rest of the traditional fabric. This issue is addressed in this design. A meaningful link between heritage and its social environment has been established by creating concrete ways for inhabitants to feel that culture can thrive where they live and portray hope. Renewed references to Persian history, culture, and art become tools of knowledge to revive Borazjan. The Persian Garden, which is more of a community garden, is used as the most fundamental characteristic of a gathering place to turn the unused open space of Borazjan into a safe synergetic environment.

The design portrays the proposal social programs and landscape design inspired by the Persian garden tradition, its relation to the Persian carpet, and its depiction in Persian miniature paintings. The design proposal updates the contemporary Borazjan, thereby merging past and present activities and socio-economic demands. As well as the social realm, the design focuses on the microclimate effects of the proposed landscape that include temperature, humidity, and fragrance, to create a pleasing environment responsive to Tehran's climate. The proposal intensifies historical awareness by preserving and exhibiting the ancient walls and ornamental elements around the site within a contemporary landscape.

Acknowledgments

I would like to express my gratitude and appreciation to my wonderful supervisor, Marie-Paule Macdonald, for always supporting me, believing in me, and generously sharing her knowledge with me. I have learned from every second of my conversations with her on my thesis about architecture science, social life, culture, art, nature, and many more. She means much more than a supervisor to me; She was always a good source of inspiration and hope for me, and she will always remain so in my memory.

To my great committee member Tracey Eve Winton for her tremendous support, valuable and constructive comments throughout my work. I had the privilege of benefiting from her precious historical perception of architecture which had a big role in the guidance of my thesis design methodology.

To my internal reviewer Joan Coutu, from the fine art department, for always showing interest in my thesis design and motivating me, and helping me to look through my thesis from a different angle, through a window of art.

My most sincere gratitude to my guest critiques, Anwar Jaber and Delnaz Yekrangian for their time and very valuable comments and suggestions with their great insight on the Middle East.

And last but not least, with all my heart, I would like to thank the most loving people in my life; my mother, my father, and my sisters, Leila and Saba. None of this would have ever been possible without their continuous and uninterrupted love and support. I owe my success to them for their unconditional love, support, and encouragement. They have always listened to me, talked to me, believed in me, and made me believe in myself. Their protecting arms with a gentle smile on their kind face have always been open to me as the most peaceful and safest place on earth!

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Chapter I

THE STORY OF...

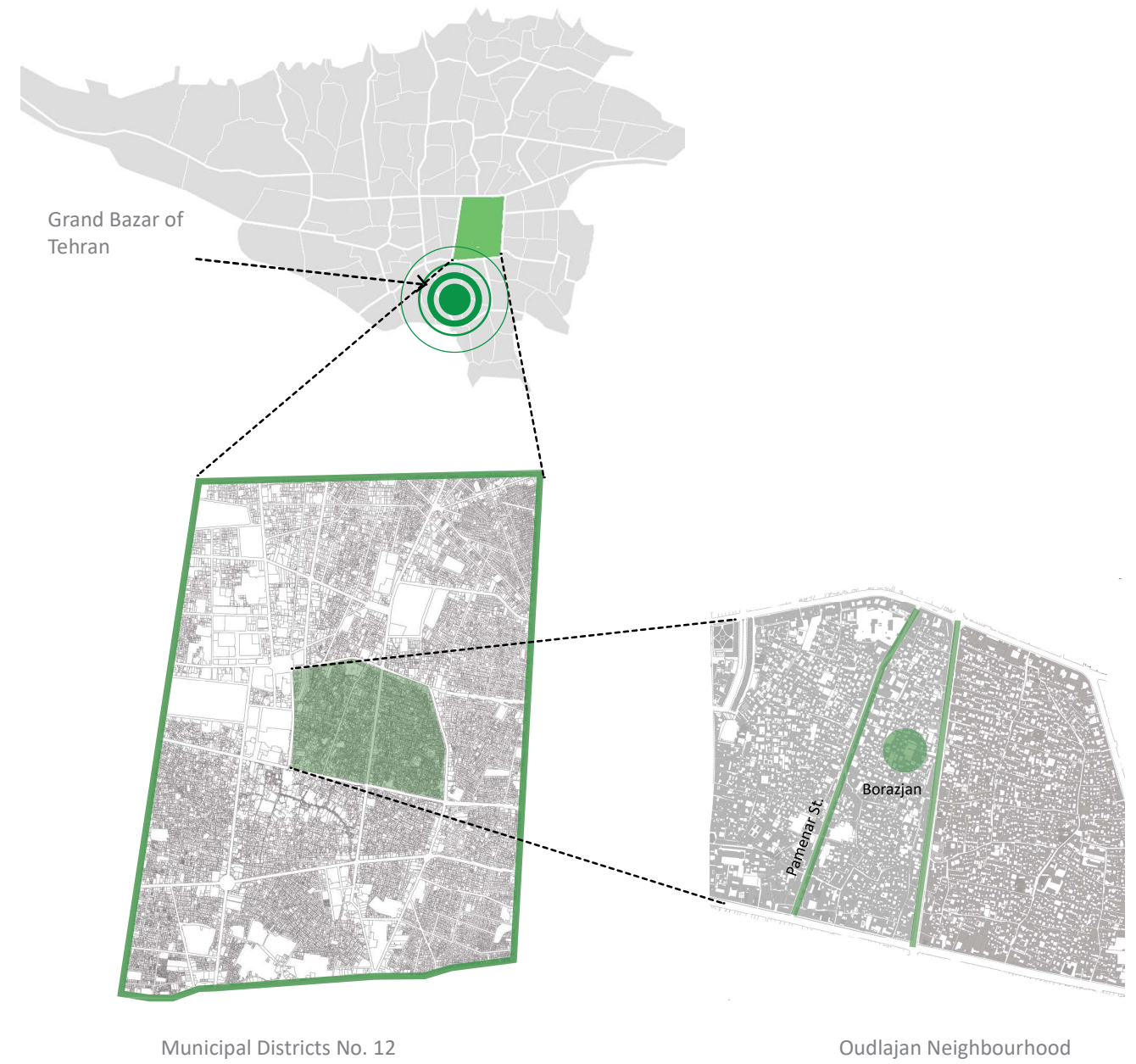
OUDLAJAN

Qajar era; "The splendid days"
Pahlavi era; "Great Civilization"
Islamic revolution; "Development of Grand Bazaar"

Borazjan

Bulldozering; Square construction project
Power of art; An urban exhibition
The timeline

Fig. 1. Location of Borazjan in Oudlajan neighborhood in the metropolis of Tehran.



Chapter 1

An introduction to the history of Oudlajan:

Oudlajan neighbourhood is one of the oldest neighborhoods located in the 12th municipal districts of the metropolis of Tehran. Surveying the history of the Oudlajan neighbourhood shows that several factors have altered the lifestyle of the inhabitants and the spirit of this neighbourhood during the last decades significantly over the previous 60 years. In this chapter factors of the alters in the city of Tehran, Oudlajan neighbourhood, and Borazjan alley will be discussed from the Qajar era (starting in 1789) till the issues of today.

Qajar era; “The splendid days”

By the beginning of the Qajar dynasty, king Agha Mohammad Khan chose Tehran as the capital of Iran in 1786, based on his concerns for the control of both northern and southern parts of Iran since he was feeling unsafe about the riots on Northern borders of Iran caused mainly by Russia.¹ His kingdom did not last long, and soon after him, Fath Ali Shah became the king in 1797 (reigned between 1797–1834). He viewed Tehran’s lack of a substantial urban structure as a blessing because it minimized the chances of resistance to his rule by the notables and by the public. As Tehran became the capital of Iran, the court and palace of Golestan became the official residence of the Qajar king in the central core of Tehran. Four neighborhoods of, Sanglaj, Oudlajan, Bazaar, and Chalemeydan developed around Golestan Palace and shaped the initial districts of Tehran.

¹ Soltani, Zohreh. “The Reincarnation of the Damned Qajar Palace: From Palace to Prison, from Prison to Museum.” THE FUTURE OF THE PAST: From Amphipolis to Mosul, New Approaches to Cultural Heritage Preservation in the Eastern Mediterranean, April 2015, 47–54.

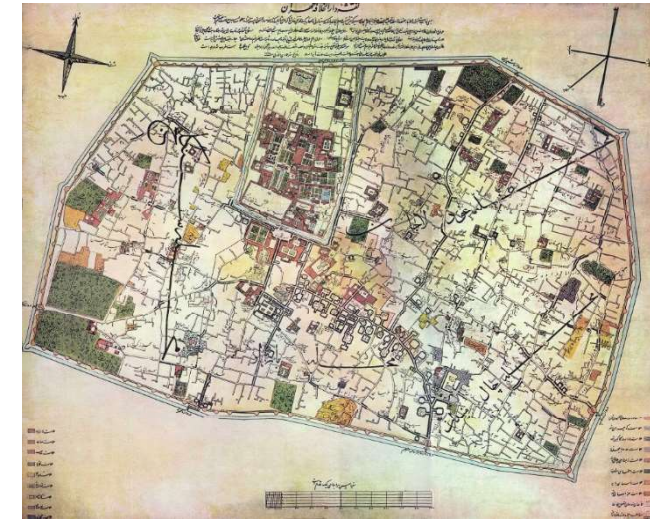


Fig. 2. Krziž Map of Tehran 1859 by August Karl Krziž.

Walls and gates for better security surrounded the city of Tehran. Later as the town was expanded by Nasir Aldin Shah of Qajar (ruling 1848 to 1896), the walls were removed, and twelve other new gates were rebuilt around it.



Fig. 3. Four main neighborhoods of Tehran

However, at present, there is no trace of the gates in Tehran except for “National Garden Gate” (referred to as Bagh-e-Meli in the Persian language), which is now one of the city’s symbols ².

² “Tehran’s Gates.” https://fa.wikipedia.org/wiki/%D8%AF%D8%B1%D9%88%D8%A7%D8%B2%D9%87%E2%80%8C%D9%87%D8%A7%DB%8C_%D8%AA%D9%87%D8%B1%D8%A7%D9%86.



Fig. 4. Shemiran gate, Tehran, painting by Eugène Flandin in 1840.



Fig. 5. Tehran National Garden Gate

The historic neighborhood of Oudlajan had its most splendid days in the Qajar dynasty (1789-1925) in the 18th century as a luxurious residential area. Due to the adjacency of the Oudlajan neighbourhood to Golestan Palace on its East side, it became the royal neighbourhood and home for noblesse families full of mansions and gardens. Oudlajan kept its social and cultural status till the last years of the Pahlavi era (ruling 1925-1979) in the 1980s³.

³ "Oudlajan." <https://en.wikipedia.org/>, last modified Dec 9, accessed 02/27/, 2021, <https://en.wikipedia.org/wiki/Oudlajan>.

Pahlavi era; "Great Civilization."

With the shift of power from the Qajar Dynasty (1785–1925) to the Pahlavi Dynasty (1925–79), the new state was determined to solidify its power by oppressing the opposition ⁴. Soon after Reza Shah started the kingdom (reigned 1925–41), he implemented the most vigorous modernization plan for the whole country. In 1928 Reza Shah put an end to the one-sided agreements and treaties with foreign powers, abolishing all special privileges. He built the Trans-Iranian Railway and started branch lines toward the principal cities (1927–38). Reza Shah emancipated women and required them to discard their veils (1935). He took control of the country's finances and communications, which up to then had been virtually in foreign hands. He built roads, schools, and hospitals and opened the first university, the University of Tehran (1934). His measures were directed at the same time toward the democratization of the country and its emancipation from foreign interference. In 1941, Reza Shah then decided to abdicate, to allow his son and heir, Mohammad Reza Pahlavi, to adopt a policy appropriate to the new situation and preserve his dynasty ⁵. Following the same path as his father, Mohammad Reza Shah followed and expanded the modernization plans. From 1973 onward, Mohammad Reza had proclaimed his aim as that of the "tamaddon-e-bozorg," the "Great Civilization," which became the most influential modernization plan in Iran's history ⁶.

This era of transition in Tehran's architecture from traditional to modern in the Pahlavi era evolved from palaces. It slowly emerged into the city, and consequently, the appearance of the city changed.

⁴ Soltani, Zohreh. "The Reincarnation of the Damned Qajar Palace: From Palace to Prison, from Prison to Museum." *THE FUTURE OF THE PAST: From Amphipolis to Mosul, New Approaches to Cultural Heritage Preservation in the Eastern Mediterranean*, April 2015, 47–54.

⁵ Afra, Hassan. "Reza Shah Pahlavi." *Encyclopædia Britannica*. Encyclopædia Britannica, inc., last modified July 22, <https://www.britannica.com/biography/Reza-Shah-Pahlavi>.

⁶ "Mohammad Reza Pahlavi." *Wikipedia*. Wikimedia Foundation, last modified Dec 6, https://en.wikipedia.org/wiki/Mohammad_Reza_Pahlavi.

By this time, demands on establishing modern banks, governmental buildings, and ... rapidly grew, but traditional architecture could not respond to this demand. And designing and building with previous methods was not feasible as the new buildings required unique and contemporary spaces. Therefore, Western architectural methods were adopted in building construction. As a result, the new vocabulary of modern architecture emerged in Tehran. At the same time, brutalist architecture became very popular in the city's architecture.

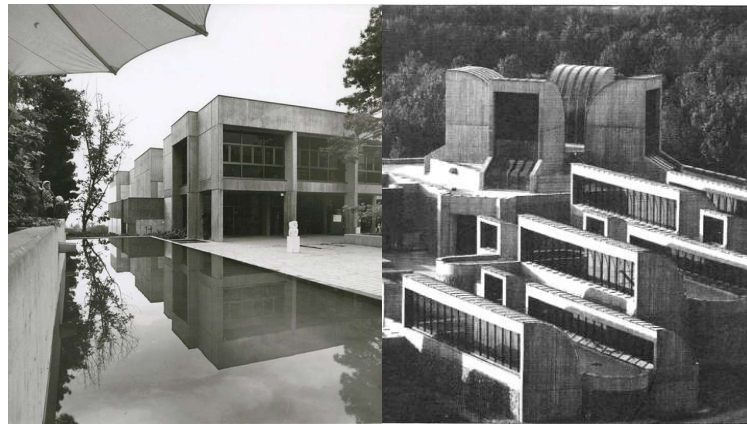


Fig. 6. Two of the symbols of modern architecture in Tehran: "Niavaran Cultural Centre." by Kamran Diba (on the left)

Fig. 7. "Tehran Museum of Contemporary Art" by Kamran Diba (on the right)

The transformations of the Oudlajan district also started with the modernization plan in the Pahlavi era. Modern urban planning procedures caused inconsistency in parts of the urban fabric of Tehran. As mentioned, parts of the traditional urban fabric were torn down, and consequently, open, unused urban spaces emerged in the city⁷. With the rapidly growing number of cars in Tehran, accessibility to the heart of Oudlajan became difficult due to its dense organic traditional fabric. Therefore, two main Northern Southern streets were added and cut Oudlajan into three pieces. This resulted in the demolition of buildings situated along the paths

7 Mashayekhi, Azadeh. 2016. "Tehran, the Scene of Modernity in the Pahlavi Dynasty: Modernisation and Urbanisation Processes 1925–1979." In *Urban Change in Iran: Stories of Rooted Histories and Ever-Accelerating Developments*, edited by Fatemeh Farnaz Arefian and Seyed Hossein Iradj Moeini, 103-119. Cham: Springer International Publishing. doi:10.1007/978-3-319-26115-7_9. https://doi.org/10.1007/978-3-319-26115-7_9.

of the proposed roadways⁸.



Fig. 8. The map is showing the neighbourhood of Oudlajan with the new streets cutting its fabric.

Islamic Revolution; "Development of Grand Bazaar."

The Islamic Revolution in 1979 culminated in the overthrow of the Pahlavi dynasty and the replacement of the government with an Islamic republic under Ayatollah Khomeini, a leader of one of the factions in the revolt⁹.

Oudlajan was home to most Jews in Tehran before the Iranian Islamic Revolution of 1979. Following the Revolution, the dominance of the political and religious doctrine of Ayatollah Khomeini shaped the post-revolutionary policies. Such state-sponsored policies

8 Rezaei, Naeimeh and Piruz Hanachee. 2015. "Oudlajan Neighborhood, an Urban Heritage between Tradition and Modernity." *Jias* 4 (7). <http://ijas.kashanu.ac.ir/article-1-703-en.html> <http://ijas.kashanu.ac.ir/article-1-703-en.html>.

9 "Iranian Revolution." Wikipedia. Wikimedia Foundation, last modified April 04, accessed April 11, 2021, https://en.wikipedia.org/wiki/Iranian_Revolution.

suppressed the possibility of plural and co-existent cultural identities for most religious minorities. This situation led to the emigration of many Iranian citizens from minority religious groups, including the Jews. Emigration of the majority of Oudlajan Jews, closure of Jewish shops, baths, synagogues, and music shops following the Revolution brought about a recognizable transformation in the area's lifestyle and ultimately changed the livelihood of this neighborhood¹⁰. This situation also led to the unoccupancy of many houses owned by Jews.

Besides, years after the Islamic Revolution, the most significant commercial point of Tehran, Grand Bazaar, was developing swiftly on the Southside of Oudlajan. This became the most significant threat for Oudlajan. Due to a rise in job opportunities in Bazaar and a massive influx of crowds towards it, many residential houses in Oudlajan became unoccupied. Later these houses, mainly located in the southern part of Oudlajan, turned into small-scaled retails, housewares, and industrial workshops. The changes in the functionality of Oudlajan from residential to retail caused unwillingness for the inhabitants to reside and partially damaged its historic fabric¹¹. Consequently, Oudlajan became a suitable destination for job hunters coming to Tehran from different provinces of Iran and even Afghan immigrants seeking work¹².

10 Pakravan, Mahsa. 2016. "Soundscape, Sonic Experience, and Sonic Memory in Iran: Jewish and Muslim Cultural Identity in Udlajan, Tehran." University of Alberta.

11 Fattahi, Sajjad, Mahmoud Sharepour, and Mohamad Fazeli. 2018. "Elements and Forces Producing Stability and Instability in Historical Neighborhood "Oudlajan"." *Jisr* 7 (3): 599-626. accessed May 26, 2021, https://jisr.ut.ac.ir/article_68992.html.

12 Pakravan, Mahsa. 2016. "Soundscape, Sonic Experience, and Sonic Memory in Iran: Jewish and Muslim Cultural Identity in Udlajan, Tehran." University of Alberta.

Population of District 12 of Tehran

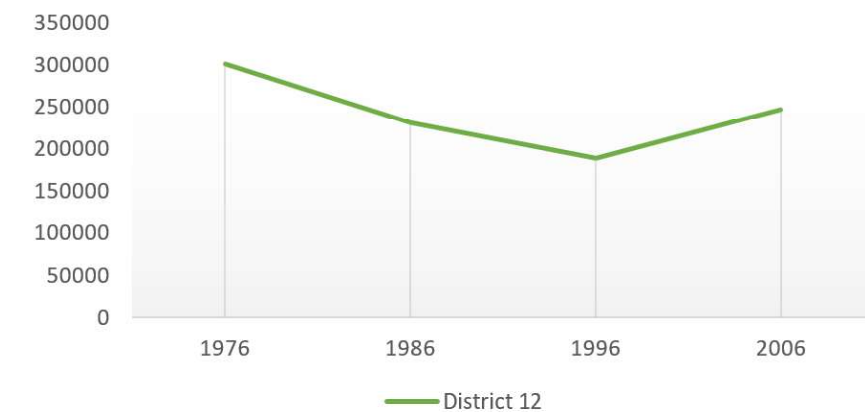


Fig. 9. The graph shows a reduction in population from 1976-1986 (after Islamic Revolution in 1979) and a rise after 1996 due to immigration of workers.

Borazjan; a victim

Bulldozing; Square construction project

Like other alleys and streets in this neighborhood, Borazjan, located in mid-Oudlajan, also lost its liveliness. According to Aftabeyazd News, between 1981 and 2017, 66% of the population, equal to almost 28,000 people, left Oudlajan, and approximately 20% of the residential buildings turned into industrial workshops¹³. Following the modern urban planning procedures, the municipality authorities continued widening the streets and increasing accessibility. As a result, almost fifteen years ago, a decision was made to add a square at the Borazjan alleyway. The officials implemented this plan without informing the residents. The occupants noticed the emergence of the municipality's trucks in the neighborhood mostly at midnight, discharging the construction waste adjacent to the unoccupied buildings. The amount of waste was increasing so far as people could not reach their homes effortlessly. Then, the municipality commenced bulldozing the vacant buildings and the houses with unknown owners. This made the situation much worse as the demolition waste was added to the initial construction waste, making hills of dirt. This situation remained the same, as the square construction project failed due to the lack of project management

13 Gohari, Ali. "Population Migration from Oudlajan Neighborhood." <http://aftabeyazd.ir/>, last modified Aug, accessed 02/27/, 2021, <http://aftabeyazd.ir/?newsid=131161>.

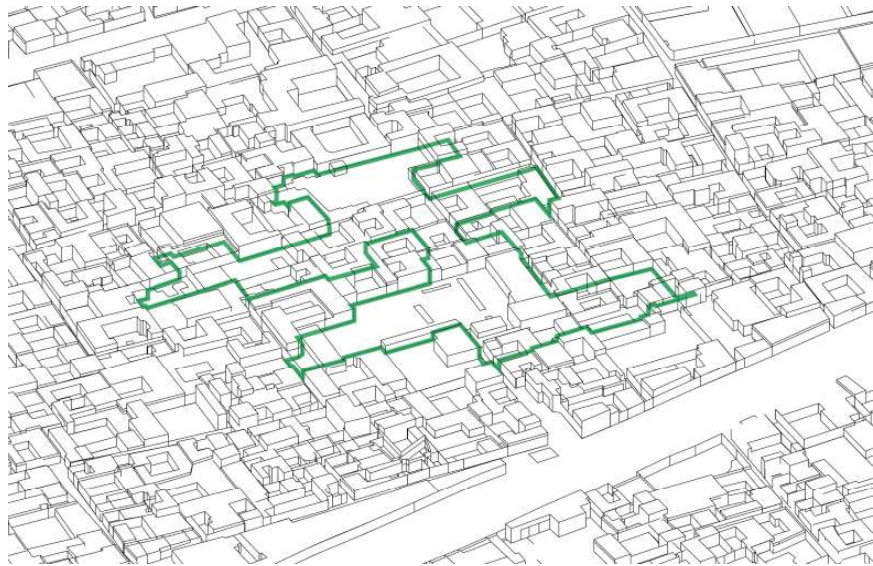


Fig. 10. Borazjan neighborhood before demolition.

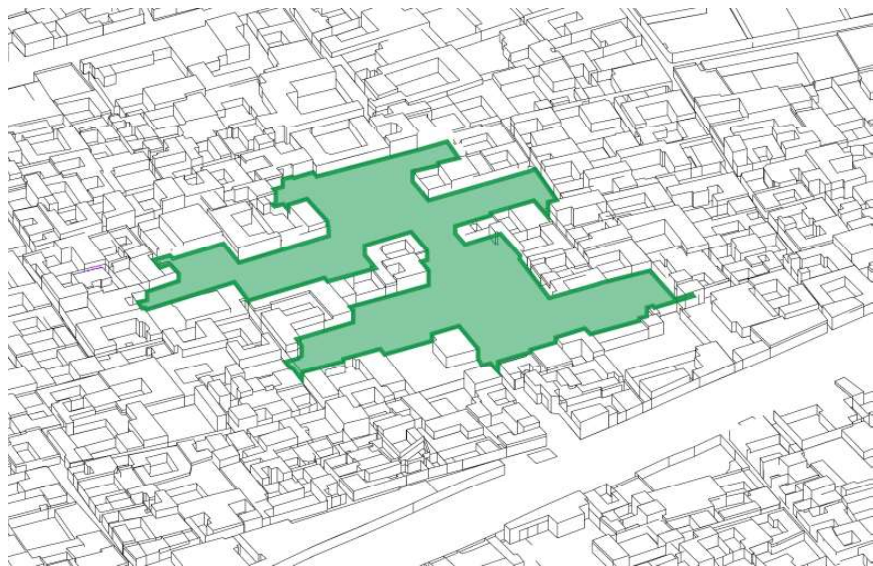


Fig. 11. Borazjan neighborhood after demolition in 2006. The area of the demolished site is almost 11000 sqm.

and economic issues. With these circumstances, Borazjan became an unpleasing dirty, unsafe environment for the families to live¹⁴. Besides, this situation influenced the cost value of the surrounding residential buildings.

Power of art; An urban exhibition

Around three years ago, a young talented street artist named MirzaHamid was wandering around Oudlajan neighborhood when he faced Borazjan Alley. He spent about two weeks there chatting with inhabitants and poor drug abusers. He was very much influenced by the existing paradox in Borazjan: the rich ornaments on the remains of the destroyed walls and the urban waste underneath them. He started painting twelve illustrations on the walls surrounding this open dirty urban space. In the end, it turned out to be like an open-to-public exhibition while the pedestrians were walking around¹⁵. He called his series of artwork on the walls the “Lost” exhibition as he believed Borazjan is destitute of everything except its originality. He started inviting people to his exhibition on social media. As a result, it attracted attention, and many people from other parts of the city visited the paintings in Borazjan. MirzaHamid believes that there was a non-verbal conversation emerged between his work and authorities.

Consequently, in the last year, the municipality of Tehran cleared the construction waste, added security cabins, portable toilets, and a fence around the walls to preserve them. Even later, a street concert was held in Borazjan. Although the situation is much better than before, Borazjan has remained an unused open space¹⁶. However, Borazjan has the potential to be transformed into a great public space in a way to revive its lost vitality.

14 Boujarian, Hamidreza. “Reviving Borazjan.” <https://www.hamshahrionline.ir/news/>, last modified May 12, accessed 02/27/, 2021, <https://www.hamshahrionline.ir/news/4/7> در ی-م-هرابود-ناج-ناج زار ب / 439928.

15 MirzaHamid. (2019) «Lost» Urban Exhibition, Tehran, Iran.

16 Boujarian, Hamidreza. “Reviving Borazjan.” <https://www.hamshahrionline.ir/news/>, last modified May 12, accessed 02/27/, 2021, <https://www.hamshahrionline.ir/news/4/7> در ی-م-هرابود-ناج-ناج زار ب / 439928.



Fig. 12. MirzaHamid's painting on the walls and a bench in front of the wall.



Fig. 14. Security cabins and portable washrooms added by officials



Fig. 15. Covering the torn down walls by banners with printed renders of the proposed square failed project.



Fig. 13. Paintings on the wall with arcs



Fig. 16. Nowrouz festival (Persian new year) concerts and movie screening

Maps of Tehran

Borazjan Alley

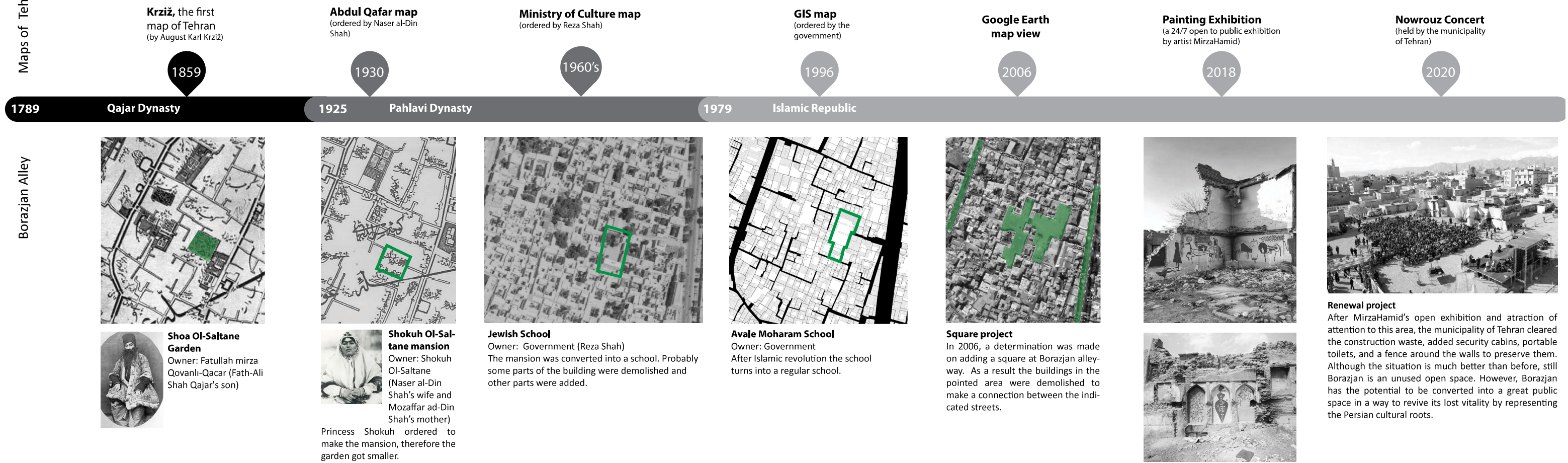


Fig. 17. Timeline of Borazjan

With all the alterations and events here I gathered information on the current situation in 12th district of Tehran.

Now, this district is a residential area for low-income communities, as the demographics show. (fig. 18 & 19)

The demographics (fig. 20 & 21) show that the population of young males is among the highest and the main job groups are vendors, artisans, and industry and construction workers.

Looking through the existing situation and social context reveals that most of the buildings along the main streets are retails with a few cultural and religious facilities around the site. (fig. 22)

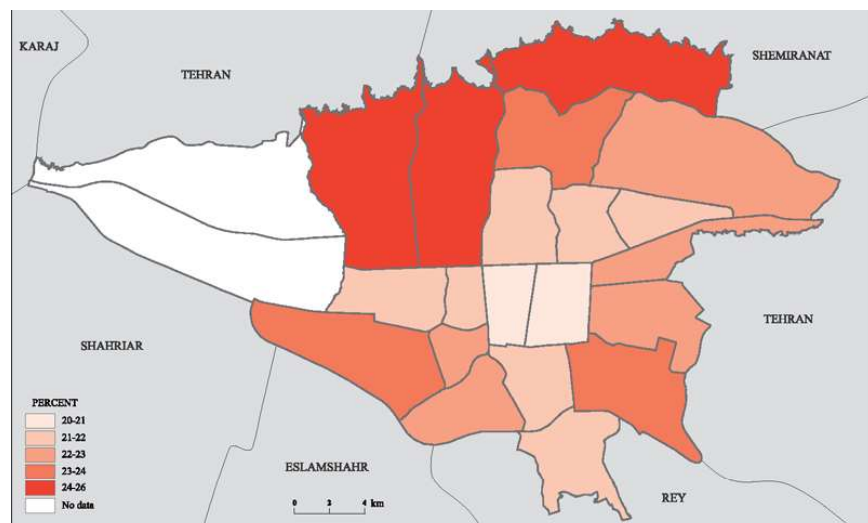


Fig. 18. The average growth rate of housing price 1991-2004

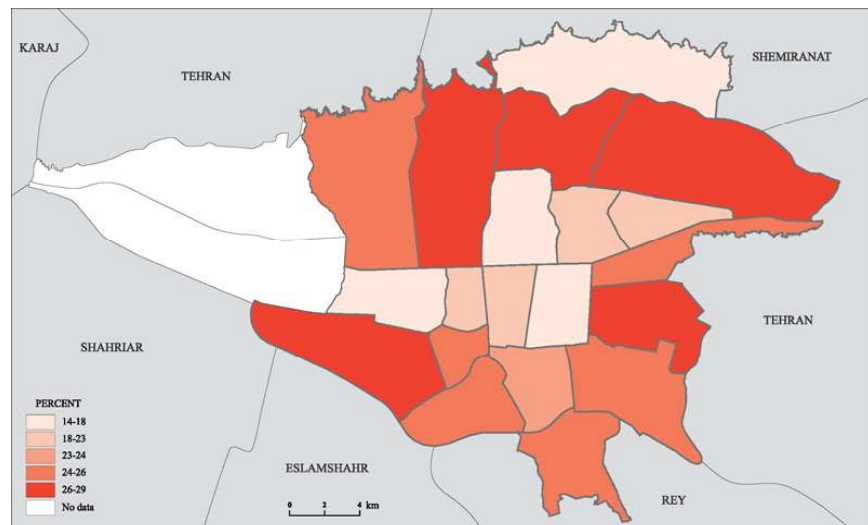


Fig. 19. The average growth rate of land price 1991-2004

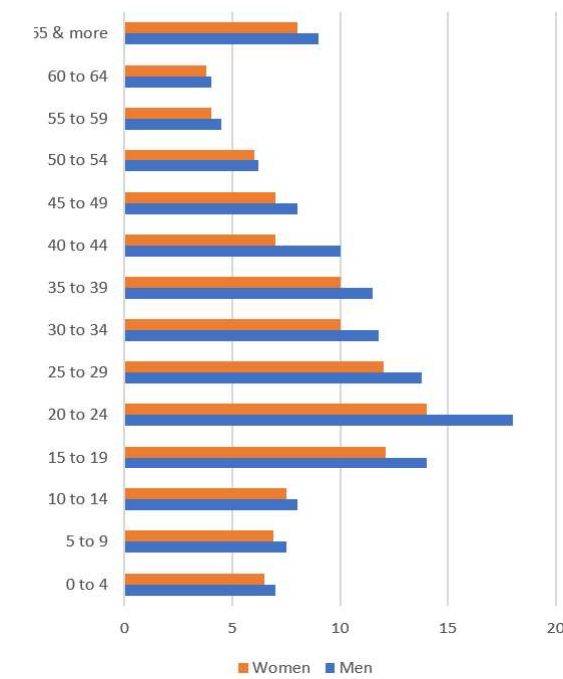
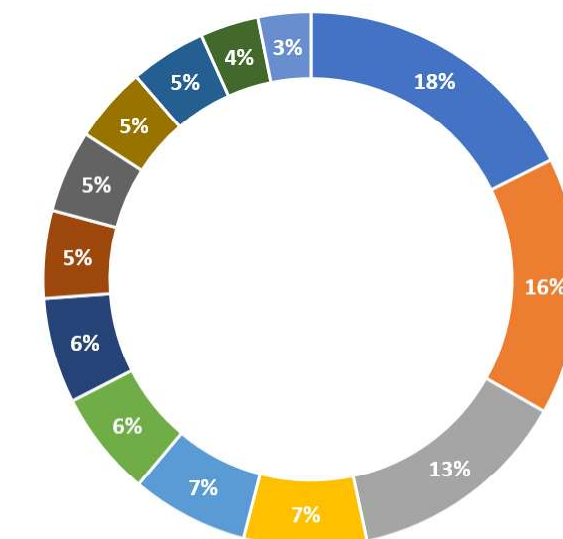


Fig. 20. Population age pyramid of 12th district of Tehran



- Service personnel and vendors
- Artisans and staff of the related jobs
- Industry and construction
- Experts
- Assemblers, operators and drivers of vehicles
- Unskilled laborers
- Transportation and warehousing
- Occupational Affairs
- Health and social work
- Technicians and assistants
- Administration and office staff
- Building
- others

Fig. 21. Main job group in 12th district of Tegan



Existing Context of the Neighborhood

- Commercial (Retails and workshops)
- Religious buildings
- Clinic
- Motmaen Al-Otaba cultural house
- Shazdeh (Prince in Persian) resturant garden
- Gas station
- Open public space (streets and allies)

Fig. 22. Map of existing context of the area around Borazjan

Chapter II

Chapter 2

Part I: Challenges and Obstacles

In the first chapter, the existing social, political, economic, and cultural issues were revealed to understand better the current social and urban context and the history behind the demolished walls around the site. Many of the ongoing problems are rooted deep into political and economic infrastructures, which are out of the control of the architectural realm. According to governmental planning and procedures, a regional and city scale facing the mentioned issues requires long-term and infrastructural complex solutions. –

In this chapter, some of the challenges and obstacles of revitalization for this site will be analyzed, and as possible solutions, some of the promising ideas, theories, and case studies in this realm will be examined.

The big obstacle; cultural issue

Since the 1970s, several plans have been proposed to revitalize this neighborhood, but most of them have not been implemented. This is because most of the revitalization plans sought to change the existing situation by rejecting traditions and history and destroying the “old” to build up the “new” modern projects that contrast with the rest of the traditional fabric. In 2015, Rezaei and Hanachee, two urban planning professors, guided a research team to investigate and recognize the obstacles of the revitalization of Oudlajan. They collected data through semi-structured interviews with citizens, residents, and workers in the Oudlajan neighborhood and observation and review of secondary data (existing reports, statistics, books, articles, etc.). The results of their study show a lack of interest in heritage and historic spaces and a desire for modernization. It can be concluded that the obstacles of rehabilitation of the Oudlajan neighborhood, more than economic, technical, and political, are cultural and social. In other words, the representation of heritage in this neighborhood is strongly influenced by thoughts and ideological trends. The desire to “change,” which has long existed in Iran, was accompanied by the rejection of tradition and history, destroying

everything that is known as old. To revive a historic neighborhood, it is essential to establish a link between heritage and its social environment. Encouraging the participation of local communities in the development and implementation of projects for historic districts is an effective tool for success that requires information and awareness. This awareness needs interdisciplinary cooperation to sensitize society towards the urban heritage¹.

Part II: Theories Culture as Catalyst

According to the results of the research by Rezaei and Hanachee on the identification of the obstacles to the revitalization of Oudlajan, a possible solution in reviving this site is to recreate a bridge between cultural heritage and social environment. Therefore, in this part, the methods of two promising revitalization projects are going to be analyzed in order to find out the solutions for reviving Oudlajan. The first case study is Revitalization of Chicago’s South Side by Theaster Gates, and the second one is Project Row Houses by Rich Lowe.

Case Study I: Chicago’s Southside Revitalization Project by Theaster Gates

Chicago’s South Side is mainly an African-American community neighbourhood and used to be very lively back in the 90s, full of retails, mostly local homes that doubled as candy stores, referred to as “candy houses.” This was the symbol of the Chicago South Side. But later, with changes in communities and technology, these Black-owned businesses never saw their former glory. There is no single reason why candy houses are no longer as widespread. But among them are candy house owners growing older and retiring, safety concerns in Chicago’s enclaves due to the small population of violent offenders, and the ease of internet shopping². As a result of

¹ Rezaei, Naeimeh and Piruz Hanachee. 2015. “Oudlajan Neighborhood, an Urban Heritage between Tradition and Modernity.” Jias 4 (7). <http://ijas.kashanu.ac.ir/article-1-703-en.html>.

² Mosley, Robin. “Chicago’s South Side was Covered in Candy Houses. Now They’re Dying Out.” Talk Poverty. Talk Poverty, last modified Feb 03, accessed April 19, 2021,

economic and social changes, South Side is now full of weeded lots, vacant buildings, crooked frame houses, and eventually became a residential area for low-income people.

“It’s the place people leave or are stuck [in],”

Gates says one day while driving through the neighborhood.

Although Theaster Gates is a painter, sculptor, performance artist, academic, inspirational speaker, he refers to himself as someone who is trained in ceramics as a potter because that is how he got the inspiration in his revitalization career by creating beauty out of the mud ³. South sides recognize his job as pioneering a new approach to revitalizing a forsaken neighborhood, transforming it without displacing residents or changing its essential character.

Gates had the passion to do something about the distressed state of his neighborhood on the South Side of Chicago. So, he did, transforming the abandoned buildings to create community hubs that connect and inspire people who still live there and draw in those who do not ⁴. He took his first step in rehabilitation with a low budget by buying a dilapidated candy house on Greater Grand Crossing, his childhood neighborhood, in 2006. Two years later, he purchased the building next door that later became the Archive House, a micro-library. And then, he continued renovating and activating other buildings in the neighborhood, as indicated in the map below.

<https://talkpoverty.org/2020/02/03/chicago-south-side-candy-houses/>

³ Moore, Natalie. “How Theaster Gates is Revitalizing Chicago’s South Side, One Vacant Building at a Time.” Smithsonian.com. Smithsonian Institution, last modified December 01, accessed April 19, 2021,

<https://www.smithsonianmag.com/innovation/theaster-gates-ingenuity-awards-chicago-180957203/>

⁴ Gates, Theaster. “How to Revive a Neighborhood: With Imagination, Beauty and Art.” TED. TED Conferences, accessed April 19, 2021,

https://www.ted.com/talks/theaster_gates_how_to_revive_a_neighborhood_with_imagination_beauty_and_art/up-next?language=en



Fig. 23. Theaster’s Empire.

To revive downtrodden urban neighborhoods—what Gates calls the “challenge of blight”—there are many methods and strategies, such as enticing members of the “creative class” to move in. But what Gates is offering is “redemptive architecture”, which is not about gentrification or replacing poor people with the upper class. Gates’s revitalization method is about creating concrete ways for existing residents to feel that culture can thrive where they live, and to portray hope for them.

Gates has said he wants to turn Greater Grand Crossing into a “miniature Versailles” that would draw visitors from all around. “I want the South Side to look like my friends’ home in Aspen. I want my pocket part to look like Luxembourg.” Chicago is just the start for him. He is expanding his successful revitalization method in other states such as Gary, Indiana, and St. Louis, as an urban potter to reshape the existing situation into a delightful neighborhood.

Case study 2: Project Row Houses by Rick Lowe

Another notable auspicious case study is Project Row Houses lead by Rick Lowe. This is a community platform that enriches lives through art, emphasizing cultural identity and its impact on the urban landscape. This way, neighbors, artists, and enterprises are engaged in collective creative action to help materialize sustainable opportunities in marginalized communities ⁵.

⁵ “Project Row Houses.” Project Row Houses., <https://projectrowhouses.org/about/about-prh>



Fig. 24. Project Row Houses, preserving multiple blocks in the Third Ward and offering its historic neighborhood a gathering place for art and community.

“You wipe out a people when you wipe out their history. What Rick is trying to do is to restore that history.” – says Garnet Coleman, the neighborhood’s representative in the Texas House.⁶



Fig. 25. Project Row Houses from back in 1993, with the exhibition “Drive-By,” before its first formal artist round, which unveiled October 15, 1994. (Courtesy Project Row Houses)

⁶ Kimmelman, Michael. “In Houston, Art is Where the Home Is.” The New York Times., last modified Dec 17, <https://www.nytimes.com/2006/12/17/arts/design/17kimm.html>

Project Row Houses is located in Third Ward, a historical neglected area of Houston, Texas. The ward became the center of Houston’s African-American community. In this project, Lowe started his work by creating solutions to problems instead of creating work that tells the community about its issues. Therefore, Lowe purchased 22 old poor condition shotgun houses that drug abusers and prostitutes ran. They started renovating these houses with the assistance of several local volunteers removing trash, used needles, and hung wallboards. Now, in some of these renovated houses, art exhibitions are held, some are homes for artists. Seven houses are homes for young single moms adjacent to a playground for their children to play.



Fig. 26. Jasmine Zelaya’s “Sugar Water,” 2020, at Project Row Houses.

Lowe started his career by collaboration within a group of artists to create something more than just a symbol but a practical application. After identifying Project Row Houses (PRH), it soon became a community-engaged project as residents started to come out and support. Parallel to establishing artists’ project programs, other programs according to the needs heard from the community were moved forward—this way the content of the project was brought about from the community. Consequently, the art community tried to figure out how to serve the community of Third Ward.

Today, more and more artists and art institutions partner with cities around initiatives for creative economies and so-called “placemaking.” Lowe’s idea is very much synced with conversations focused on how art can serve the needs of people within an

embattled community, apart from large-scale governmental developments. In Lowe's work, artists have begun to invest their energy in conceptualizing their work to add value to the people within a place, having social and economic benefits for the neighborhood. Another side of placemaking is where institutions are concerned with a larger scale because of their financial benefit. This focus shifts their perspective on whom to collaborate with, usually the institutions out of the neighborhood in a city or regional scale. While artists are generally interested in the creative resource of people within a district.

Lowe learned from his art career that the value of a painting does not relate to its scale but its symbolic value. Likewise, he believes the scale of placemaking does not matter but its practical social importance. There are thousands of housing units and programs when it comes to scaling, but most do not have as much recognition as PRH because PRH was able to build a community from within a community. Although the need for scale is not diminished, social engagement is more important to be considered ⁷.

Part III: Design Strategy

I believe Oudlajan had a pretty similar history as Chicago's South Side and the Third Ward in terms of misplacing its liveliness, residential function and losing its cultural and historical value over the last decades. According to Gate's revitalization approach to reactivate the forsaken neighborhood of Borazjan, culture can act as a catalyst by transforming it without displacing residents or changing its essential character. Cultural activities can ignite and get people reinvested in their place by providing different sets of programs and spaces into urban context in a way that is accessible for all ⁸. Besides, PRH shows the power of art and the importance of engagement of the community even on a smaller scale. Social

⁷ Lowe, Rick. "Rick Lowe: Project Row Houses at 20." Creative Time Reports., last modified October 10, accessed 04/25/, 2021, <https://creativetimereports.org/2013/10/07/rick-lowes-project-row-houses/>

⁸ Gates, Theaster. "How to Revive a Neighborhood: With Imagination, Beauty and Art." <https://www.ted.com/>, https://www.ted.com/talks/theaster_gates_how_to_revive_a_neighborhood_with_imagination_beauty_and_art?language=en.

practice as a new spirit can be infused into the urban space to revive it.

Therefore, this proposal aims to investigate the cultural and historical roots of the site to represent them in today's situation in Borazjan in the forms of social practice and urban art programs and activities.

Persian Culture

Hence, according to the issues and obstacles in reviving Oudlajan and Gates's and Lowe's methods as solutions, I looked deeper into the Persian culture and history to better indicate and understand it and then set design tools for the revitalization program. To reach this goal I sought out the most characteristic elements of Persian urban design in Persian gardens as a public gathering space. It is also important to mention that the initial function of this site was a Persian garden back in the 1700s.

In Persian culture, the garden has an inclusive role that has become its evident impression. This impression has become the Persian identity so that Persian culture and the impression of the Persian garden have constantly been influencing each other. This tight relationship between Persian culture and the garden also caused the emergence of the garden's trace in other realms of art such as carpets, handicrafts, miniature paintings, literature, and music during Persian cultural history. This manifestation can be observed very clearly from the drawings of carpets to more fantastical aspects in poems and music ⁹. The mutual spirit that exists in these forms of art is the reflection of paradise.

⁹ Shahcheraghi, Azadeh and Golamreza Islami. 2008. "Rethinking of Persian Garden Architectural Order in Persian Garden – Carpet with Emphasis on the Environmental Ecological Perception Theory." *Goljaam* 4 (9). <http://goljaam.icsa.ir/article-1-386-en.html>

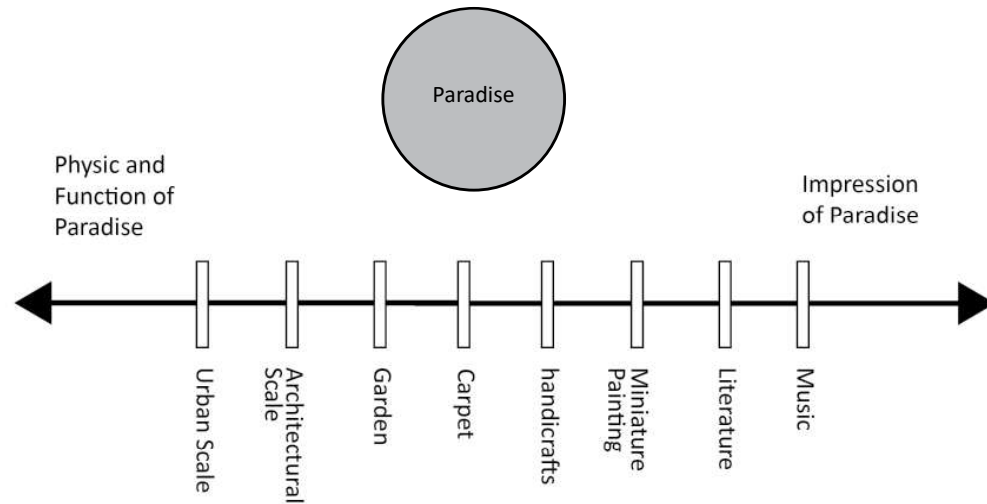


Fig. 27. Manifestation of a Persian garden in other realms of art.

*A myriad flower blossomed there,
its water sleeping, grass aware.
Each flower was of a different shade;
the scent of which for miles did spread [...]
Streams flowed like rose-water, and hid
pearls and carnelians in their midst; [...]
The fish in those bright streams did play
like silver coins in mercury [...]*¹⁰

Accordingly, I intended to explore the Persian garden, its relation to Persian carpet, and its depiction in Persian miniatures paintings to understand the relationship between human and nature, human and water, and human and the community in urban space in Persian culture. I looked into the illustrations of the events and the programs happening in Persian gardens through the miniatures and the structure of Persian garden carpets to come to an urban scale in Borazjan (fig. 28).

The outcomes are reincorporated as design tools by transforming the community through the celebration of Persian art, history, and culture, thereby merging past and present activities and according to the social demands in the current situation of Oudlajan.

¹⁰ Ganjavi, Nezami. 1197. Haft Peykar.

The design aims to improve the quality of life for inhabitants by providing a safer and more pleasing environment and remind them of the valuable forgotten culture and history. As of social practice and art programs, activities and traditional festivals held in Persian gardens delineated into miniatures can be implemented. Such as Nowrouz, (Persian new year), public concerts, painting contests, Naghali (storytelling), Rouhozi (comical acts on domestic life), Siah-Bazi (comical acts on politics) etc. can be revived in the existing situation of Borazjan and be the catalyst for transforming the community through the celebration of Persian art, history, and culture.

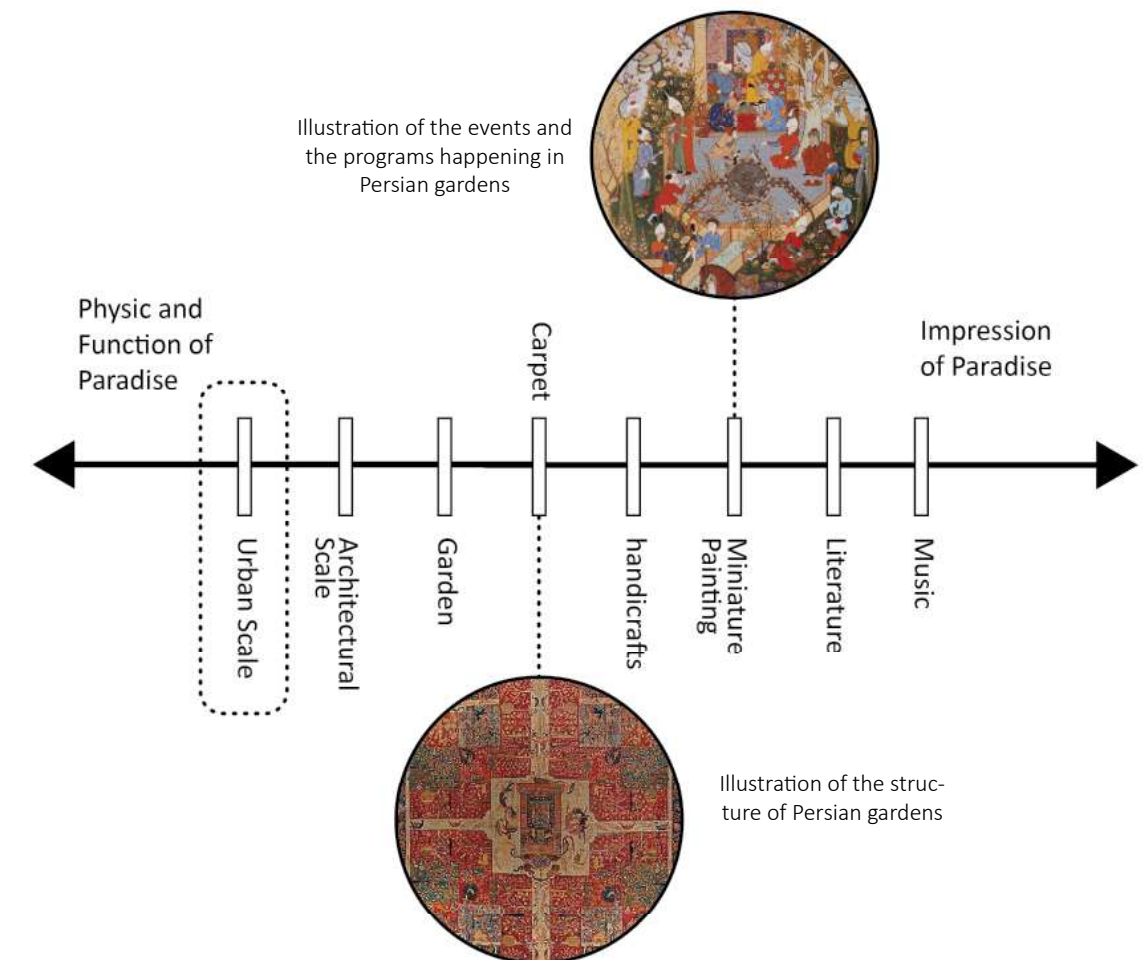


Fig. 28. The examined realms of art in Persian culture in this research

The realm of activities in the Persian Garden

Khalilnejad and Tobias, the two landscape architects from the Technical University of Kaiserslautern, Germany, have categorized the foundation of productive landscape in Persian gardens into three contexts: cultural-religious and geographic-environmental, and socio-economic.¹¹

In this part, before going through design chapter, I investigated the foundation of productive landscape in Persian gardens suggested by Khalilnejad and Tobias by looking through the miniature paintings.

Through some of the selected paintings it can be observed that, the gardens are the landscape of outdoor recreation and cultural events in Persian culture (fig. 29 & 30). Besides, the gardens are very important social gathering points and resources for building a self-sufficient society (fig. 31-32-33). Agriculture is a fundamental activity for creating jobs with both economic and environmental benefits for the community (fig. 34-35-36).

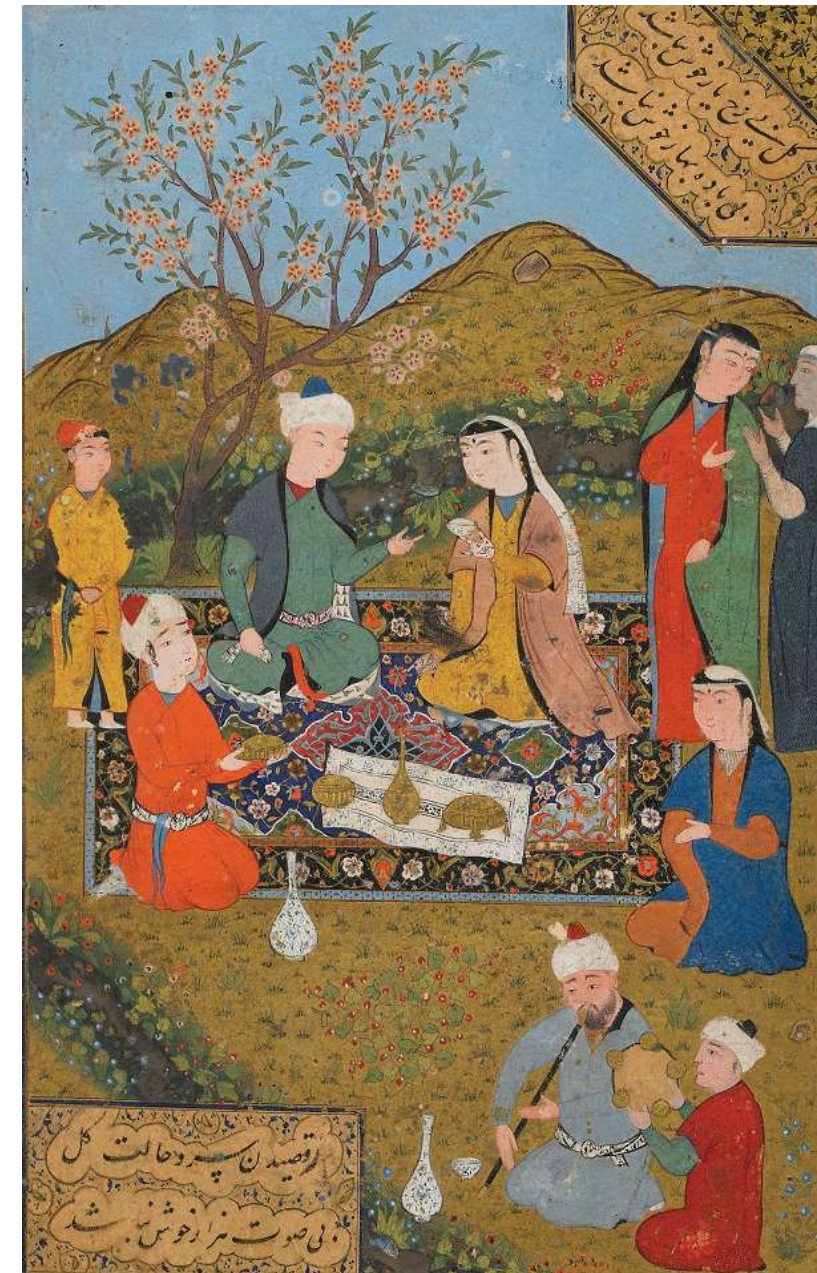


Fig. 29. *Tuhfat al-ahrar* (Gift of the free) by Jami (d. 1492); calligrapher: Baba Mirak al-Katib al-Tashkandi; Bukhara, probably Uzbekistan, Uzbek period, Shaybanid dynasty, 1558 (966 AH); ink, opaque watercolor, and gold on paper; Arthur M. Sackler Gallery, Purchase—Smithsonian Unrestricted Trust Funds, Smithsonian Collections Acquisition Program, and Dr. Arthur M. Sackler; S1986.40.

¹¹ Khalilnejad, Mohamadreza and Kai Tobias. 2015. "The Productive Landscape in Persian Gardens; Foundation and Features." *Bagh Nazar* 13 (38): 3-16.

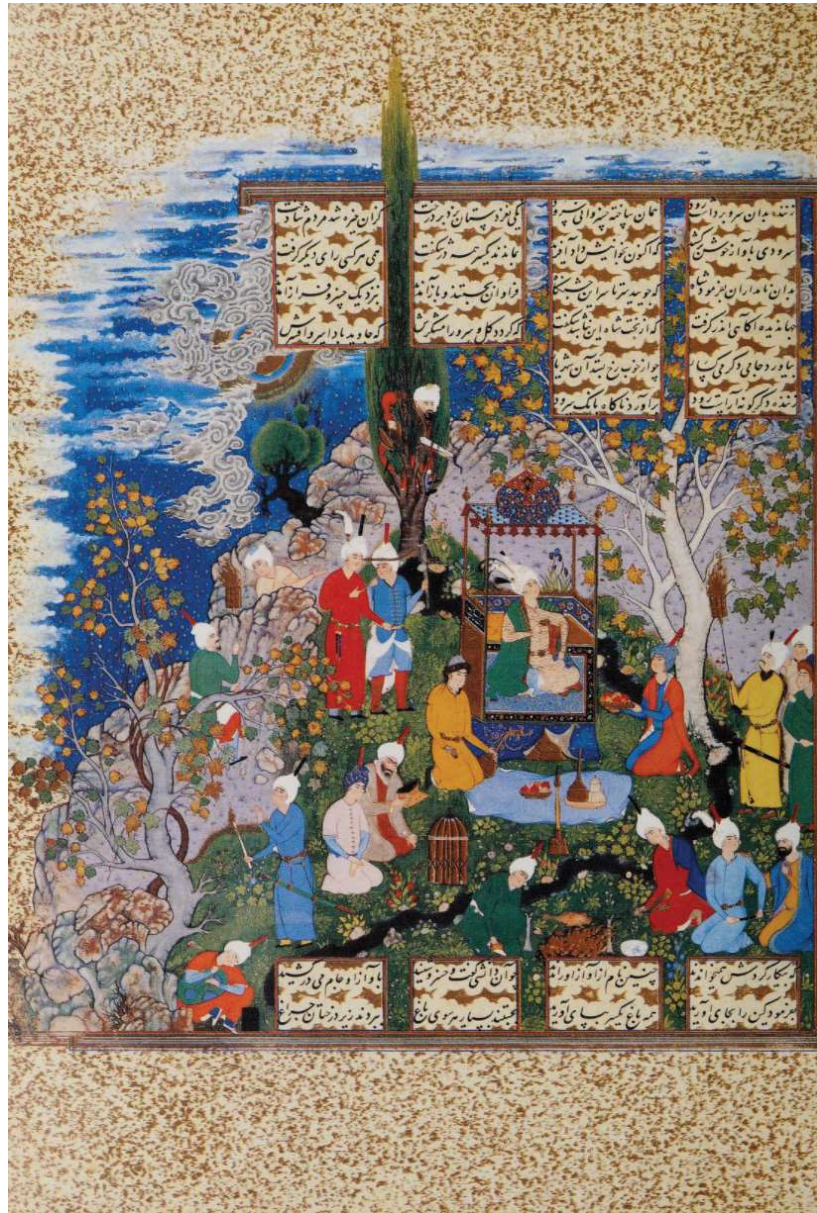


Fig. 30. Painting's Source: Shah-nama, Plate 10, folio 731 recto, the Painting's title: Barbad, the Concealed Musician, Attribute to Mirza Ali/ Image reference: Welch, Stuart Cary. Persian Painting. (New York, N Y: G. Braziller, 1996), 52.



Fig. 31. Painting's Source: Haft Awrang of Jami, PLATE 36, folio 52 recto, Painting's title: A Father's Discourse on Love, Attributed to Mirza Ali/ Image reference: Welch, Stuart Cary. Persian Painting. (New York, N Y: G. Braziller, 1996), 102.



Fig. 32. Babur entertained by Badi uz-Zaman-Mirza in the Jahan Ara Garden in Herat, miniature from Baburnama manuscript, India.

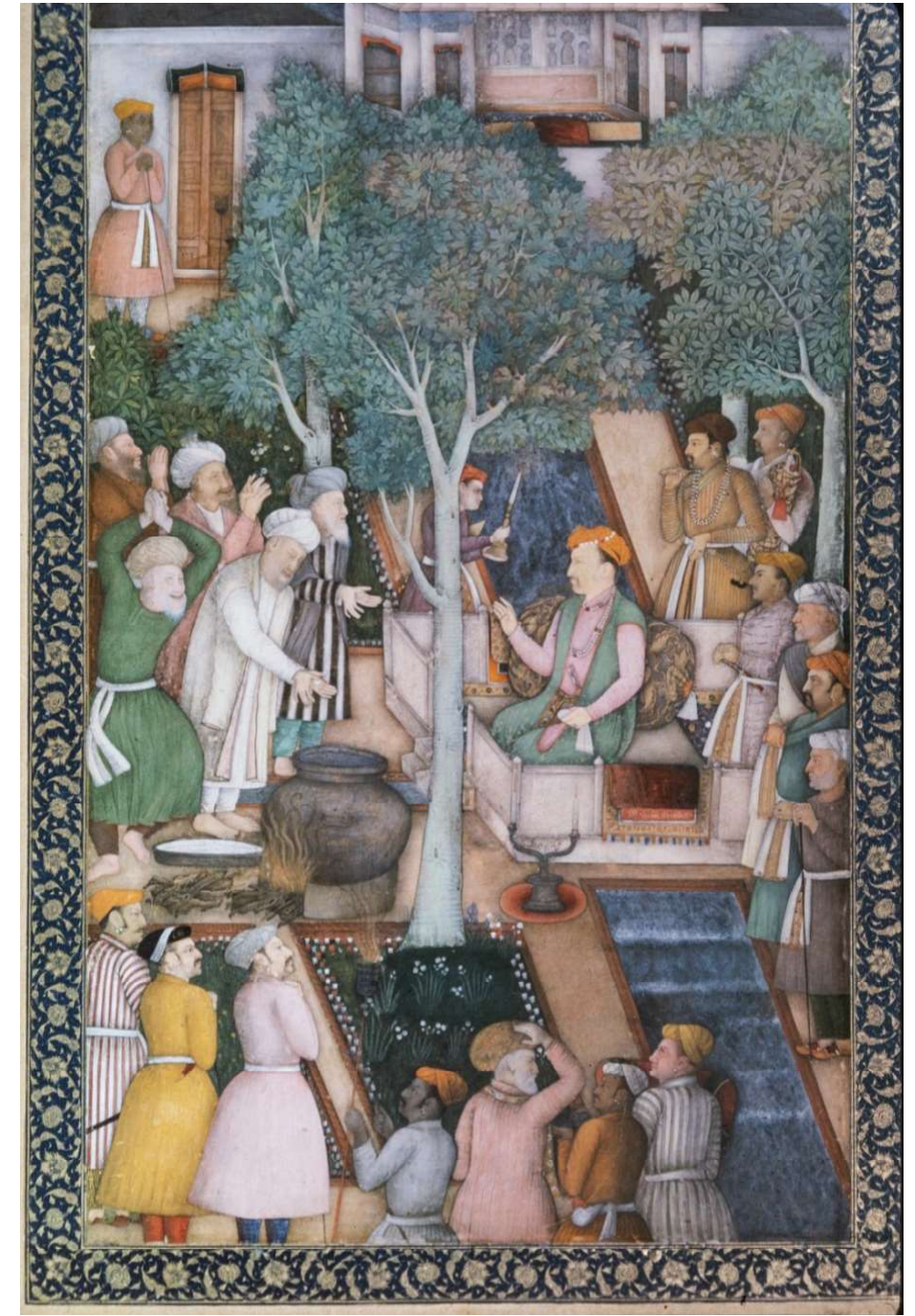


Fig. 33. Emperor Jahangir with Holy Men in a garden (San Diego Museum of Art, 1990.345): Notice the garden layout - in the background you see a pavilion set against the garden's enclosing wall and a central watercourse. This is probably a meeting being held at night, for you see the presence of candles!



Fig. 34. Babur supervising the laying out of the Garden of Fidelity, Baburnama Victoria and Albert Museum

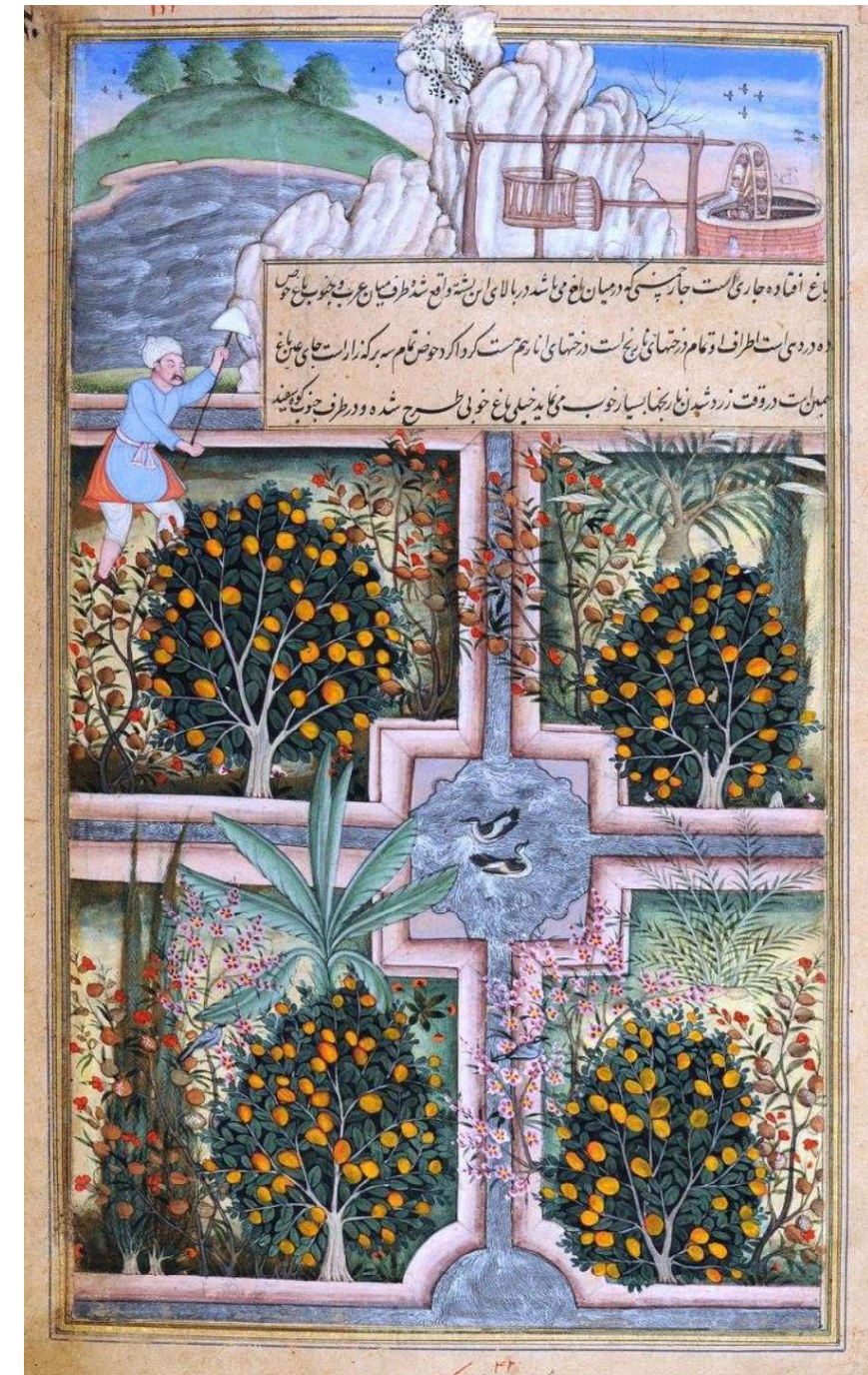


Fig. 35. Baburnama, Collection of the National Museum New Delhi.



Fig. 36. Increasing greenery, Painting's Source: *Khamsa of Nizami* PLATE 23, folio 26 verso Painting's title: *The Physician's Duel/ detail, Interwined trees and figures beneath them* Attributed to Aqa Mirak

Chapter III

DESIGN STEPS:

PART I: DESIGN PRINCIPLES

- Keeping the site open
- Preserving the walls around the site
- Reusing the material

PART II: PROGRAMS

- Analyzing the realms of activities in the Persian Garden by investigating in miniature paintings
- Set of activities according to the demands and social context of Borazjan nowadays
- Site analysis: walkways and surrounding buildings
- Conceptual drawing derived from the structure of a Persian garden
- Proposed plan
- The activities and programs
- The structure of the garden

PART III: THE ECOLOGICAL & MICRO-CLIMATE STUDIES

- Analyzing the plants in the Persian garden carpet and the way it has been drawn in more details
- The climate of Tehran and the 12th district
- Suggested plants, trees, and their microclimate effect
- Water collection
- Water drainage
- Planting plan
- Planting plan in different seasons

Chapter 3

Part 1: Design Principles

Borazjan; the open urban space

The first principle is to keep the site open without building any buildings in the area. Oudlajan has appealing passages that start from the first-grade streets, Pamenar and Mostafa Khomeini, and end to many tight and dead-end passages, capable of showing the whole context from the general to specific details in itself.¹ Some alleys are as narrow as only one person can pass through to provide shade in the unbearable hot season of Tehran. But due to the demolition program in 2006, an open spacious urban space emerged in mid-Oudlajan, Borazjan. This demolition has created a contrasting feeling of space for the pedestrian as walking through the very narrow allies and reach an empty open space. Besides, the lack of open urban space can be seen in this neighborhood. Therefore, it is aimed in the design not to build any buildings in Borazjan and keep it an open urban space for the residents to have easy equal access.

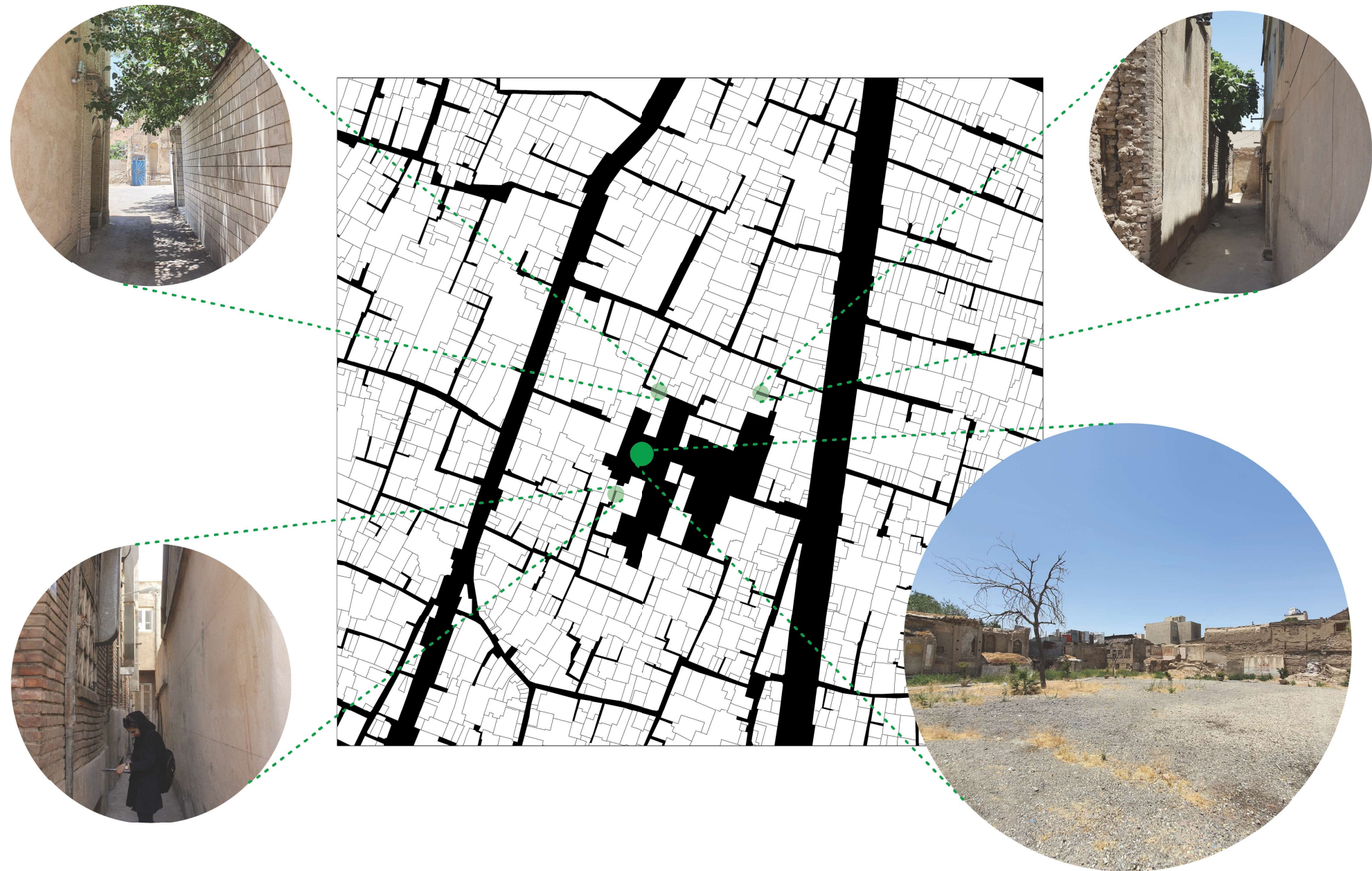


Fig. 37. Arteries and alleyways of Oudlajan

¹ Habib, Susan, Navid Jamali, and Shaghayegh Shahhosseini. 2019. "Saving Oudlajan as a Museum without Walls." *Tehran Project 8*. https://www.researchgate.net/profile/Shaghayegh-Shahhosseini/publication/333432744_Please_Save_Oudlajan_httpsiris-unipaitretrievehandle10447263327505796estratto20Margagliotta20De20Marcopdf/links/5d6d40e4458515088608b31a/Please-Save-Oudlajan-https-irisunipait-retrieve-handle-10447-263327-505796-estratto20Margagliotta20De-20Marcopdf.pdf.

Preserving the walls

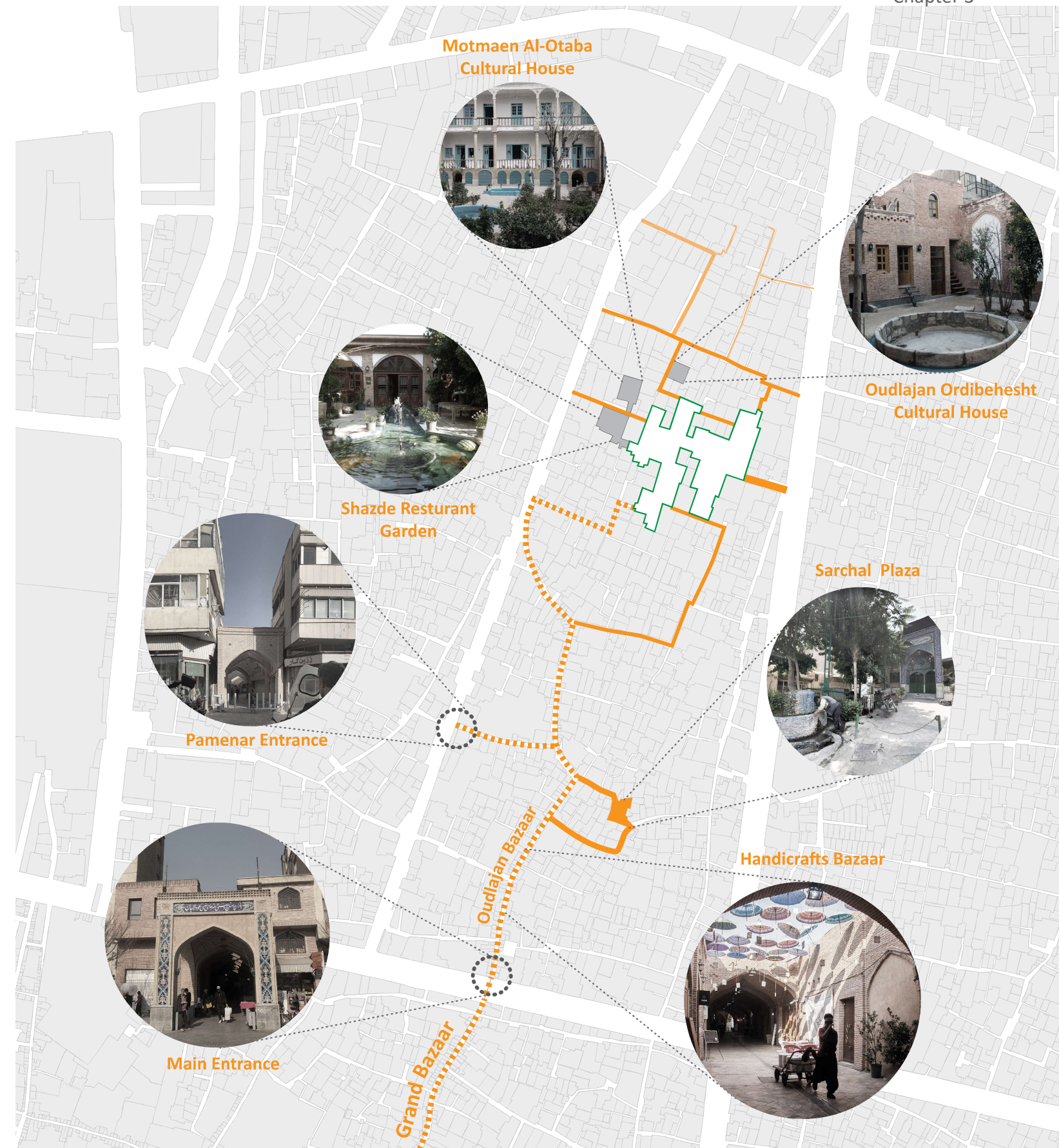
The facades on the sides of arteries display the beautiful ornamental elements of Persian art and architecture all along with this historic neighborhood. By walking through the streets and looking at the urban façade, the viewer can still find splendid plaster carving, muqarnas work, or brickwork inherited from the Qajar dynasty. As the two main streets, Pamemar and Khomeini are now primarily retailing; consequently, the façade has partially altered in some parts. However, the ornamental elements can be more observed on the buildings located in the dense fabric of Oudlajan.



Fig. 38. The urban facade of Oudlajan. image above shows the urban facade from Pamemar Street, picturing three different architectural styles from different periods in one frame; (from left to right) the modern glazed recently built building on the left, next to the brutalist concrete building built in the Pahlavi era and the entrance towards Oudlajan Bazaar with beautiful brick arches dates to Qajar dynasty (but was renovated recently) which looks like it is compressed between the two brutalist buildings

Fig. 39. Pedestrian paths towards Borazjan (Page 47)

As mentioned, many historical houses and buildings were ruined in Borazjan. Some of the buildings were the very luxurious houses owned by the king of Qajar's family, but unfortunately, now only some parts of the walls remain. As a result, the interior spaces of the demolished houses are now part of the urban façade in Oudlajan. Therefore, walking around Borazjan architectural elements such as fireplaces, staircases, muqarnas works, arches, plaster carving,



glazed tiles, brickworks, etc., can be observed as indicated in the images below.



Fig. 40. Facade of Borazjan, muqarnas works



Fig. 41. Fireplaces and plaster carving



Fig. 42. The interior walls turned into the urban facade

The ornamental details on the urban façade have the most significant role in characterizing the neighborhood. Therefore, it is essential to be preserved as a cultural heritage for future generations. Thus, the design process aims to identify the ornaments around the site, refurbish some parts, and keep them from deterioration. The image below shows the location of some of the spectacular decorations in Borazjan.



Fig. 43. Location of the valuable architectural ornamental elements and the artefacts on the walls surrounding Borazjan

In the design process, refurbishing the walls around the site is inspired by “Kintsugi,” the ancient Japanese technique of repairing pottery with a gold glue that becomes its identity. The refurbishment of the walls is to glorify the history they have seen from the Qajar era till today.



Fig. 44. Kintsugi technique of repairing

Similar to this technique but in the architectural realm Carlo Scarpa, the Italian architect, with his unique architecture of layering, creates a new hierarchy of the historical layers in the Castelvechio Museum.

“layering is part of our day-to-day perception, based on the simultaneous existence of objects of different ages and provenance. Besides, there are traditions, connections, and memories that give our daily existence a historical dimension.”

Quotes Anne-Catrin Schultz²

For Scarpa, the historical traces and their relationships have the power to reveal history. His intervention suggests nothing more than a root and a stage for the visitor. Through this root, he entangles relations between the historical layers of the complex for the visitor to observe. Scarpa saves not only the traces of the historic walls in Castelvechio Museum but also immortalized all the significance and memory those traces hold, keeping them active and vital for the present.

² Theodorakakis, Tasos. “Carlo Scarpa / Museum of Castelvechio.” Issuu., last modified Apr 2017, accessed June, 2021, https://issuu.com/tasostheodorakakis/docs/scarpa_comp.



Fig. 45. Sculpture gallery



Fig. 46. Framing a sculpture

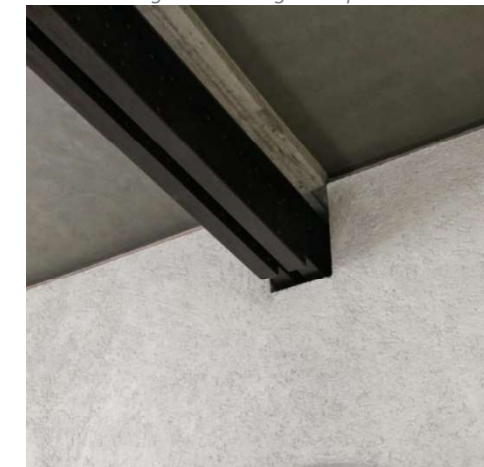


Fig. 47. layers of old and new

Inspired by Scarpa’s Castelvechio project and kintsugi technique, I used the same refurbishment method in Borazjan. Creating a link between old and new layers and how architecture can become a tool of highlighting this relationship is considered in renewing the walls. This way, the visitor will witness a continuous dialogue between the new layer of materials and the old Qajari ornaments.

Highlighting the architectural embellishments and the elements on the remaining walls, such as fireplaces, staircases, etc., will give the pedestrians a feeling that they are walking through a site where the king’s family used to live in the 18th century. It will create a sense of traveling between past and present. The invisible power of space will make the visitor want to scrutinize the site and transforms the past into an object of importance and a source of knowledge via interpretation.³ In this part, according to the discussed renewal principles, I propose a refurbished image of a wall in more detail. Besides, the walls can also exhibit the old objects from the ruined houses like these beer bottles dated back to post-revolution in the image (Fig. 48).



Fig. 48. Exhibition of the old objects found in the ruined houses (such as the beer bottle dated back to post-revolution)

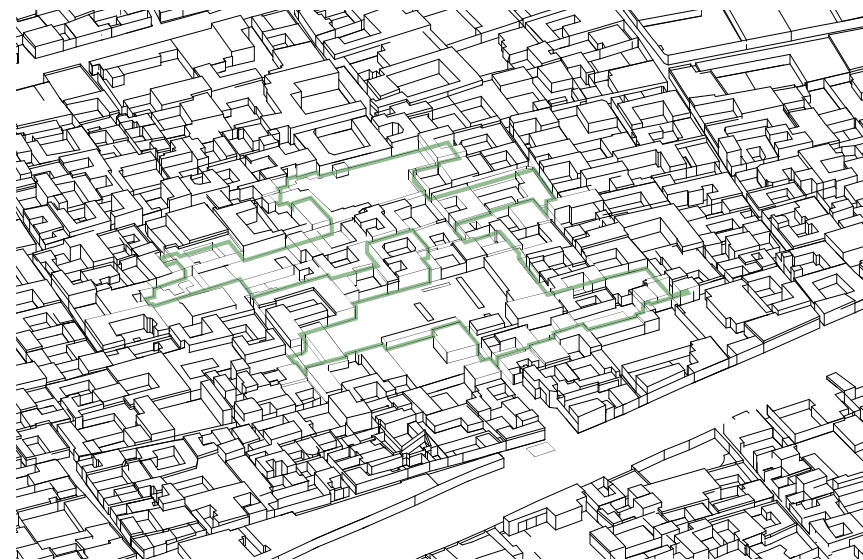
3 Theodorakakis, Tasos. “Carlo Scarpa / Museum of Castelvecchio.” Issuu., last modified Apr 2017, accessed June, 2021, https://issuu.com/tasostheodorakakis/docs/scarpa_comp.



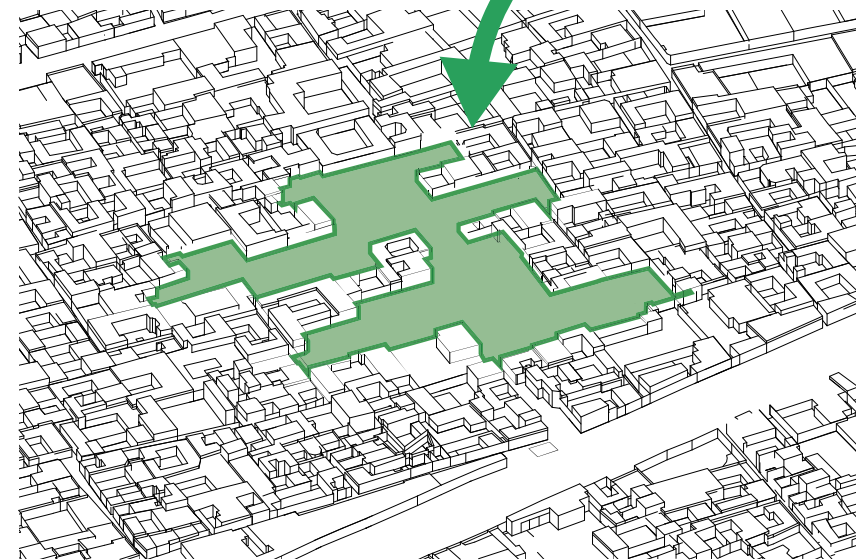
Fig. 49. A wall in Borazjan before and after image of the proposed renovation

Principal III: Material reuse

The demolition area in Borazjan is almost 11000 sqm that resulted in the production of a massive amount of construction waste, mainly consisting of brick as the most common material in the historic fabric of Oudlajan. Another design ethos in the proposal is to reuse this material for the paving of the site.



Borazjan neighborhood before demolition.



Borazjan neighborhood after demolition in 2006. The area of the demolished site is almost 11000 sqm.

Reusing the brick
for the paving



Demolition waste of the historic site.

Fig. 50. The Material Reuse Illustration

Part 2: The social context and programs

Social context and interactions in old Oudlajan

Borazjan is located in the historical context of Tehran, having outstanding cultural value with numerous ornamented houses and public buildings and urban spaces such as qanats, hammams (public baths), bazaars, public gardens, and tea houses served the public. Besides, religious buildings like synagogues, churches, mosques, shrines, and *saghākhānehs* in close distances show a high density of social interactions in the neighborhood. Such a symbiosis between different religions has roots in the intangible heritage still alive in the community.⁴ But unfortunately, it is gradually fading away in Borazjan according to the previously mentioned issues and changes over the last decades, so the aim in this part is to reactivate the lost liveliness and spirit of Borazjan by proposing a set of activities and program. The images are indicating the social context, hobbies and activities in old Oudlajan (fig. 51-55).

Muslim women wearing hijab at Bazaar shopping with their children

Russian ambassadors, Mr. Kohenka and Dr. Schorvich visiting Oudlajan

Jewish woman purchasing at the local Bazaar of Oudlajan

Jewish men wearing Jewish style hats wandering at Bazaar



Fig. 51. The image shows the symbiosis between different religions and the liveliness on a regular day at the local Bazaar of Oudlajan in 1960.

⁴ Habib, Susan, Navid Jamali, and Shaghayegh Shahhosseini. 2019. "Saving Oudlajan as a Museum without Walls." *Tehran Project 8*. https://www.researchgate.net/profile/Shaghayegh-Shahhosseini/publication/333432744_Please_Save_Oudlajan_httpsirisunipaitretrievehandle10447263327505796estratto20Margagliotta20De20Marcopdf/links/5d6d40e4458515088608b31a/Please-Save-Oudlajan-https-irisunipait-retrieve-handle-10447-263327-505796-estratto20Margagliotta20De20Marcopdf.pdf



Fig. 52. Oudlajan neighborhood, entrance towards seven Kanisa alley (the Jewish community)

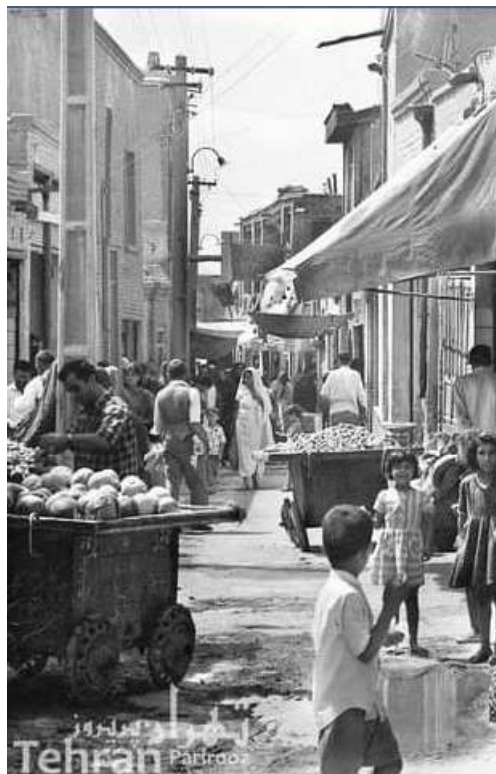


Fig. 53. A view of retails in Oudlajan



Fig. 54. The man is looking through "Shahre Farang". A Shahre Farang is an Iranian version of a portable peep box traditionally taken around the country by wandering storytellers.



Fig. 55. Old people of Oudlajan walking in the neighborhood.

Current situation of local businesses and social activities

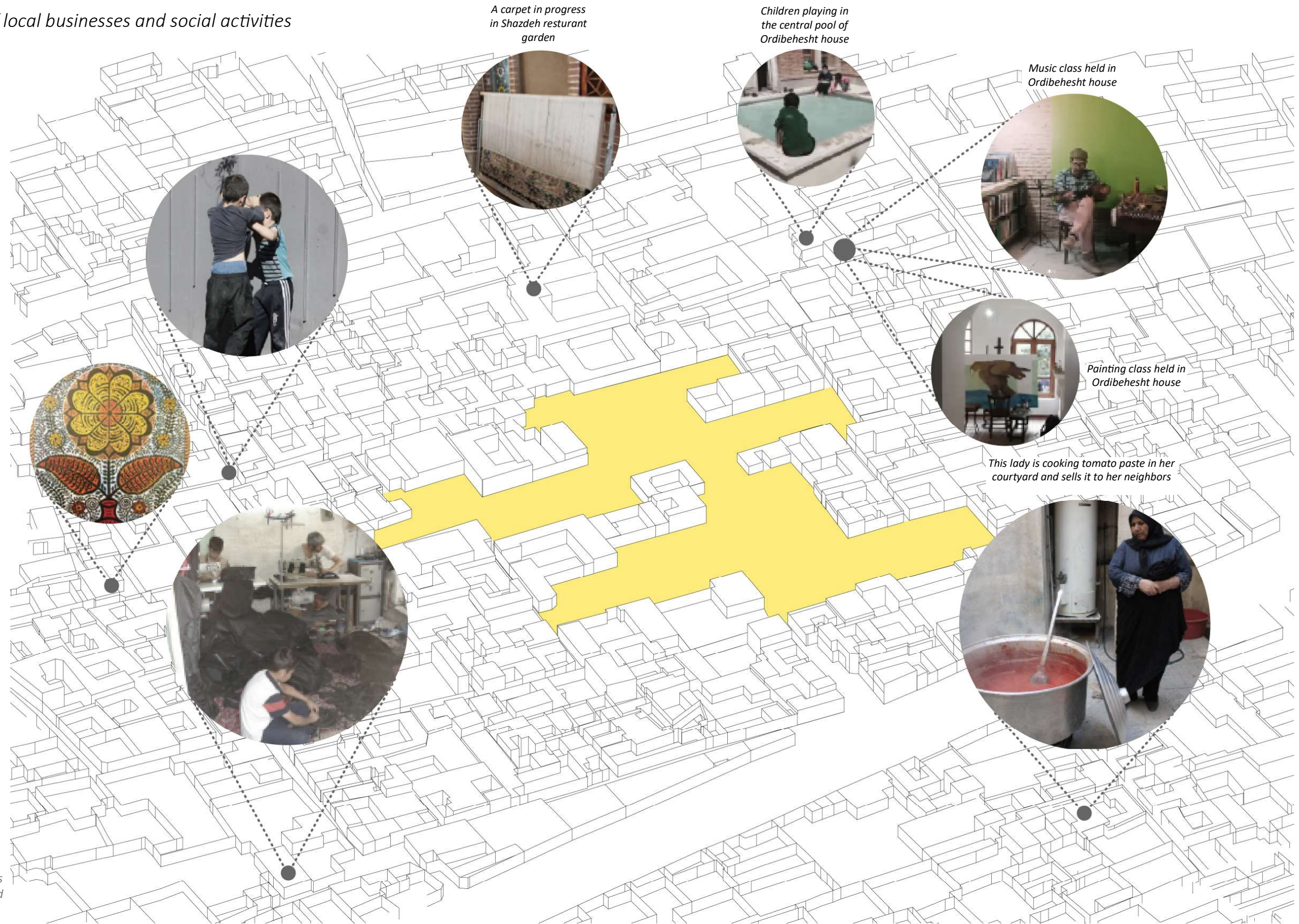


Fig. 56. This map shows the current situation of local businesses and social activities in Oudlajan. Such as crafts and family businesses.

A new program in Borazjan, according to the social context and demands

After researching the current situation of this district in chapter one and analyzing the activities and programs in the Persian garden in chapter two, I came up with the illustrated realms of activities; culture, social life, economic, recreation, and environment, indicated in fig. 57 and 58. A bubble diagram of the placement of the program is shown in fig. 59.

The Proposed Program

In the most spacious space of the site, an open plaza is a good place for big social and cultural events such as movie screenings, concerts, theatre, events, and festivals. In addition to this, there can be a small-scale community garden for smaller gatherings located closer to Ordibehesht cultural house.

I intend to activate the abandoned buildings on the Northside of the site and turn them into classes such as art for children and women. Because there are many workers and industrial workshops on the site, more spaces should be allocated to women and children. Besides, one should be turned into an Afghan cultural house since many Afghan residents and workers are in this district; there should be a place to give them a sense of belonging to this public urban space.

As the number of young males is more than any other group, I added the street soccer field, the boy's favorite sport in this community, with other sports facilities for the other groups.

Due to the location of Oudlajan bazaar and Shazdeh restaurant, I decided to have the economic part of the program adjacent to them. So when a pedestrian is walking through the Grand Bazaar and Oudlajan Bazaar and reaching to Borazjan site, can get the same feeling of old Bazaar's retails from the atmosphere.

The retail kiosks have a very simple basic form of Bazaar retail shades built by the local workers. The kiosks are a perfect opportunity for residents to sell their craft or other products. Besides, the crops from the courtyard can be sell in the local Bazaar. The local gardeners will run the courtyards.

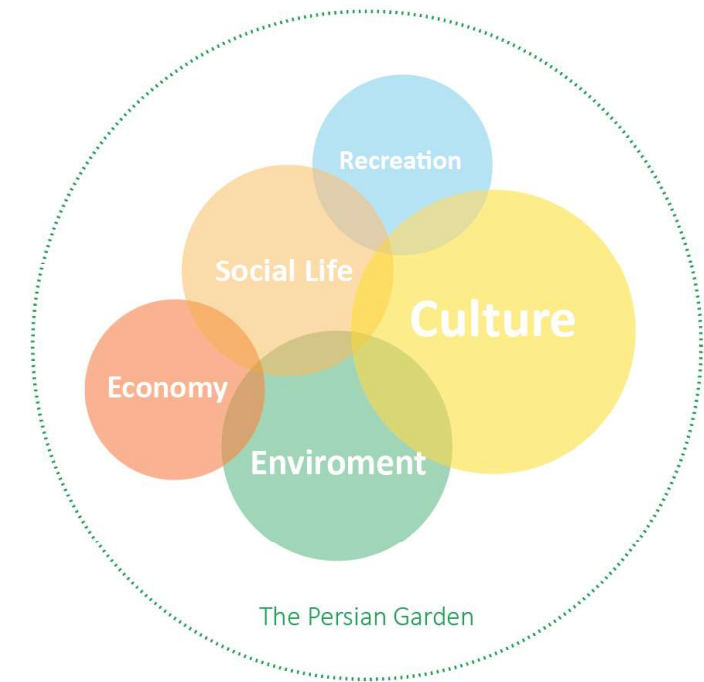


Fig. 57. The diagram shows the program derived from the Persian garden's activities according to what Khalilnejad and Tobias suggested (noticed in Chapter 2).

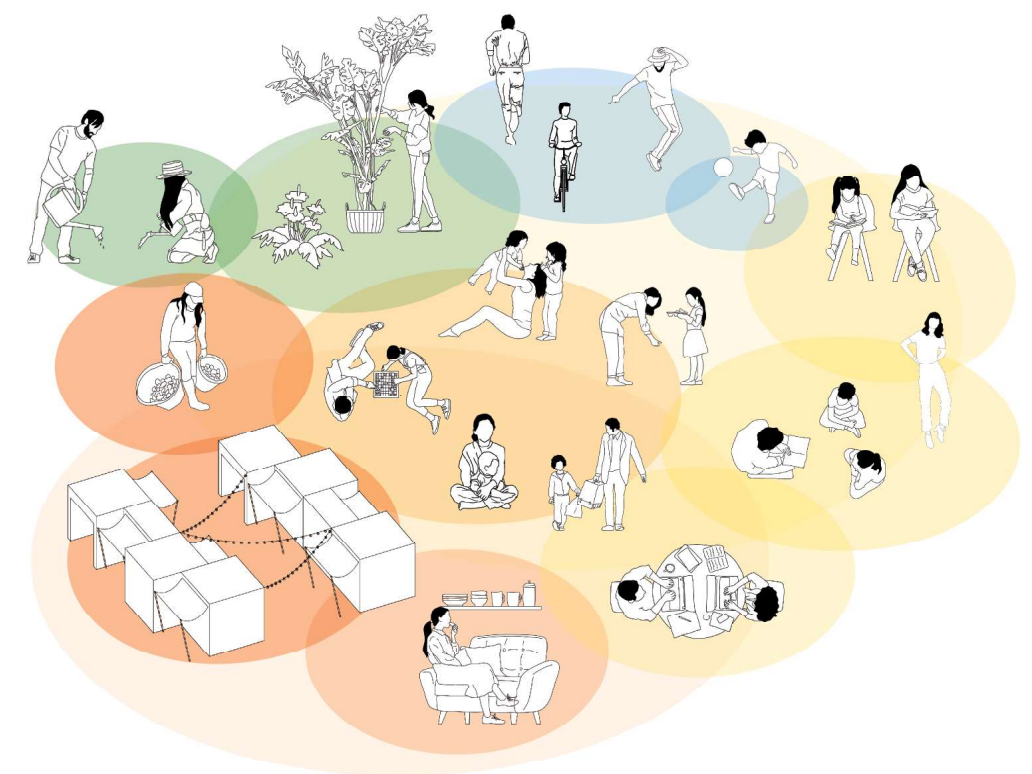


Fig. 58. A proposal of a set of activities and programs that are needed in Borazjan neighbourhood according to the ongoing issues and demands:

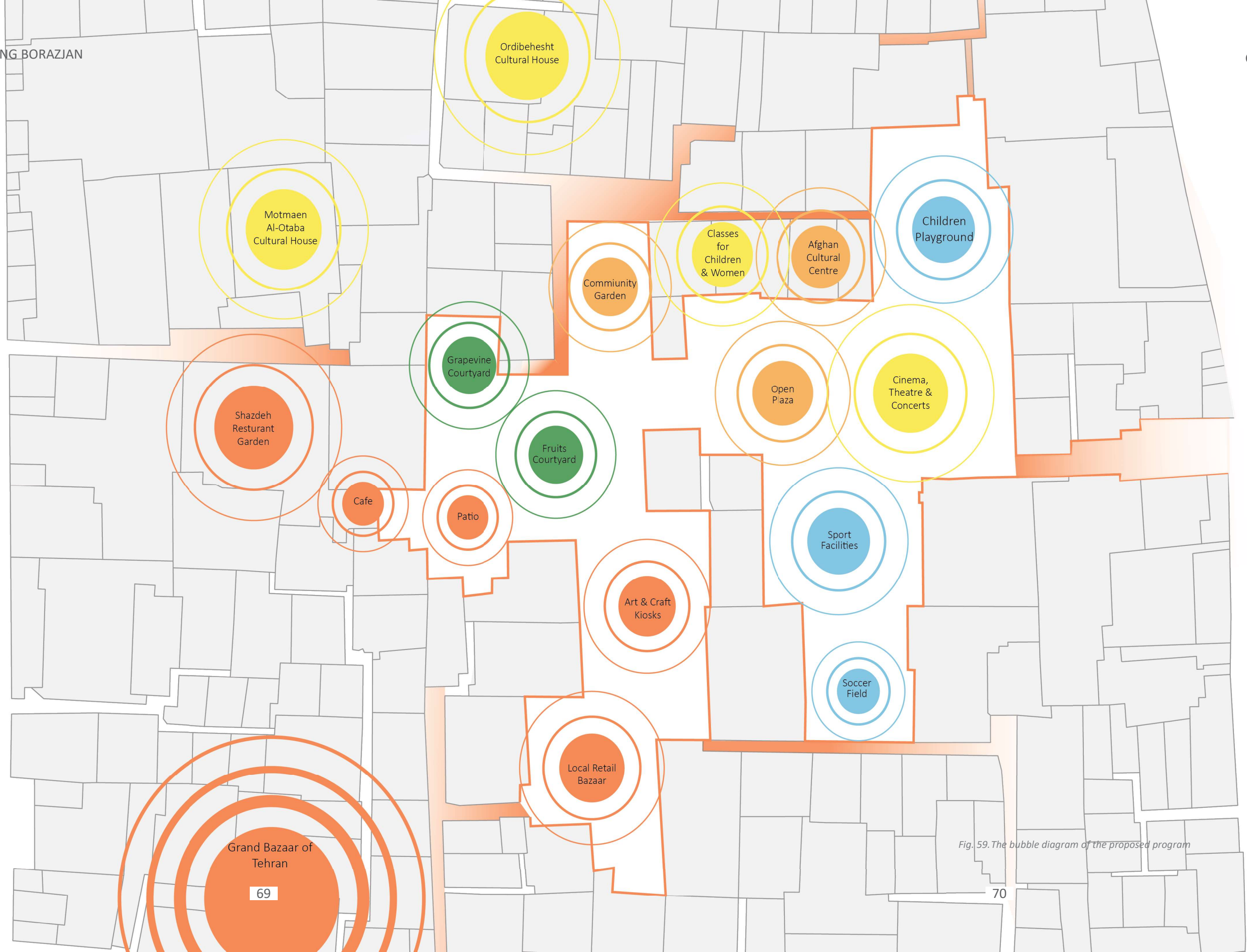


Fig. 59. The bubble diagram of the proposed program

Structure of Persian Gardens investigated through the Persian “Garden” Carpet:

There are many different kinds of carpets in terms of a wide variety in their patterns. One of the oldest kinds of Persian rugs is the “Garden” type. In this sort of carpet, the original garden design in carpets is a pattern that illustrates a Persian garden from a “bird’s-eye view.” The Safavid “Garden” Carpet, from Northwest Iran, dated to the first half 17th century (1622-32), will be analyzed. This carpet is assumed as the most refined and the oldest garden carpet existing in the world. The place of origin of this carpet is believed to be the city of Kerman in Iran. It was purchased by Mirza Raja Jai Singh I in 1632 A.D., and now it is being exhibited in Albert Hall Museum in Jaipur, India. The warps are cotton knotted fourfold, while the weft threads are brown wool and silk knotted twofold. The carpet is 28’4” x12’4” in size.

The depiction of the garden elements in the carpet is in two-dimensional space, almost without any perspective. The elevation of trees, flowers, plants, and animals is well illustrated with the most straightforward shape in the plan view in the Garden carpet in a way that plays with the viewer’s imagination to picture the Persian garden in their mind by looking at the carpet.

Usually, the Persian Garden Carpets design is inspired by the classic four-parts Persian garden known as “Chahar Bagh” (meaning four gardens), divided by streams into four main garden sections. The unique characteristic that made me chose this carpet to dive in rather than other rugs is the other subdivisions in four corners that made beautiful colorful smaller garden pots with different vegetation that makes me think of rendering these hues gardens into rigid empty space of Borazjan.

The four main sections are around the central tank with a high pavilion. The pavilion has a blue dome and richly decorated interior with a throne, from which the emperor could enjoy a view of the splendid garden. The garden and orchards within are supplied with water from the central tank, with two big ponds on either side of it by the main channel. The channel motif is inspired by a system introduced by Shah Abbas the Great (1526-1628) in and around his capital. It was known as the “Isfahan Channel System.”

The central pool, as pictured, shows fish, ducks, turtles, and some fabulous Chinese animals. Ferocious beasts appear to break the garden’s peace when a lion caught the deer. Other vicious animals

include a Chinese monster and a fantastic dragon devouring a fish. As every animal is preying upon another, the fish, too, turn aggressive biting stags and birds. Avenues and orchards of flowering and fruit-laden trees adorn the channels and plots, full of birds on the ground, in the air, and in nests.

While the ground color of the avenues and much of the carpet are red, the square garden plots around the central tank are in five colors. The group of four garden plots at the top and bottom are in four colors. The varied colored story is a unique feature of the carpet and contributes to its incomparable magnificence ⁵.



Fig. 60. Analysis of the structure of the studied Safavid garden rug

⁵ “Safavid “Garden” Rug, NW Iran, First Half 17th Century (1622-32). Albert Hall Museum, Jaipur.”, accessed May 29, 2021, <http://www.azerbaijanrugs.com/guide/early-nw-iran-azerbaijan/early-azerbaijan-nw-iran-rug11-garden-carpet-albert-hall-museum-jaipur.htm>.

*Structuring the garden through investigation in the Persian
“Garden” Carpet*



Fig. 61. Step one: Cutting the carpet into pieces



Fig. 62. Step two: collaging the pieces on the site



Fig. 63. Step three: Finding order by using the structure of the garden to create courtyards for different activities

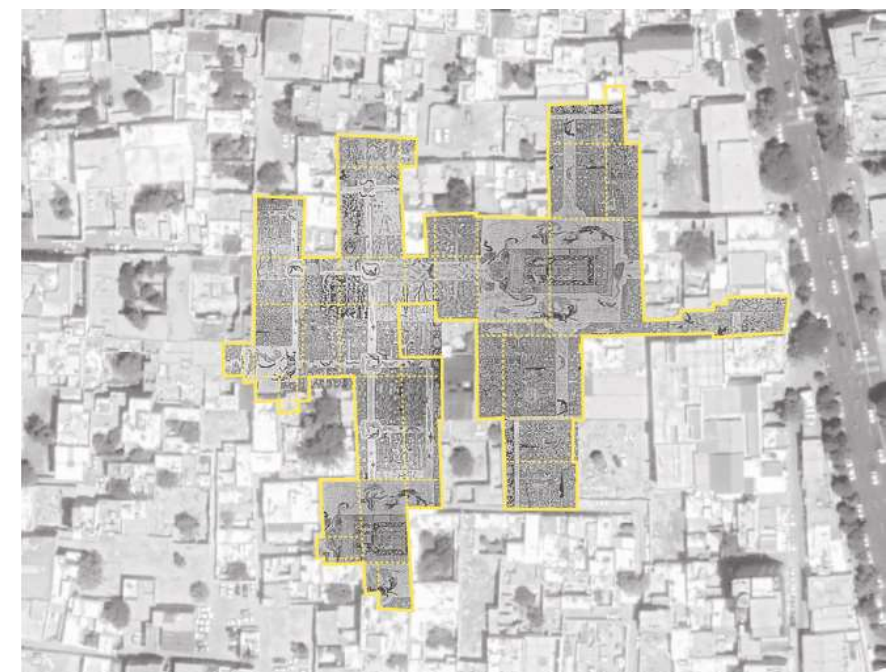


Fig. 64. Step four: Modifying the lines according to the traces of the ruined buildings

Followed by the structure of the Persian garden, which consists of these three layouts, I designed the urban space of Borazjan.

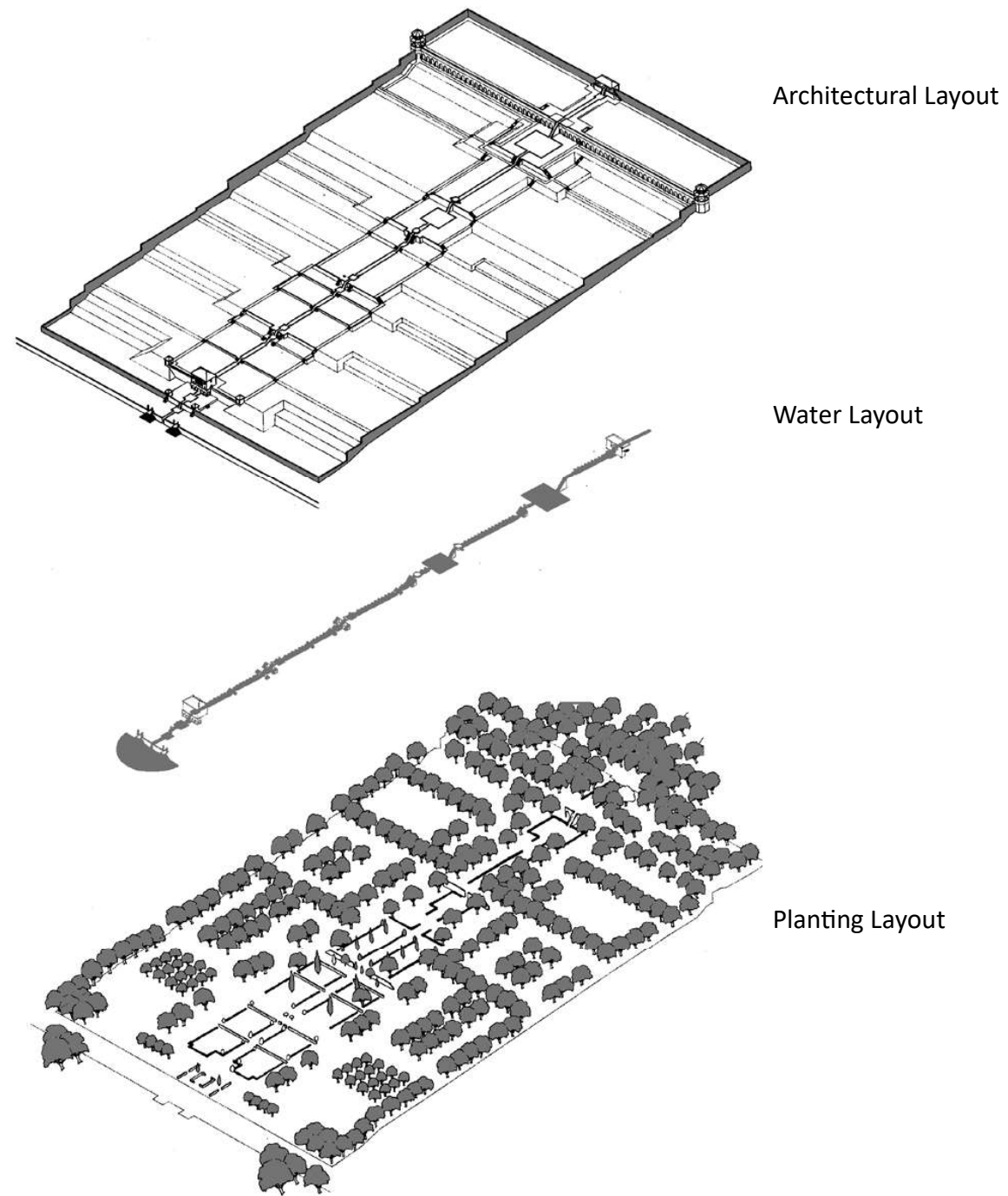


Fig. 65. Structure of the Persian garden. Showing: Planting layout, Water layout, Architectural layout

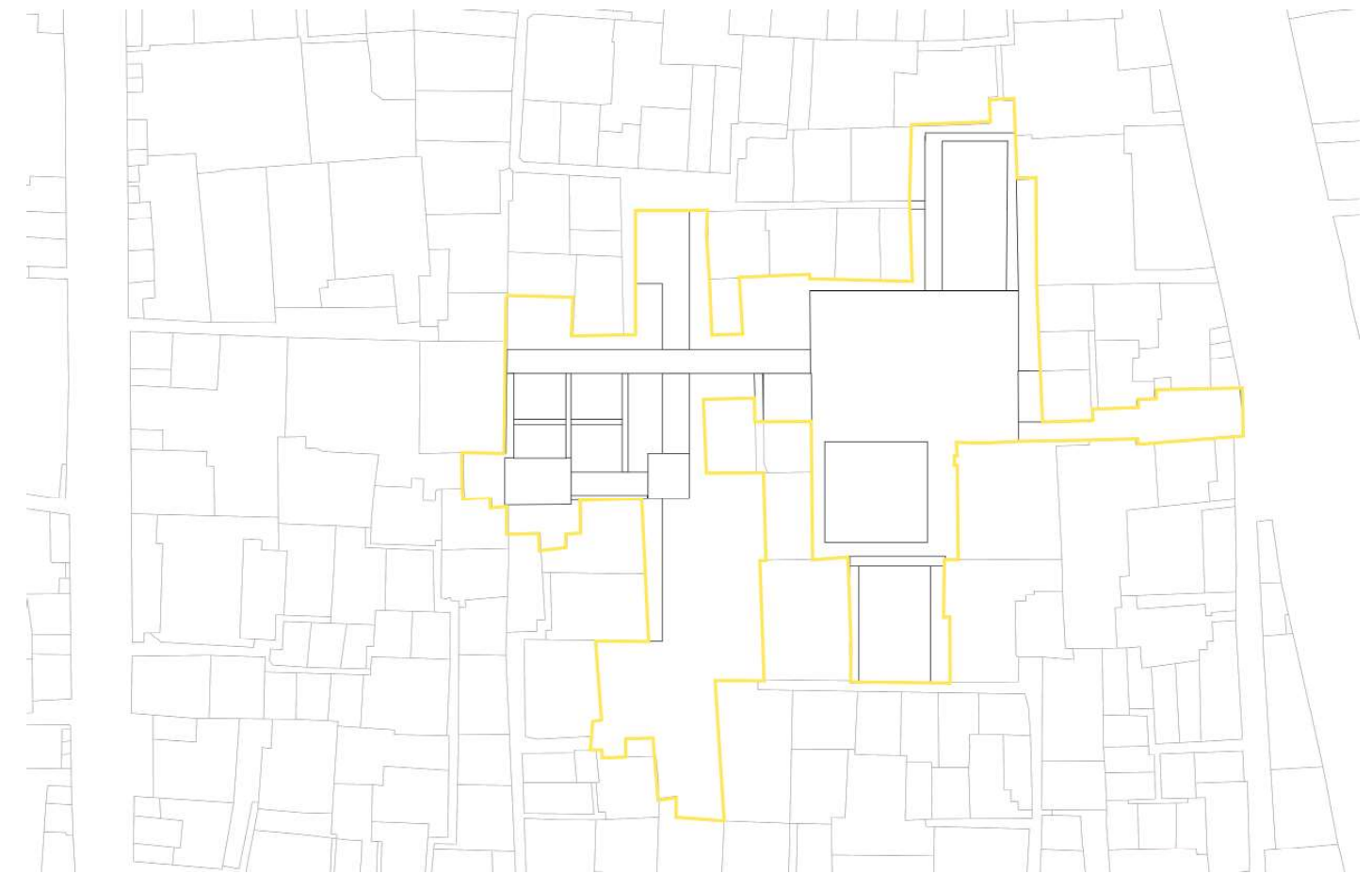


Fig. 66. The architectural layout

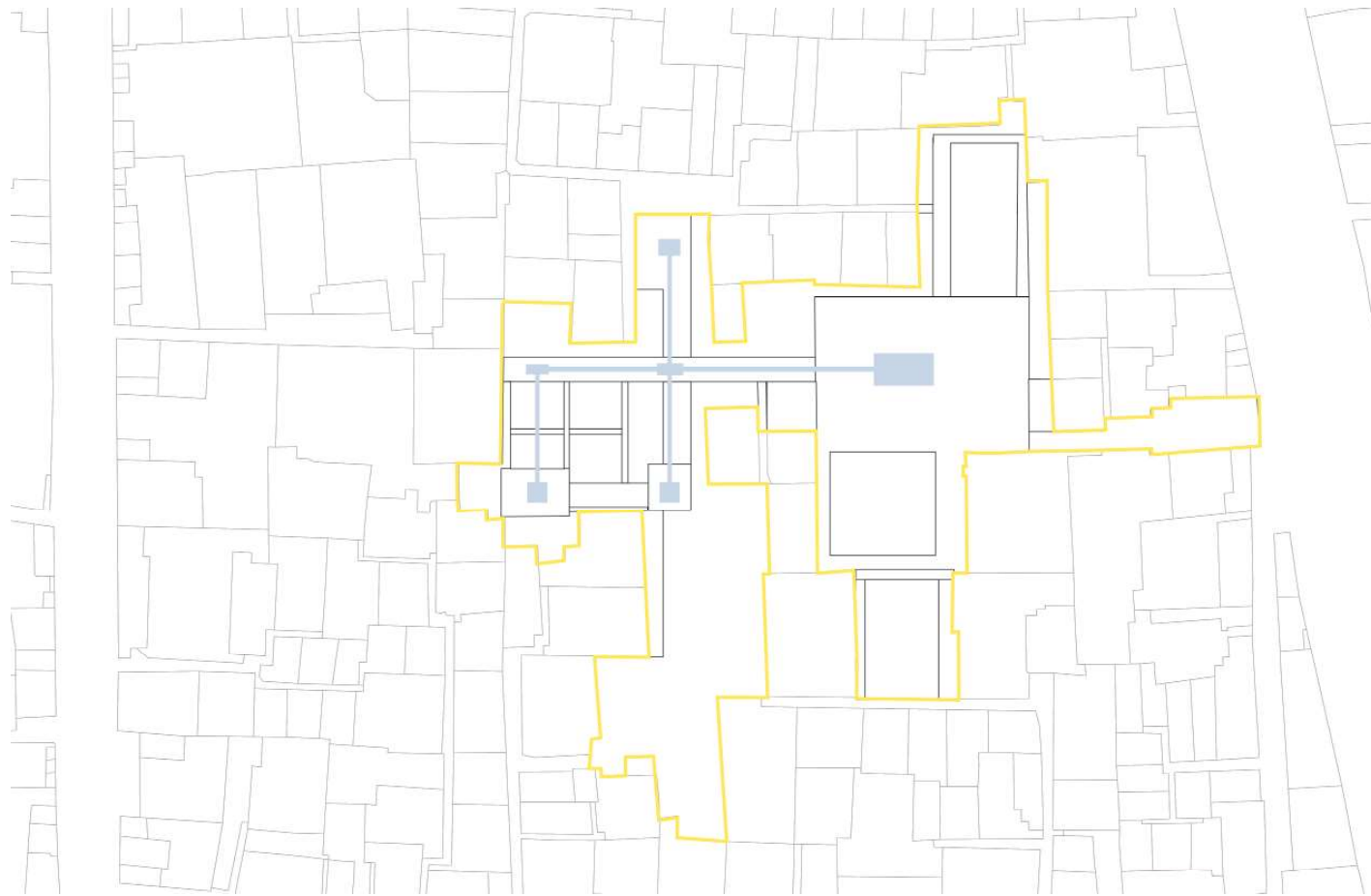


Fig. 67. The water layout

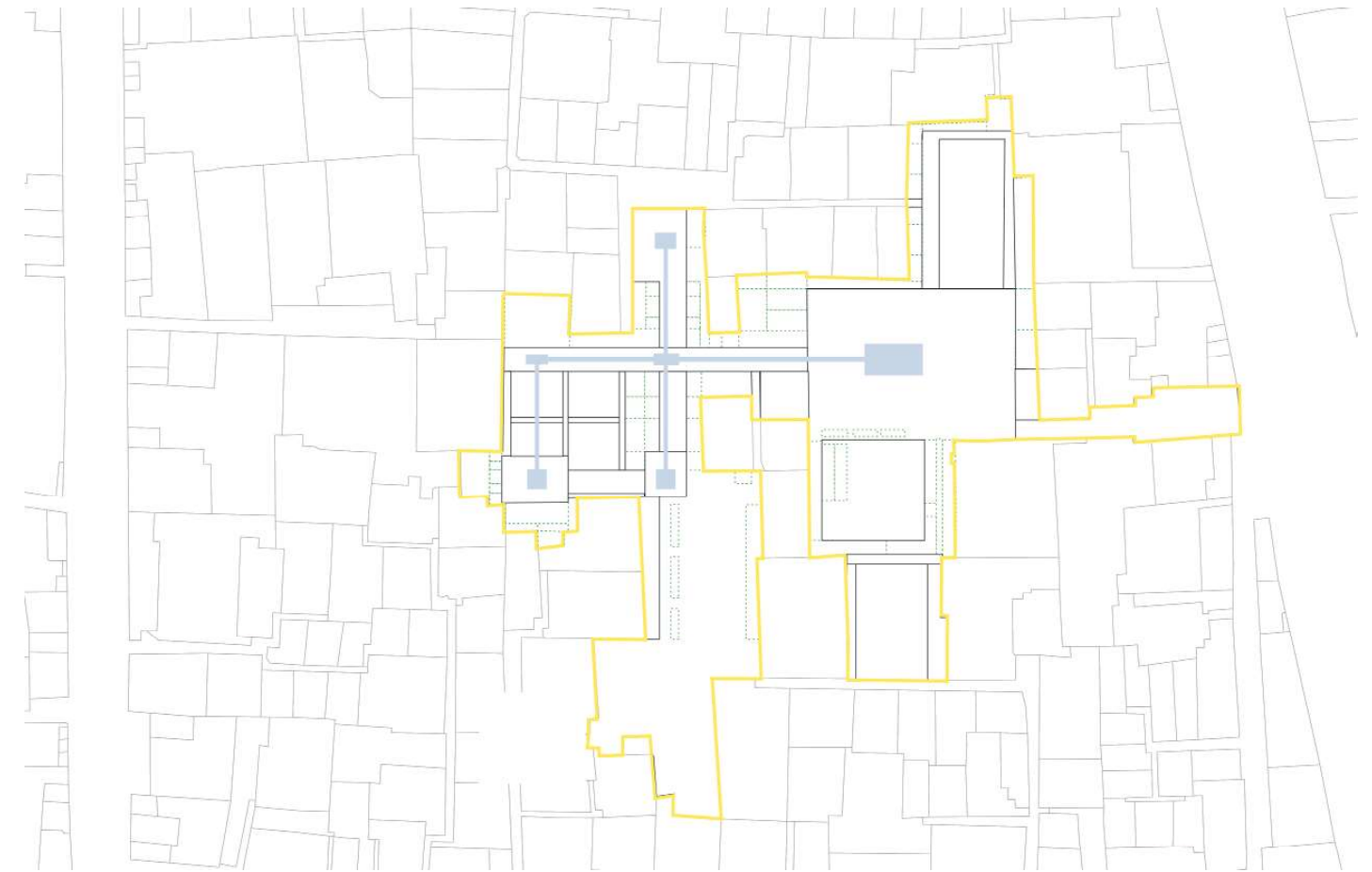


Fig. 68. The planting layout

Part 3: The planting and micro-climate effects

While poetry, music, and conversation with friends and family all took place in garden settings, they also provided a protected environment in which to grow fruit and nut trees, vegetables, and flowers such as roses, iris, and lilies. Therefore, besides the program and activities, the landscape's productivity also plays an essential role in the Persian gardens. The arrangement of the vegetation is well illustrated in detail in the Safavid garden rug below. It is worth mentioning that some trees and plants imply symbolic meanings that are more particular than simply that of paradise. For example, the poet Hafiz (1315–1390) refers to a love object (the cypress) and the tears of the lover (the canal):⁶

*The phantom of the stature of his
cypress constantly stands in my eye,
Because the place of the cypress is
at the bank of the canal.⁷*

⁶ Canby, Sheila. "Eternal Springtime: A Persian Garden Carpet from the Burrell Collection." metmuseum.org., last modified July 18, accessed June 26, 2021, <https://www.metmuseum.org/blogs/now-at-the-met/2018/eternal-springtime-wagner-garden-carpet>.

⁷ Schimmel, Annemarie. 2014. *A Two-Colored Brocade: The Imagery of Persian Poetry*. United States: The University of North Carolina Press.

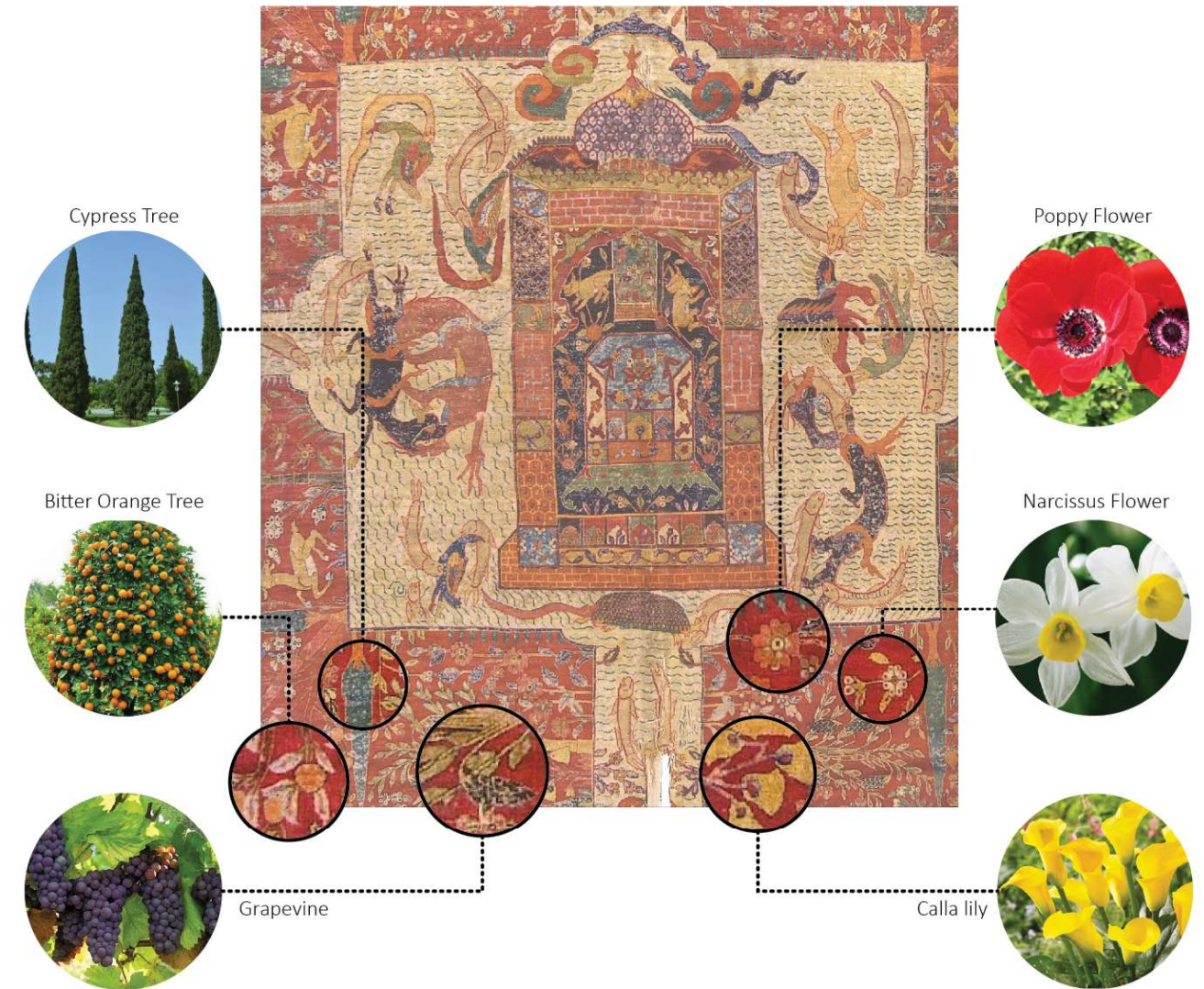


Fig. 69. The arrangement of the vegetation in more details

Before going through the foliage, it is essential to look through Tehran’s climate, air condition, and topography.

Topography

The greater Tehran consists of three mountainous, piedmont, and dessert sections. The mountainous area includes heights over 1800 meters. In this section, due to the height and legal restrictions, there is no residence or construction. Thus Tehran has physically developed in the other two areas. The southern parts of the city have grown along a vast, flat desert. The city, however, cannot expand along the plain due to the high levels of Groundwater and the arid zone. Nor can the city grow along the northern and eastern heights. So the city can only expand in the western direction due to its suitable geographical condition. The new residential estates have primarily developed in this direction. The topographical conditions of the city directly influence the spatial texture of the city, especially on the northern side. The height difference in certain parts of the city has given it a remarkable beauty.

The city’s view from the north and the mountainous view from the south have been influential in the morphology. Topographically, the most crucial issue in Tehran is the direction of relief. From the south toward the north, the height of land increases. The height difference between the low parts reaches 900 meters and the high parts 1800 meters—the height difference results in a change of weather, better vegetation, and beautiful countryside along the north. As we move from the north to the south, the whole of Tehran falls within our view.

As we move from the south to the north, we observe many natural environmental conditions, property value, access to services, and social needs. In fact, the geographical slope, as it were, corresponds to the social pitch. In other words, the topography of the city is a reflection of its social-geographical topography ⁸.

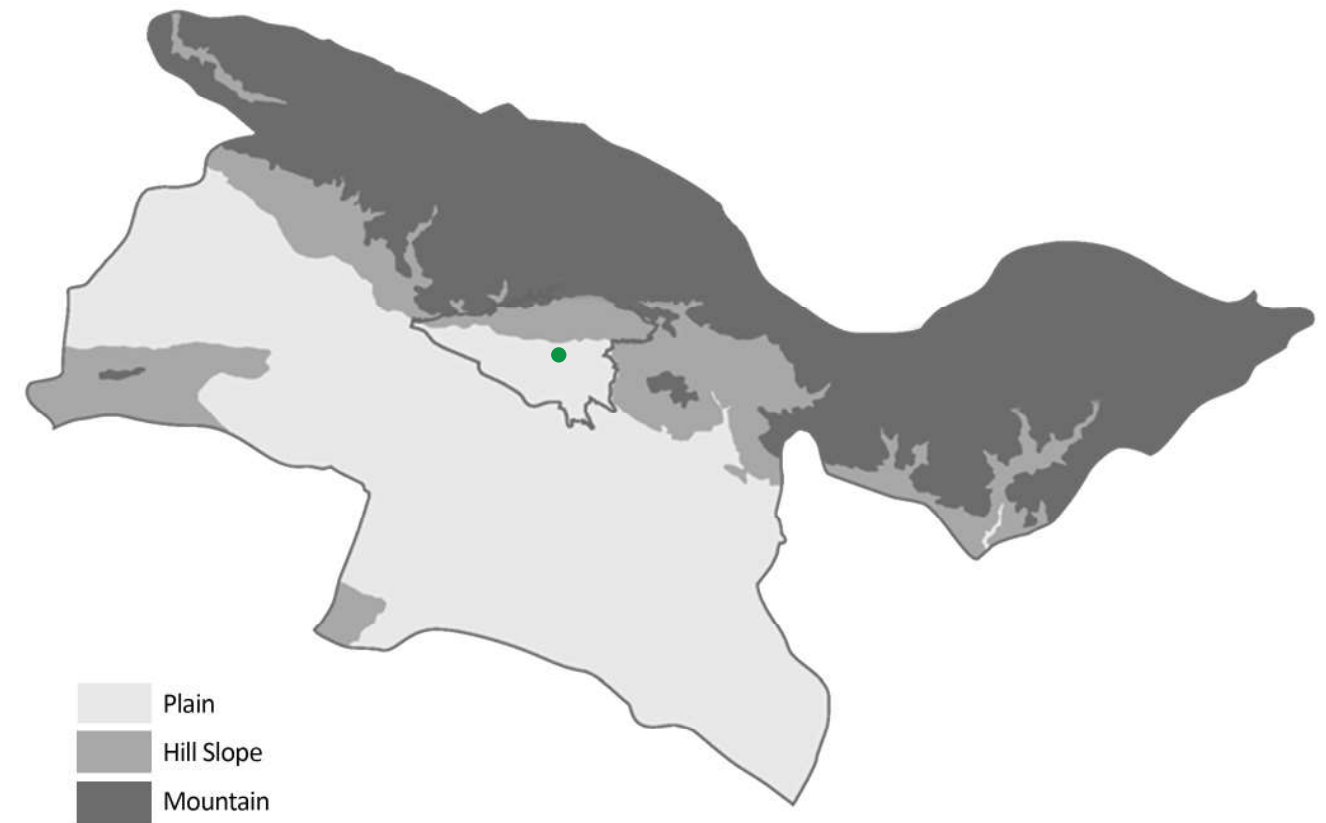


Fig. 70. Topography of tehran province (2006)

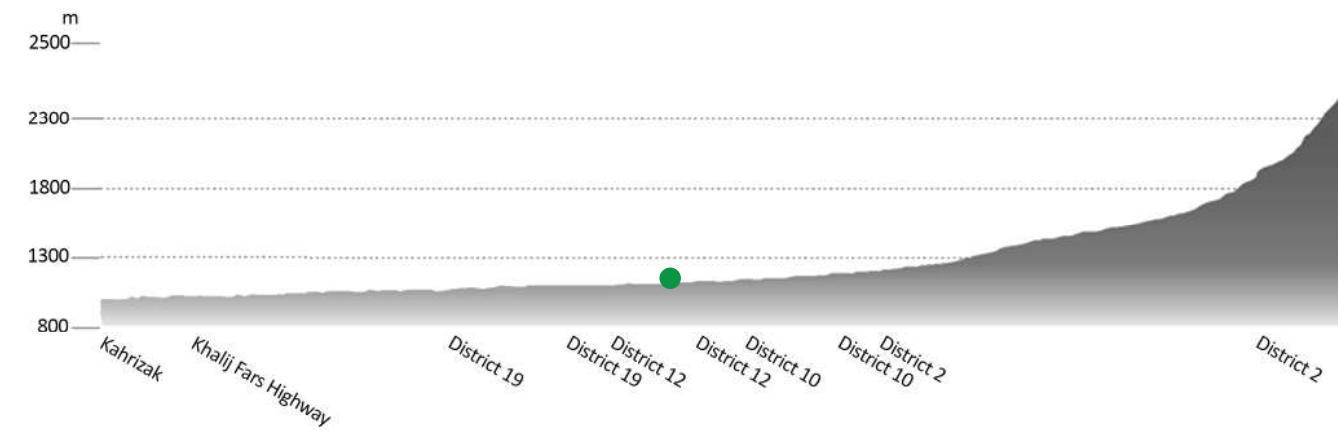


Fig. 71. Longitudinal profile of the routes leading to Tehran. North-South path.

⁸ Atlas of Tehran Metropolis. Accessed August 14, 2021. <https://atlas.tehran.ir/>.

Temperature

In the Tehran metropolitan, the annual mean temperature changes between 15 to 18 degrees Celsius. Given the height differences in the city, the various parts have an average of 3 degrees Celsius difference in temperature. This difference remains almost the same in cold and warm seasons of the year.

Humidity

The aviation of monthly mean relative humidity includes minimum and maximum relative humidity registered at Mehrabad Station. In the mornings, humidity changes from a minimum of %38 to a maximum of %79 in July to January. The changes in the relative humidity in midday vary between %15 in June to %47 in February.

Pollution

Air pollution of Tehran is one of the major problems that the greater Tehran is facing. With a population of 7.7 million, Tehran is the most important industrial and business center ⁹.

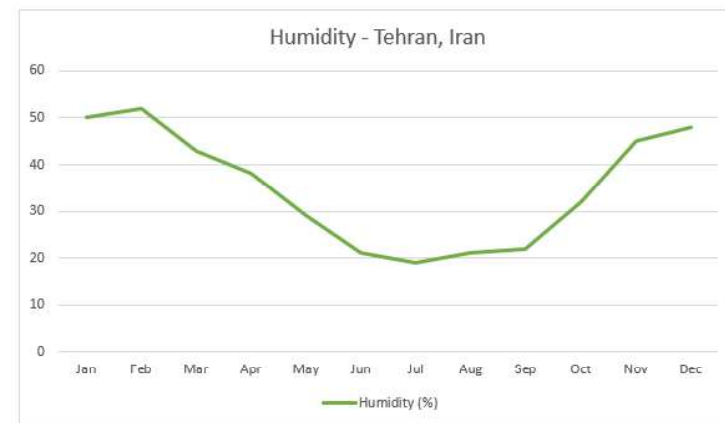


Fig. 72. Average humidity Tehran, Iran

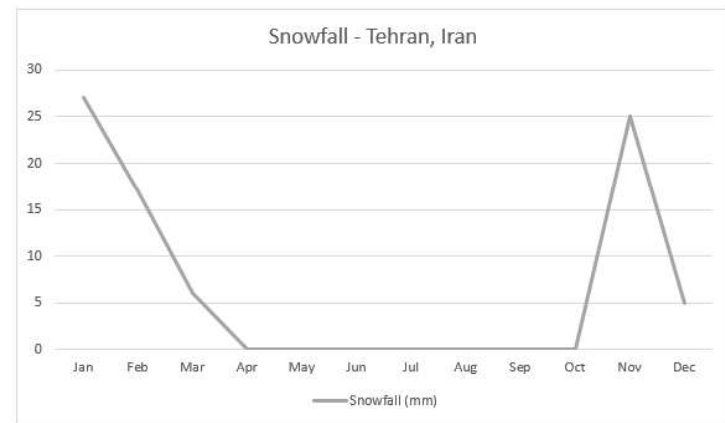


Fig. 73. Average Snowfall Tehran, Iran

⁹ Atlas of Tehran Metropolis. Accessed August 14, 2021. <https://atlas.tehran.ir/>.

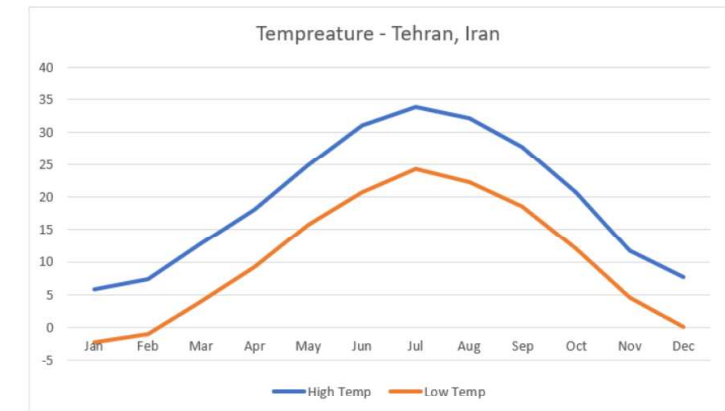


Fig. 74. Average temperature Tehran, Iran

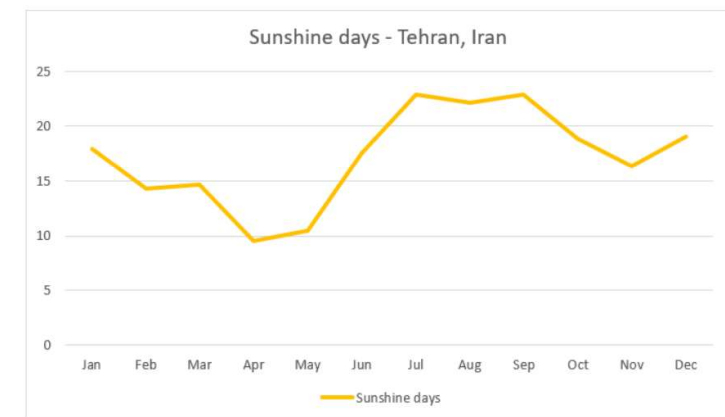


Fig. 75. Average sunshine days Tehran, Iran

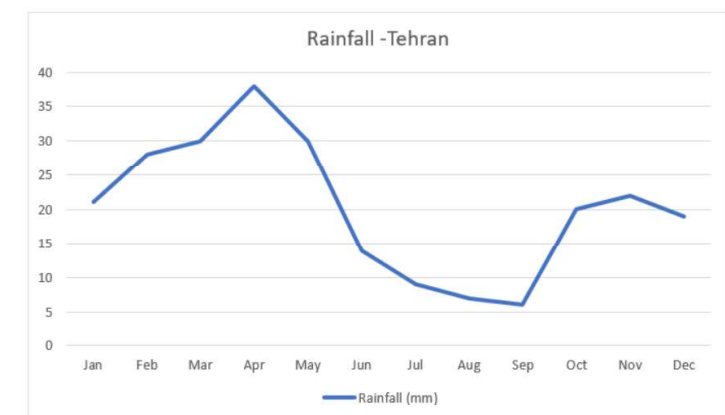


Fig. 76. Average rainfall Tehran, Iran

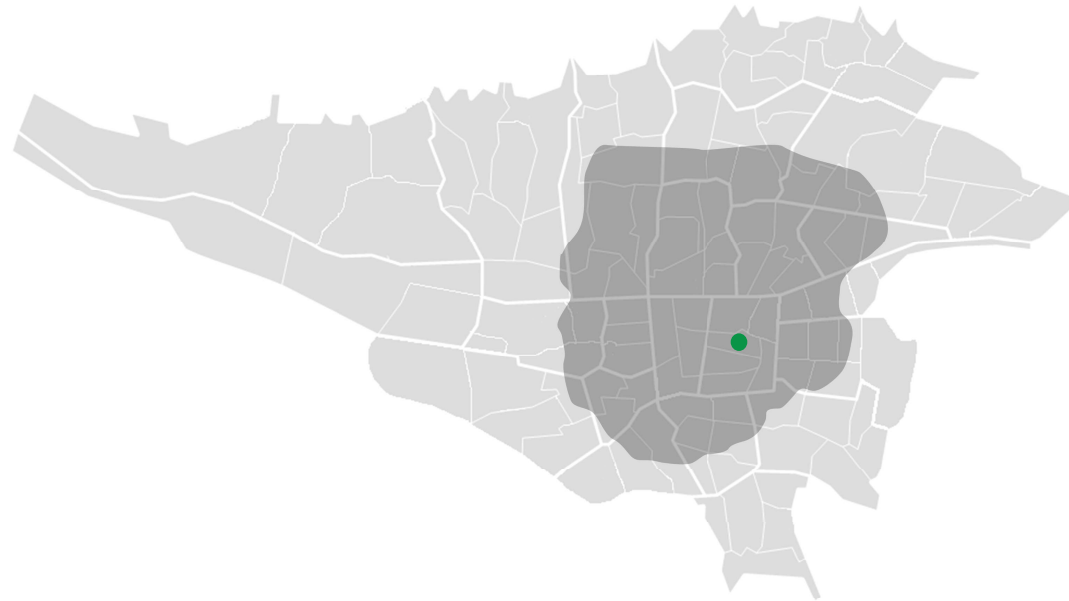


Fig. 77. Area of Tehran with air pollution conditions

Productive landscape in Persian garden

Studies of plants and trees in the Persian gardens show that the plant species can be categorized into two fruitful and ornamental categories. Each of those classes makes unique greenery that is distinguishable according to differences in species, plant location, plant design, and operation. Therefore, the Persian Garden's inner landscape has two kinds of green scenery: productive (edible) and ornamental (non-edible) landscapes. Interestingly, that characteristic is not limited only to being present in the orchard and agricultural gardens; rather, the ceremonial gardens also have fruit trees and other plant species containing food products (Shahcheraghi, 2013). Fruit trees in the plots as the edible greenery occupy a large proportion of the garden and, combined with ornamental trees (the garden's central axis), form the garden's plant structure.¹⁰

According to the climate of Tehran and Borazjan's air condition and the vegetation arrangement in the Persian garden, the proposed plants are categorized as indicated below with heights:

1. Trees

- Shading trees
 - Cypress 30-50m
 - Tree of heaven (*Ailanthus altissima*) 15-27m / 6m spread
 - Eastern redbud 6-9m h / 8-10m spread
- Edible trees
 - Mulberry tree 10-20m
 - Bitter orange 4-10m
 - Persimmon 10-20
 - Grapevine (creeping plant)

2. Ornamental plants

- Shrubs
 - Firethorn 2-5m
 - Mahonia aquifolium 0.8-2m
 - Melaleuca citrina 1-3m
 - Cycas 1-2m
- Flowers
 - Rose in different colors
 - Geraniums 10-120cm
 - petunia × atkinsiana 40-100cm
 - Cockscomb 20-80 cm
 - *Lonicera caprifolium* (creeping plant)

¹⁰ Kahlilnejad, Mohamadreza and Kai Tobias. 2015. "The Productive Landscape in Persian Gardens; Foundation and Features." *Bagh Nazar* 13 (38): 3-16.

The height of the plants is considered in the landscape design (fig. 78-79). The shorter decorative flowers are planted near the ornamental walls not to block the artifacts besides creating a pleasing view. At the same time, the taller species are placed along the passages, corridors, and adjacent to the sitting areas to create a shadow for the people in the hot summers of Tehran like cypresses (fig. 81).



Fig. 78. The structure elevation of the chosen greenery. The edible plants are pointed in orange.

Planting Plan

The studied Safavid garden rug inspired the color palette of the flowers and plants to recreate its beautiful harmony. Most of the chosen plants and trees are green all year, as the cypress shading trees. Besides, it is worthing to notice that minimum lawn is used in the landscape design due to water issues. Different trees and shrubs have fruits or flowers in different seasons of the year, giving the garden various colors and aesthetics.

- | | |
|----------------------|----------------|
| Flowers: | Trees: |
| White Rose | Cypress |
| Petunia x Atkinsiana | Tree of Heaven |
| Yellow Rose | Eastern redbud |
| Cockscomb | Mulberry |
| Geranium | Bitter Orange |
| Bushes: | Persimmon |
| Cycas | |
| Mahonia | |
| Firethorn | |
| Melaleuca Citrina | |

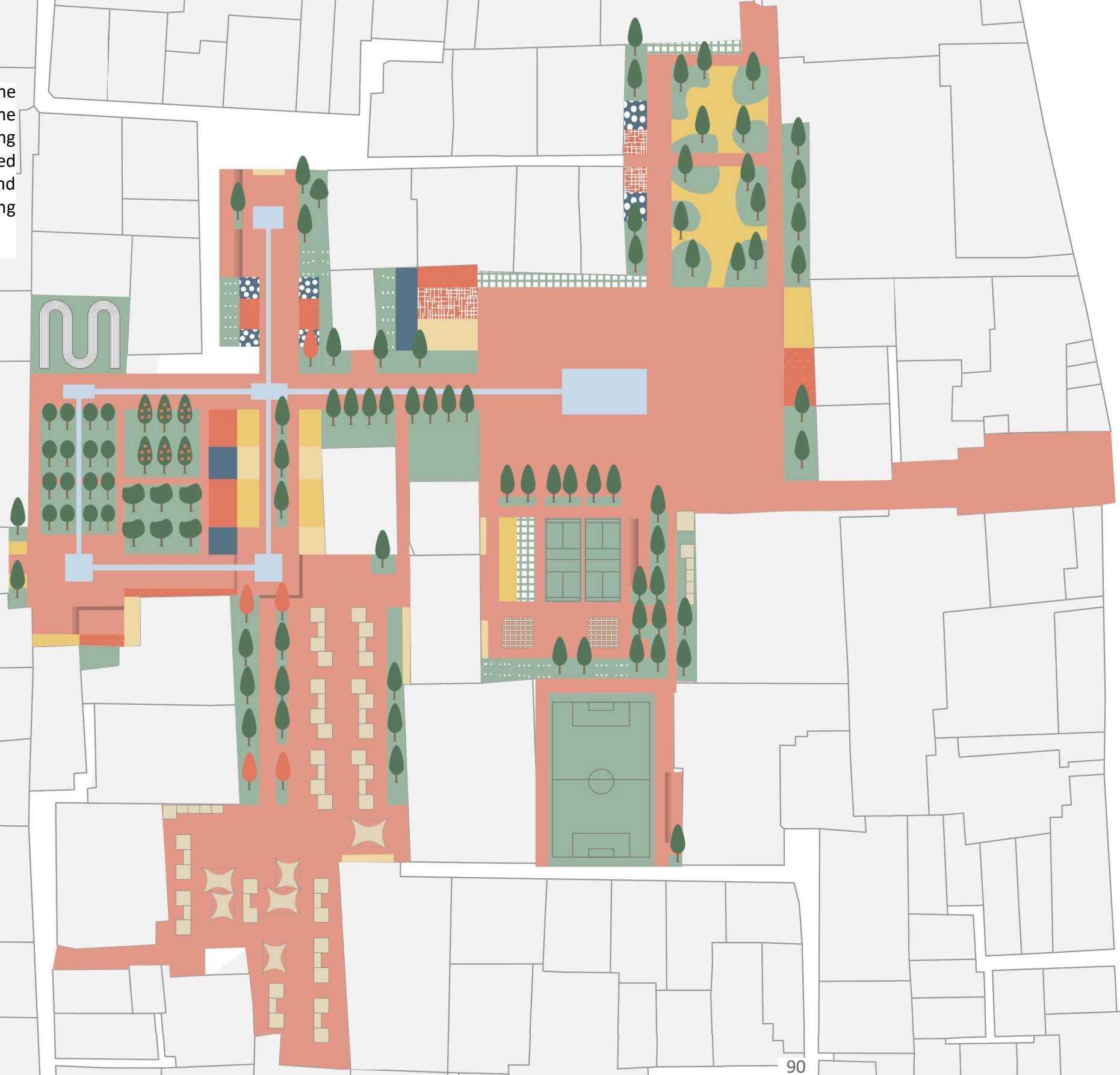


Fig. 79. The planting plan

Seasonal Plan -
Spring

Seasonal Plan -
Summer

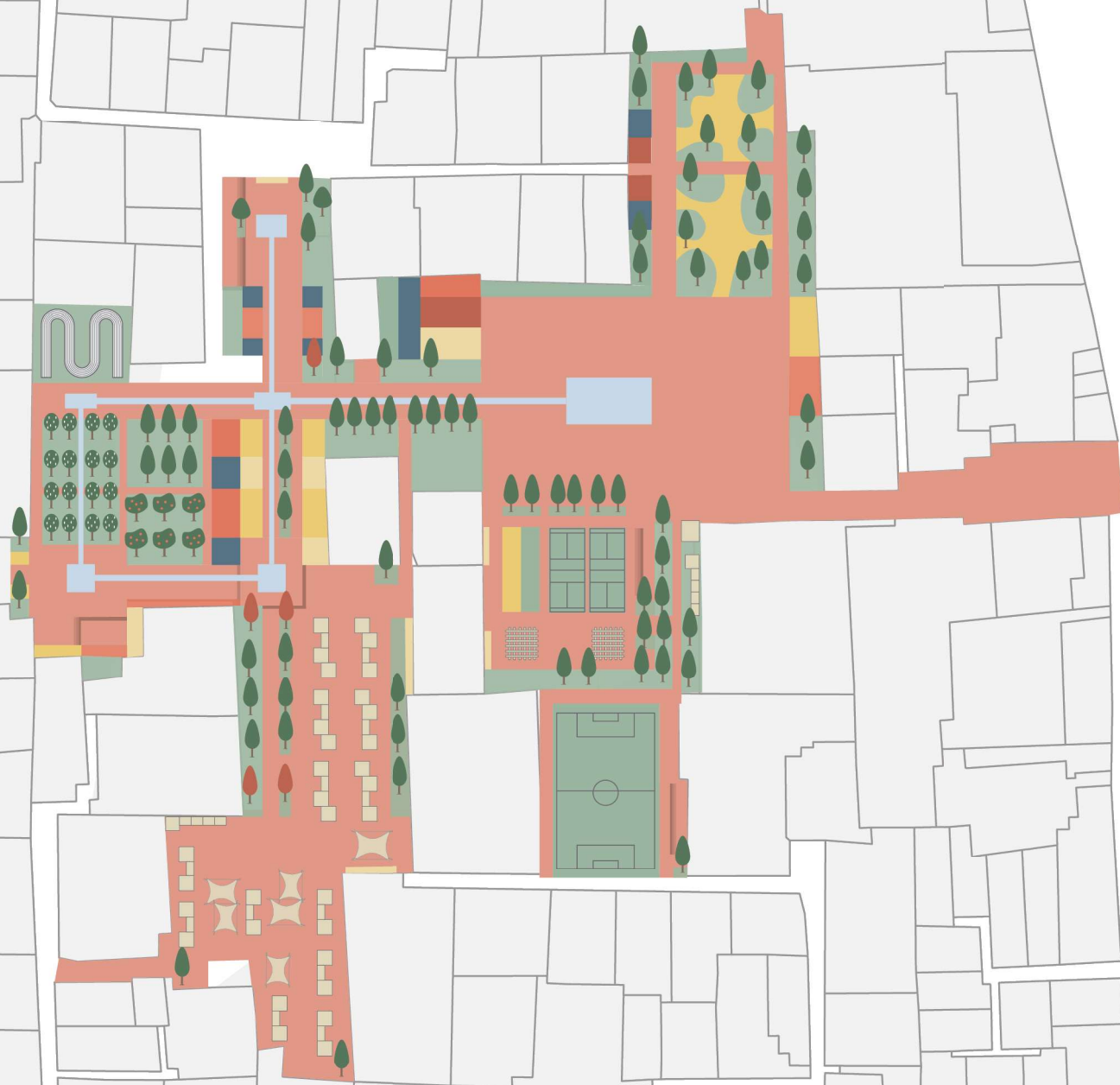
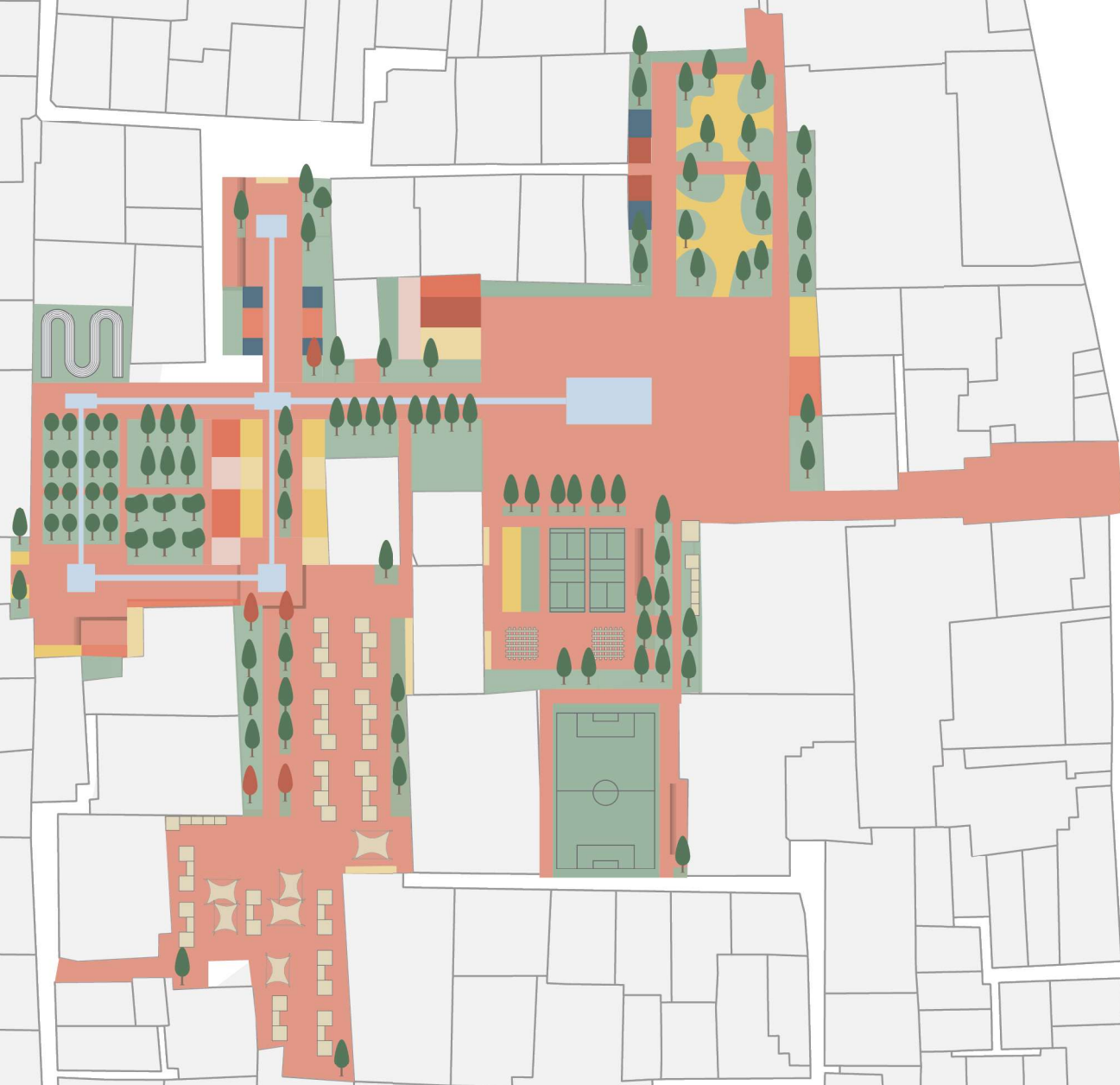


Fig. 80. The seasonal plans

**Seasonal Plan -
Fall**

**Seasonal Plan -
Winter**



Shading Plan

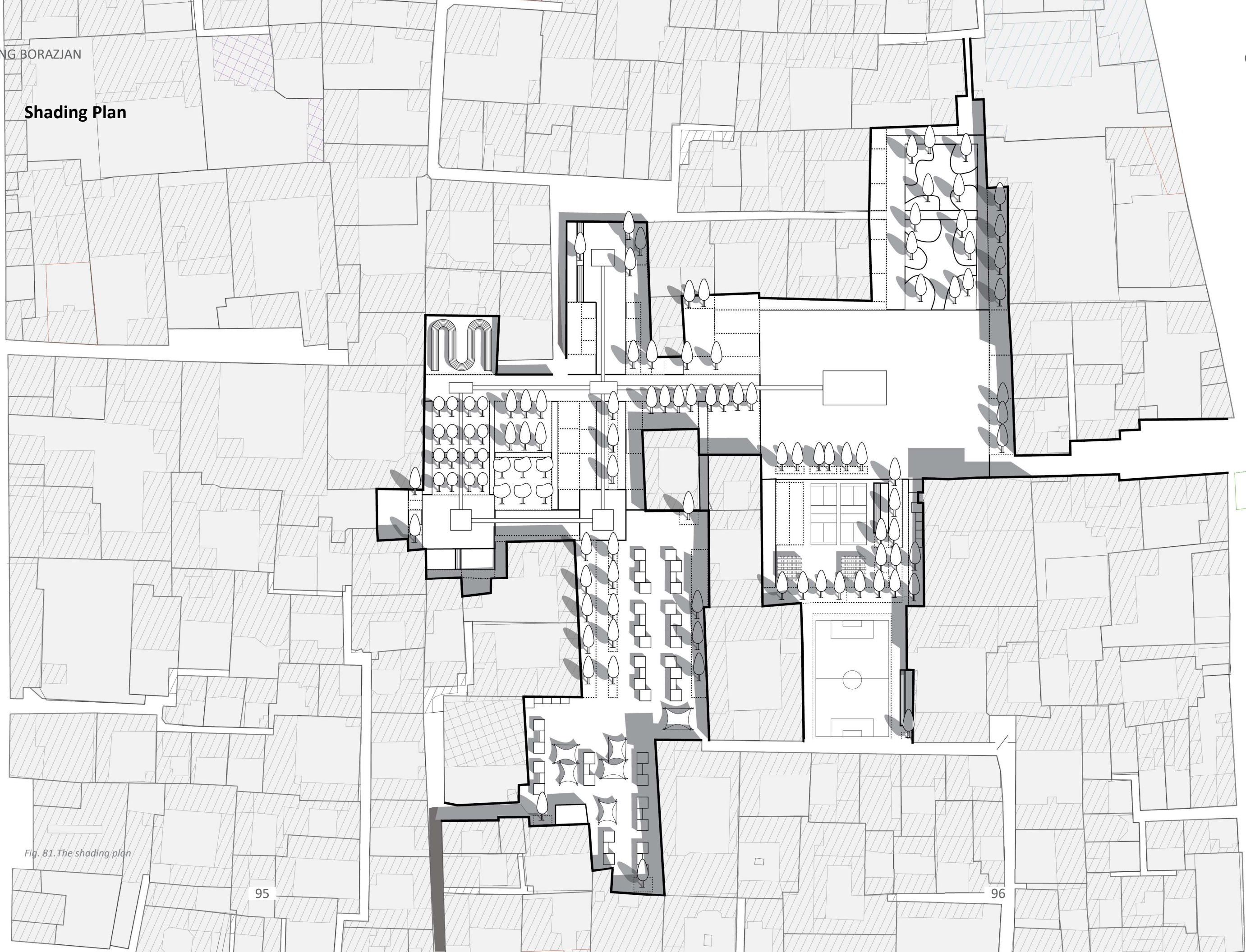


Fig. 81. The shading plan

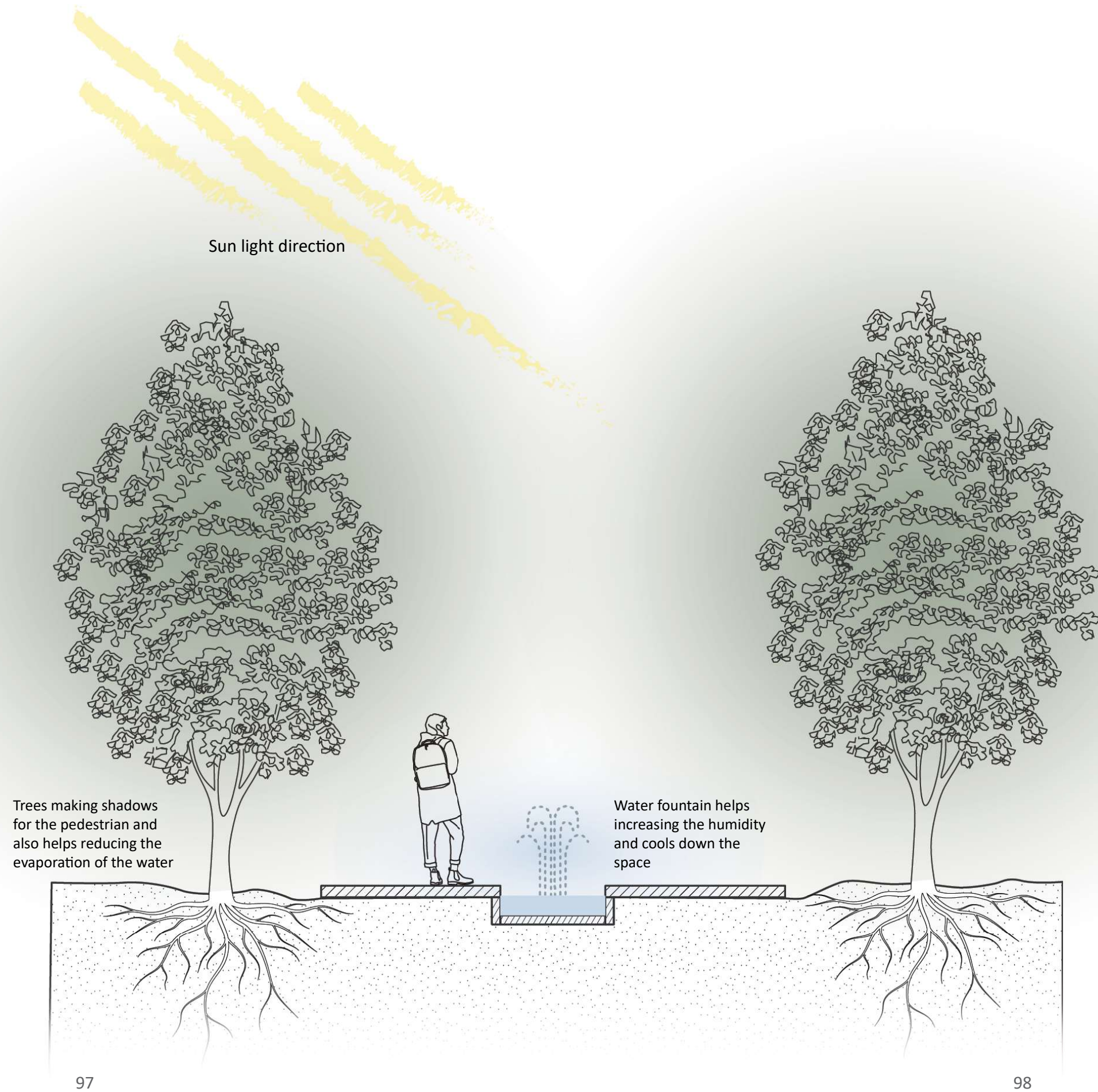


Fig. 82. Shading's effect

Fragrance Plan

The fragrance plan shows the placement of two very fragrant types of flowers, *Lonicera caprifolium* in yellow and roses in red. These flowers are next to sitting areas or gathering points on the site.

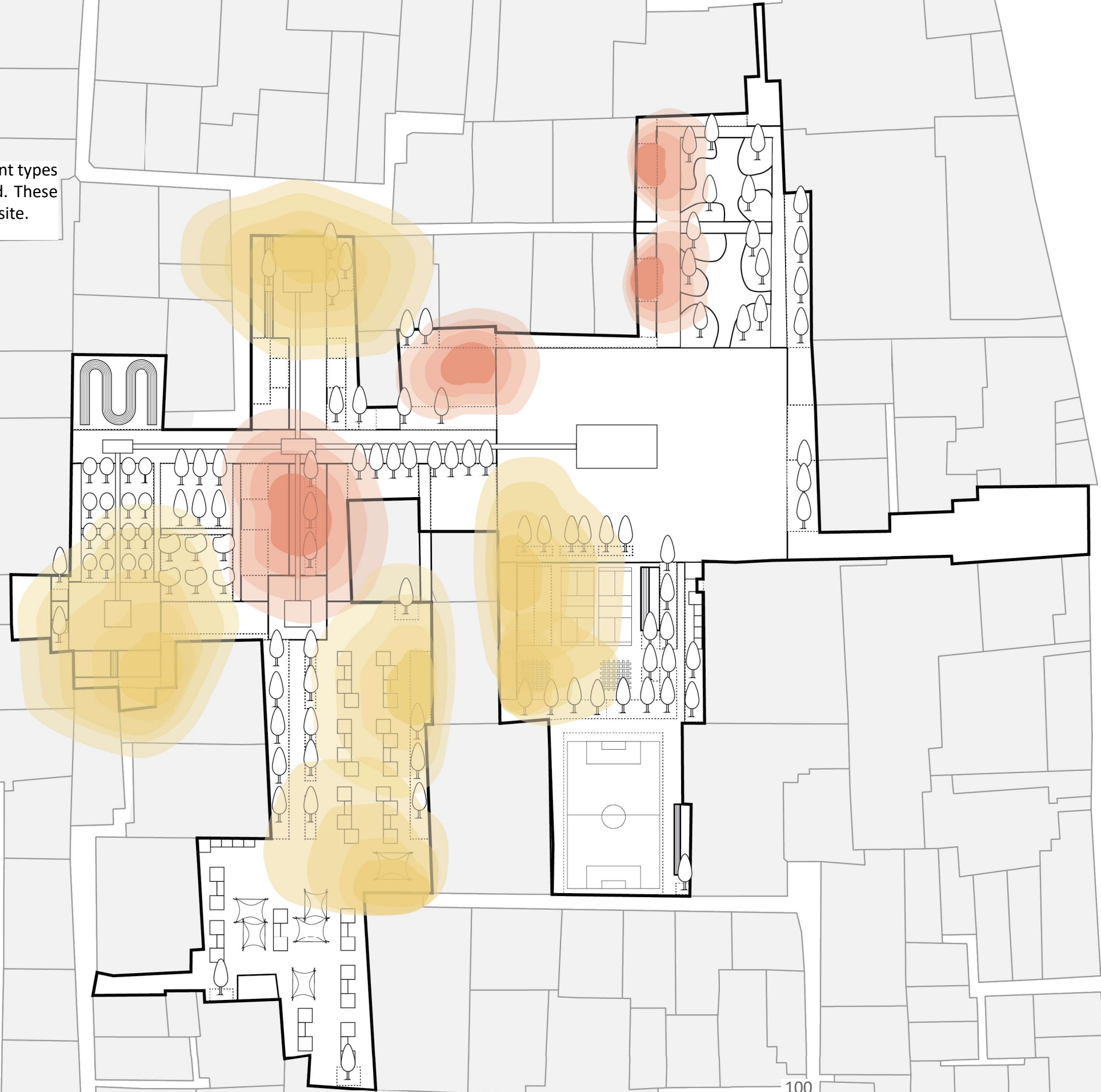


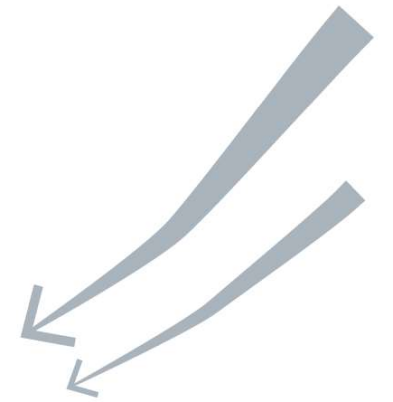
Fig. 83. The fragrance plan

The Micro-Climate Effects

The nectar produced by the flowers of "Crimson bottlebrush" is a good food source for birds. This is why many birds are attracted to the garden, and their pleasant song can be heard.



"Lonicera caprifolium" is green all year and has beautiful white/ yellow flowers from Spring till late Summer. The flowers are very fragrant, and as the wind passes through it, a good smell goes through all the garden.



The artworks by artist MirzaHamid on the ruined walls, creating an open exhibition.

Fig. 84. The micro-climate effects

Water Drainage Plan

In general, the drainage system works with the slope in the courtyards that conduct the water through the underground pipes. The excess water will be filtered and poured into the streams. Besides, the playground and the sports fields are made of porous rubber permeable surfaces to let the water pass through.

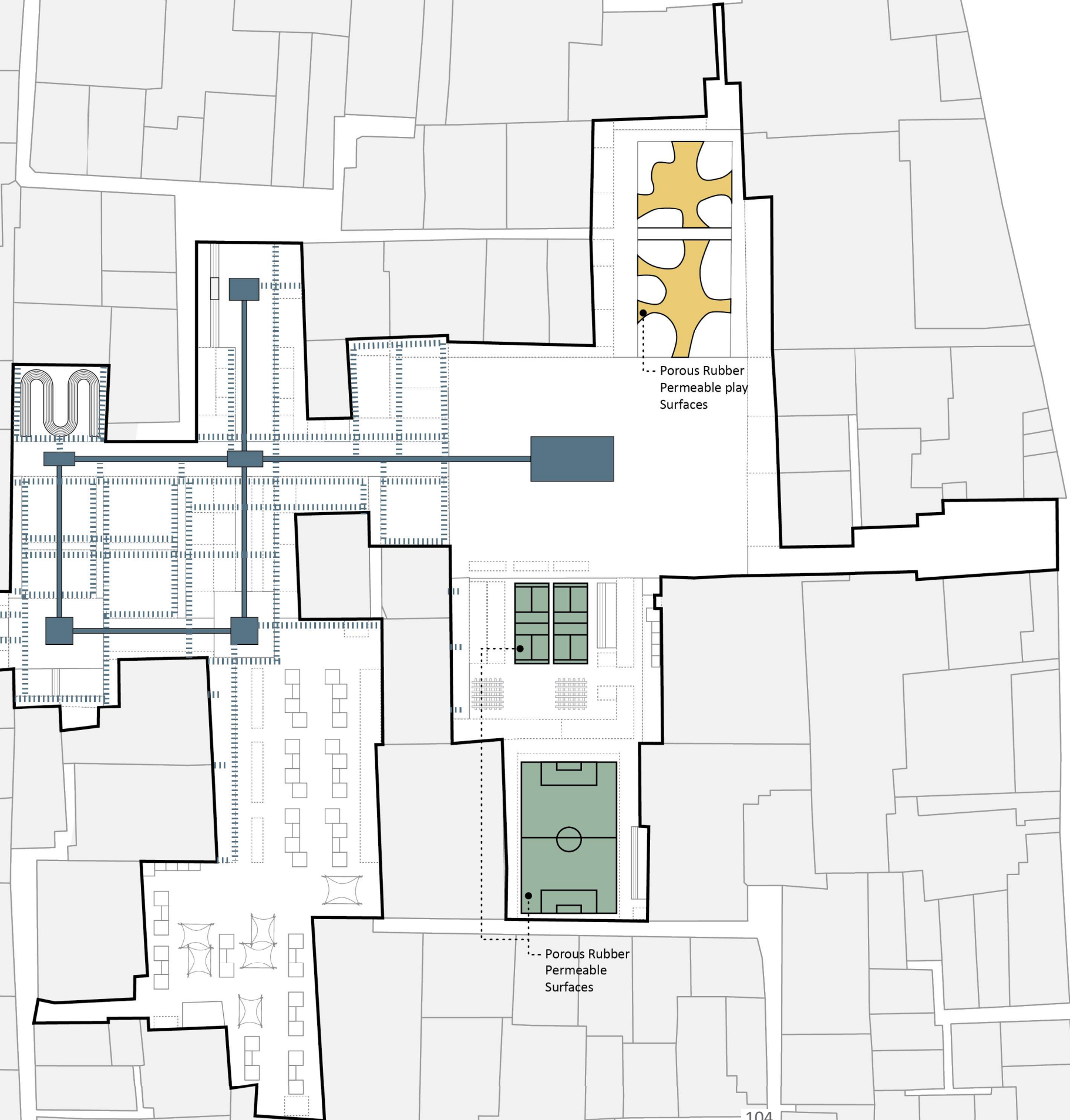


Fig. 85. The water drainage plan

Rainwater Collection

I used the same method to collect the rainwater from the buildings around the site, derived from the existing traditional rainwater collection system in Oudlajan.

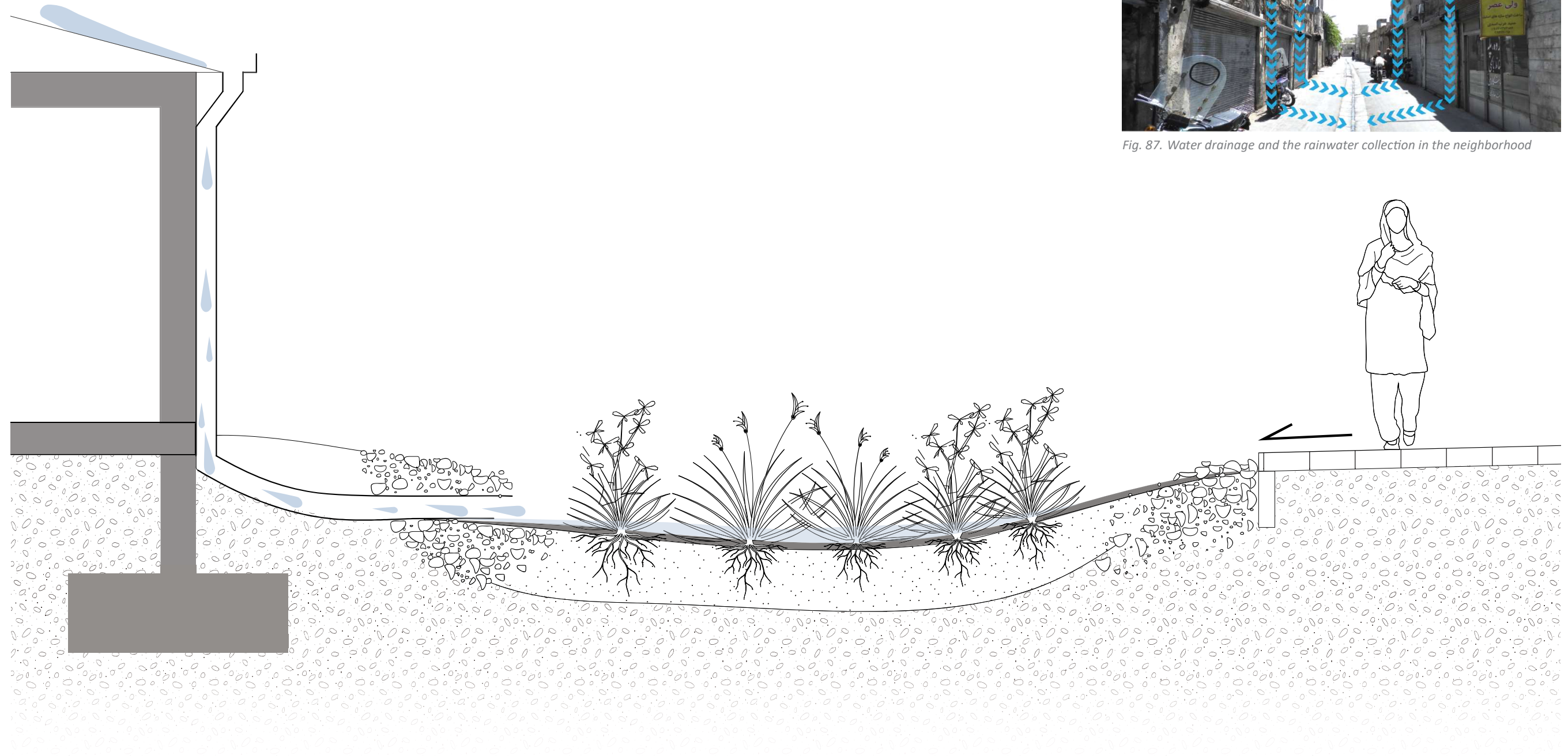


Fig. 86. Rainwater collection section



Fig. 87. Water drainage and the rainwater collection in the neighborhood

Local Access Plan

Ordibeheht Cultural House

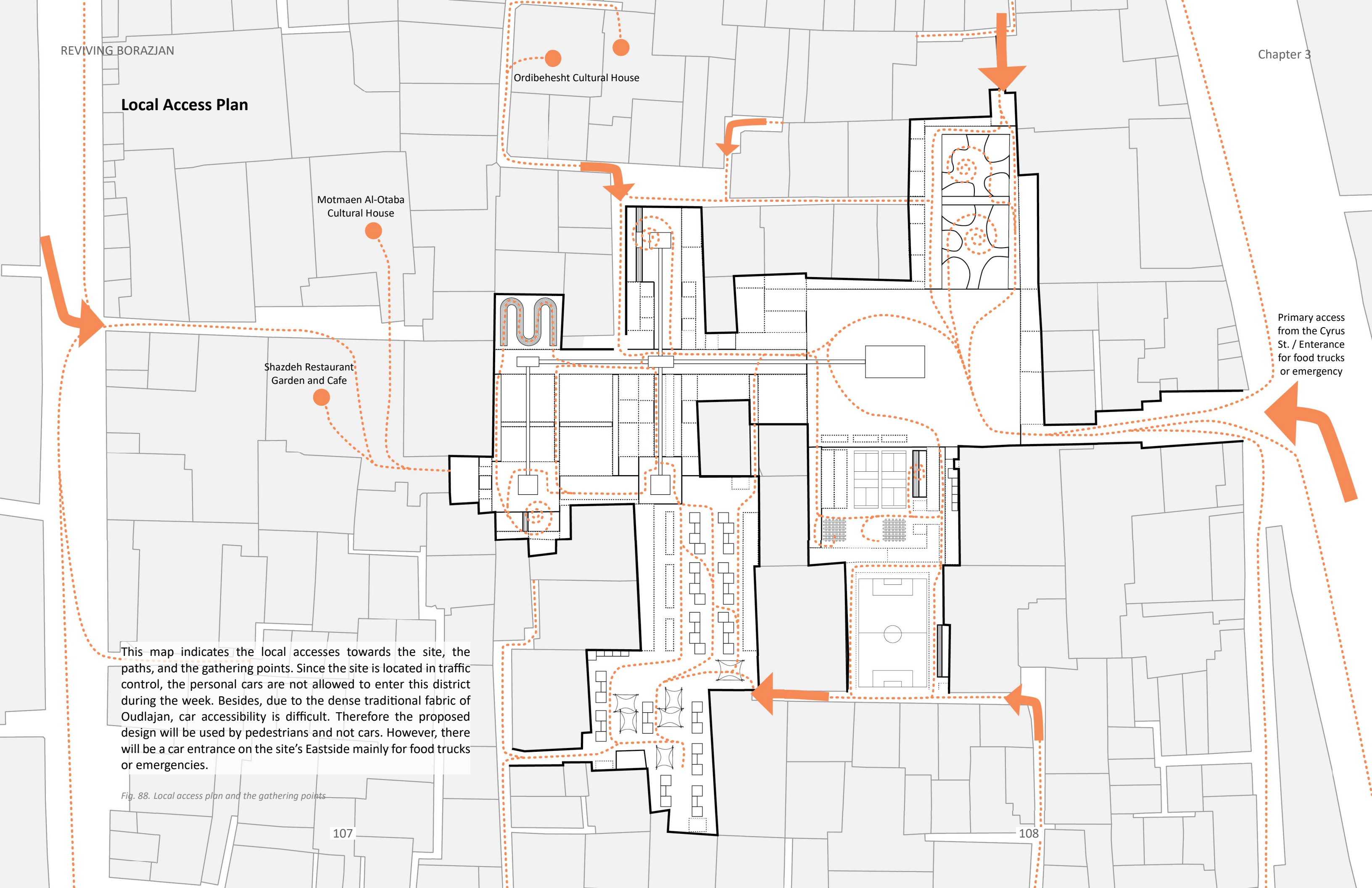
Motmaen Al-Otaba Cultural House

Shazdeh Restaurant Garden and Cafe

Primary access from the Cyrus St. / Entrance for food trucks or emergency

This map indicates the local accesses towards the site, the paths, and the gathering points. Since the site is located in traffic control, the personal cars are not allowed to enter this district during the week. Besides, due to the dense traditional fabric of Oudlajan, car accessibility is difficult. Therefore the proposed design will be used by pedestrians and not cars. However, there will be a car entrance on the site's Eastside mainly for food trucks or emergencies.

Fig. 88. Local access plan and the gathering points



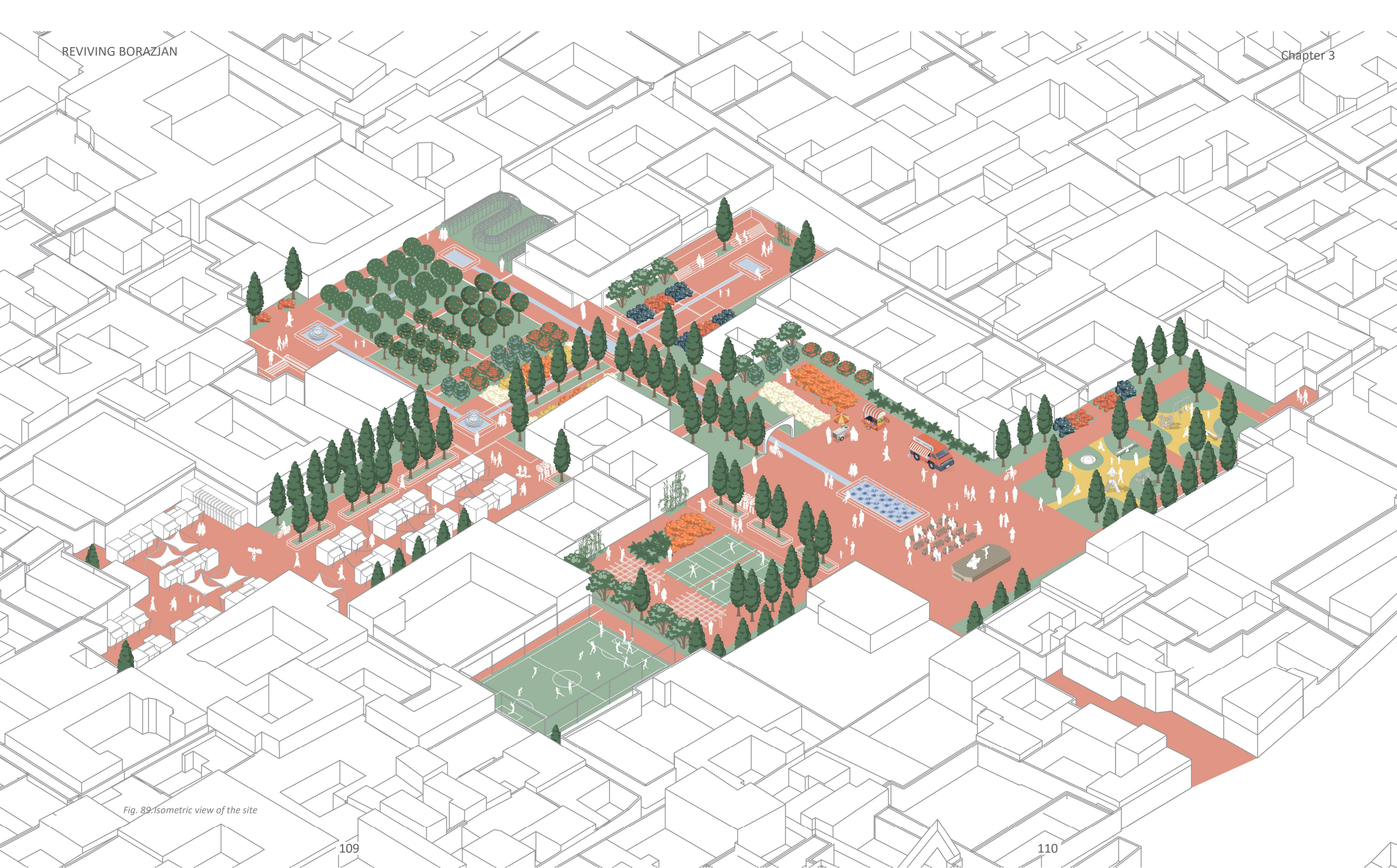


Fig. 89. Isometric view of the site



1. Storage
2. Public Washroom
3. Shazdeh Restaurant Garden
4. Cafe / Patio
5. Grapevine Court
6. Administration of the complex/ storage and restroom for the gardeners
7. Community Garden
8. Afghan Cultural Center
9. Classes for Children and Women
10. Children Playground
11. Security Cabin
12. Potential Houses to be activated for the extension of the program

Fig. 90. The map with legend

Possible Scenarios for the Open Plaza

Different scenarios (events, festivals, gatherings, etc.) can happen in the open plaza. Here some examples are indicated.

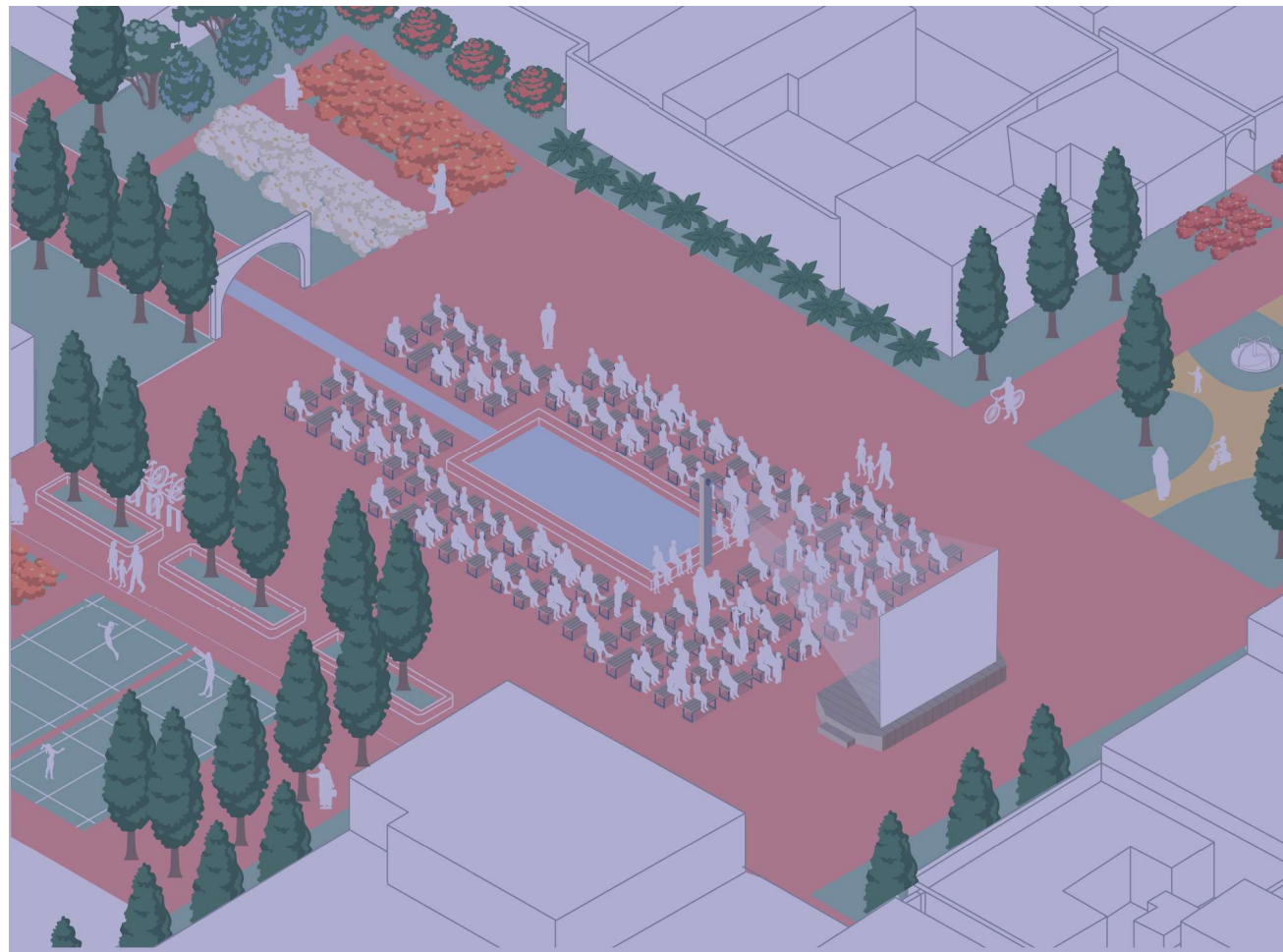


Fig. 91. Movie screening at night

The scene can be set on the central pool so that everyone can have a better view. The concept of having a theater or concert on the central pool of the plaza is derived from "Rouhozi." Rouhozi is an open to public street theater in the mid-Qajar era which were the acts of sarcastic political and domestic life or sometimes religious storytellings. Rou means "on/ on top of," and hoz means "pool" in the Persian language. The scene was set on the wooden boards on the central pools of squares or courtyards. That is why these acts were called Rouhozi.

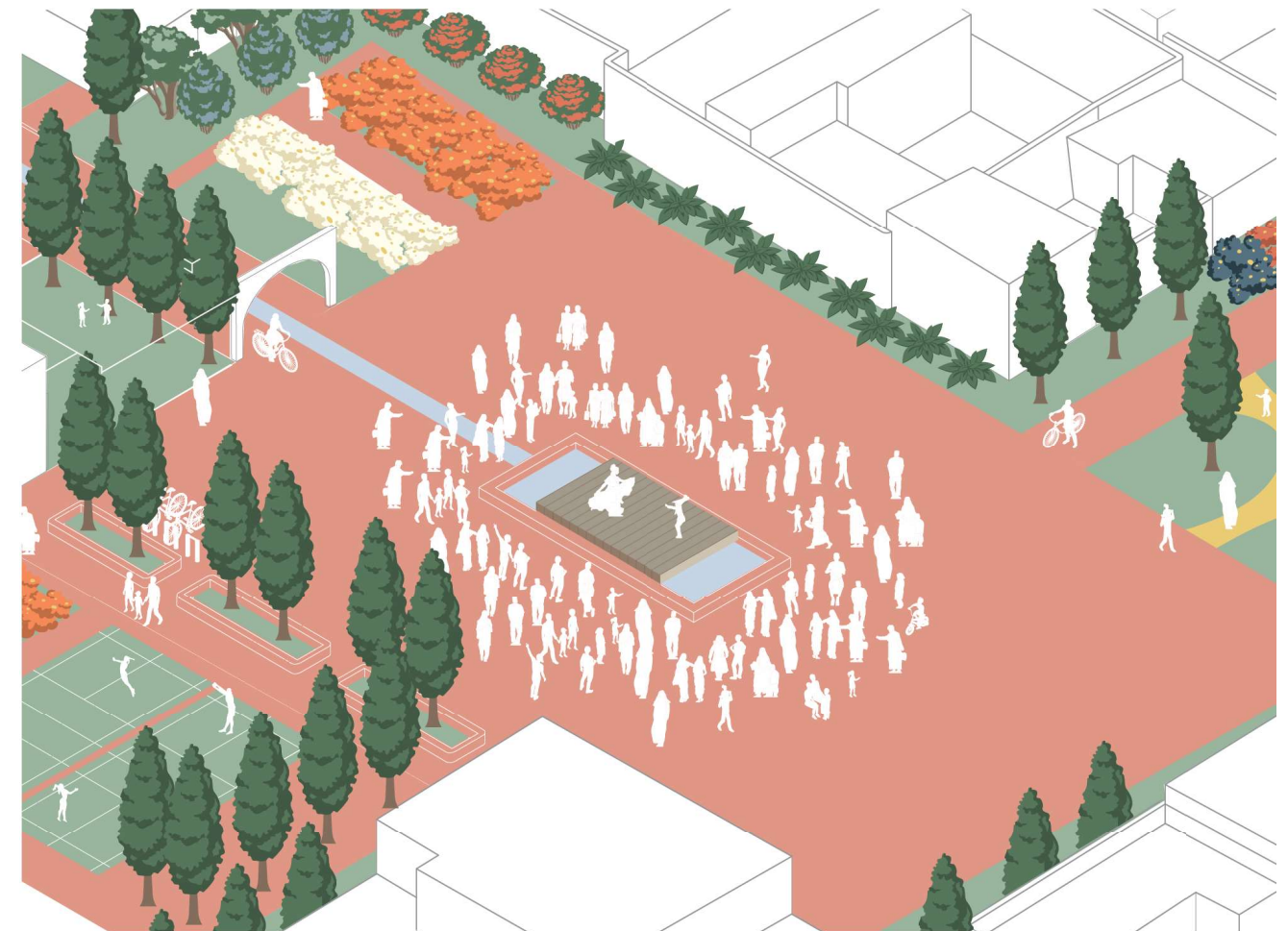


Fig. 92. Acts or concerts

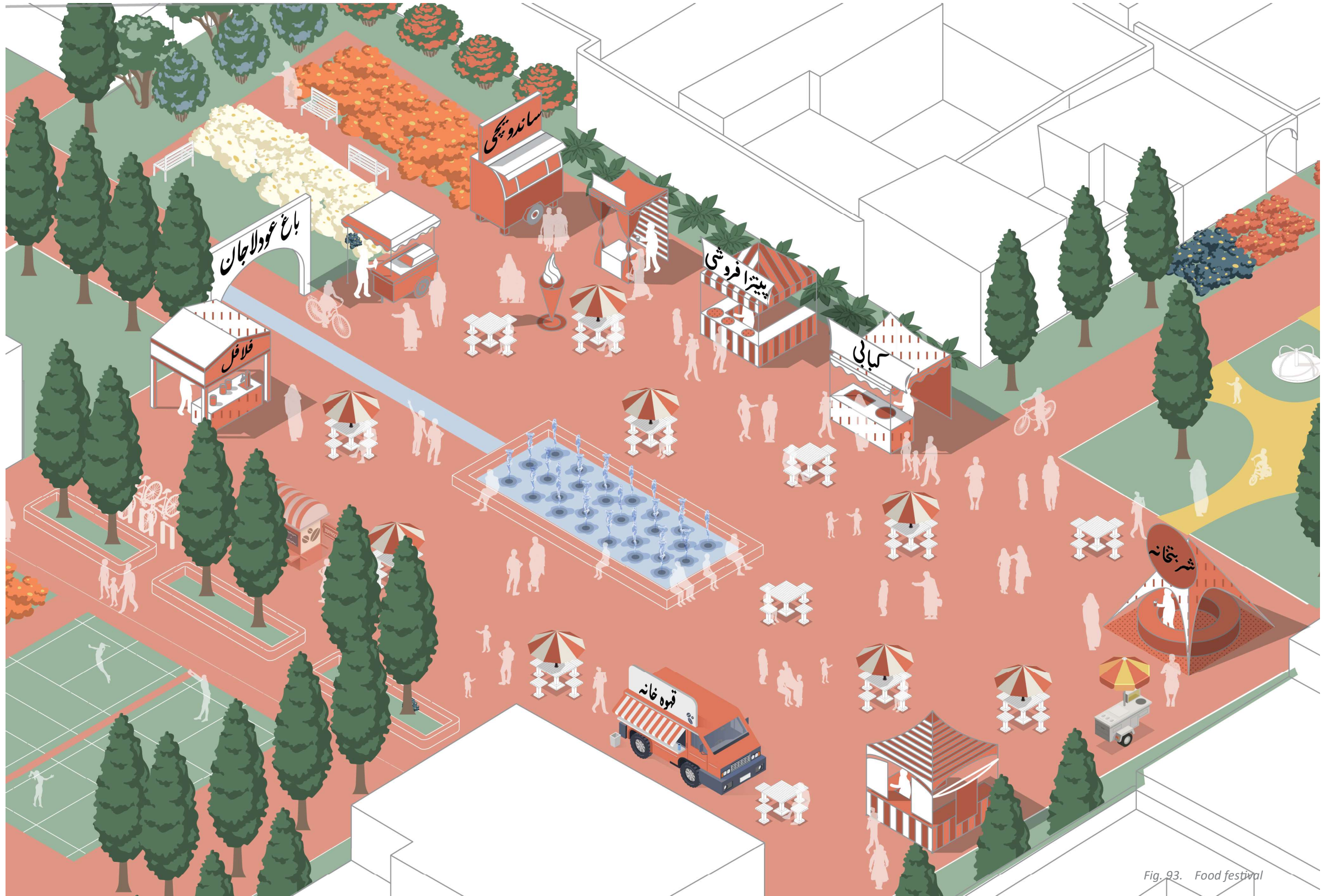


Fig. 93. Food festival

Site views and collages

I figured some before and after pictures of my design proposal from different site points in this part. Followed by the design methodology, I collaged images of old people of Oudlajan with the images of the current social context of people in my visual illustrations. I took all the (before) photos on my site visit.



Fig. 94. A view of the art and craft kiosks.



Engaging artworks of the local artists. This metal sculpture titled 'Standing Heech' was created by renowned Iranian artist Parviz Tanavoli. The work is a three dimensional representation of the Persian word 'heech', meaning 'nothing'.

Fig. 95. Showing the sculpture exhibition in the open plaza. The sculpture here is meaningful and related to the story of Oudlajan as it lost its livelihood and became "heech" (nothing) .

People of old Oudlajan leaving their neighborhood.



The intervention is only to refurbish the walls partially to exhibit the different layers of events. Since demolition is also part of the history of Borazjan, it is essential to learn from this such unorganized revitalization plans. So the walls in some parts are kept as they are.



Fig. 96. Towards the passage of cypresses.



Crimson bottlebrush next to the sitting area can attract birds and create a pleasing sound for people sitting underneath.



Fig. 97. The commiunity garden. Showing the most common bird species, the sparrow and the crow and the refurbished wall with MirzaHamid's paintings on the left.

The two flower species, Geranium and Petunia are the very typical flowers in every old Persian house. This can create a more home-like atmosphere for the visitors.



Fig. 98. Cafe and the ornamental architectural elements on the wall.



Fig. 99. A view from the Bitter Orange court in Spring time harvest. (flower harvesting)



Fig. 100. The children playground with the playful green hills



Fig. 101. Grapevine Courtyard

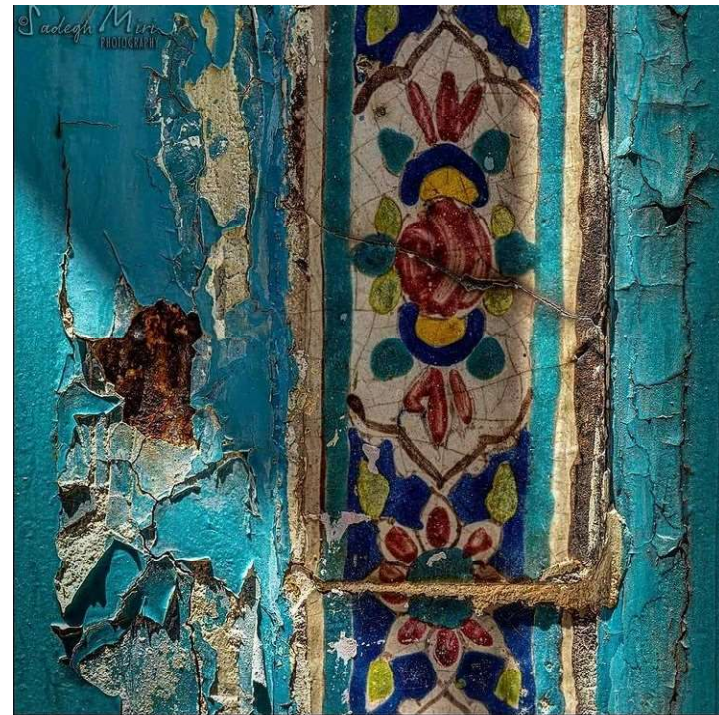


Fig. 102. Tiles on an old wall of a house in Oudlajan.

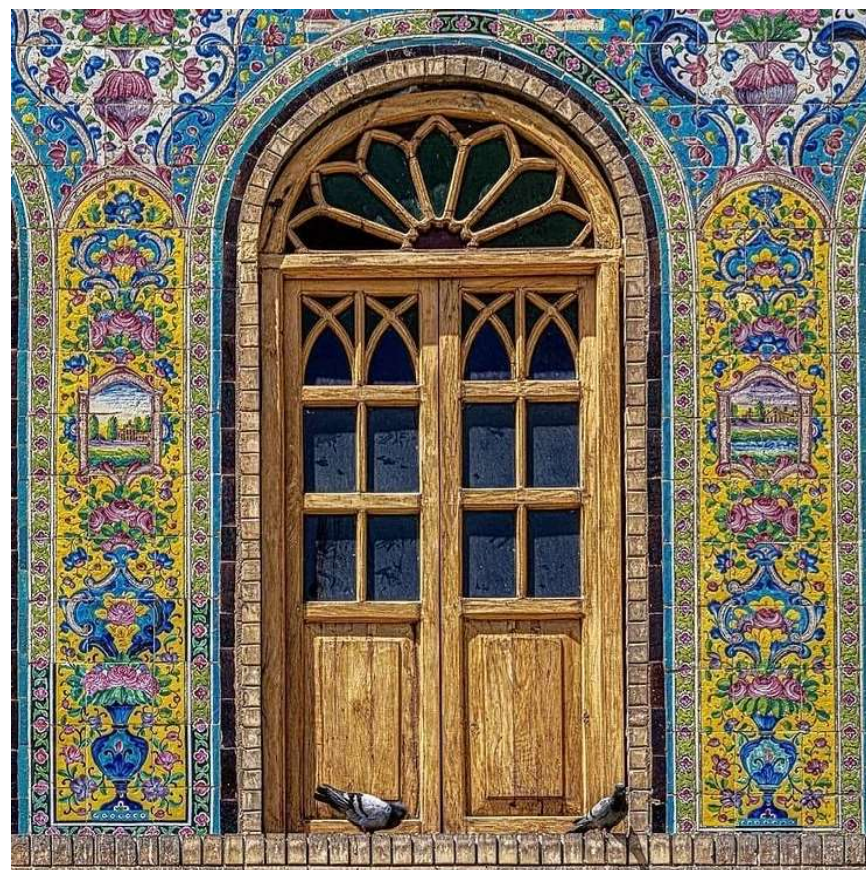


Fig. 103. An example of tilework in Golestan Palace



Fig. 104. Reusing the tiles in the pool

Following the material reuse theory, the remaining colorful tiles from the ruined houses can be used in the details. This can glorify the site's history and create a link between other historical houses, from regular houses in Oudlajan to the incredible tile work in Golestan palace.



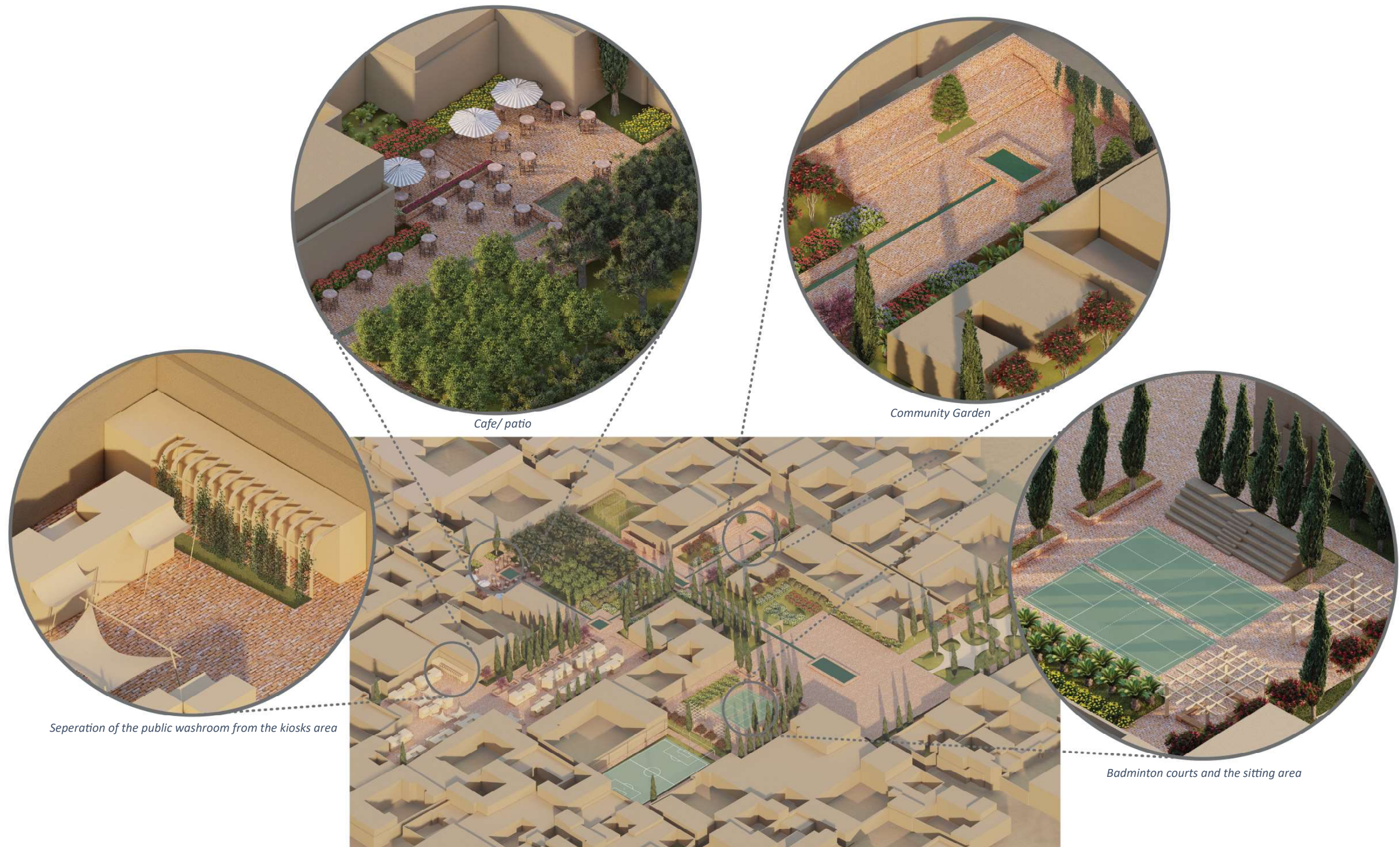


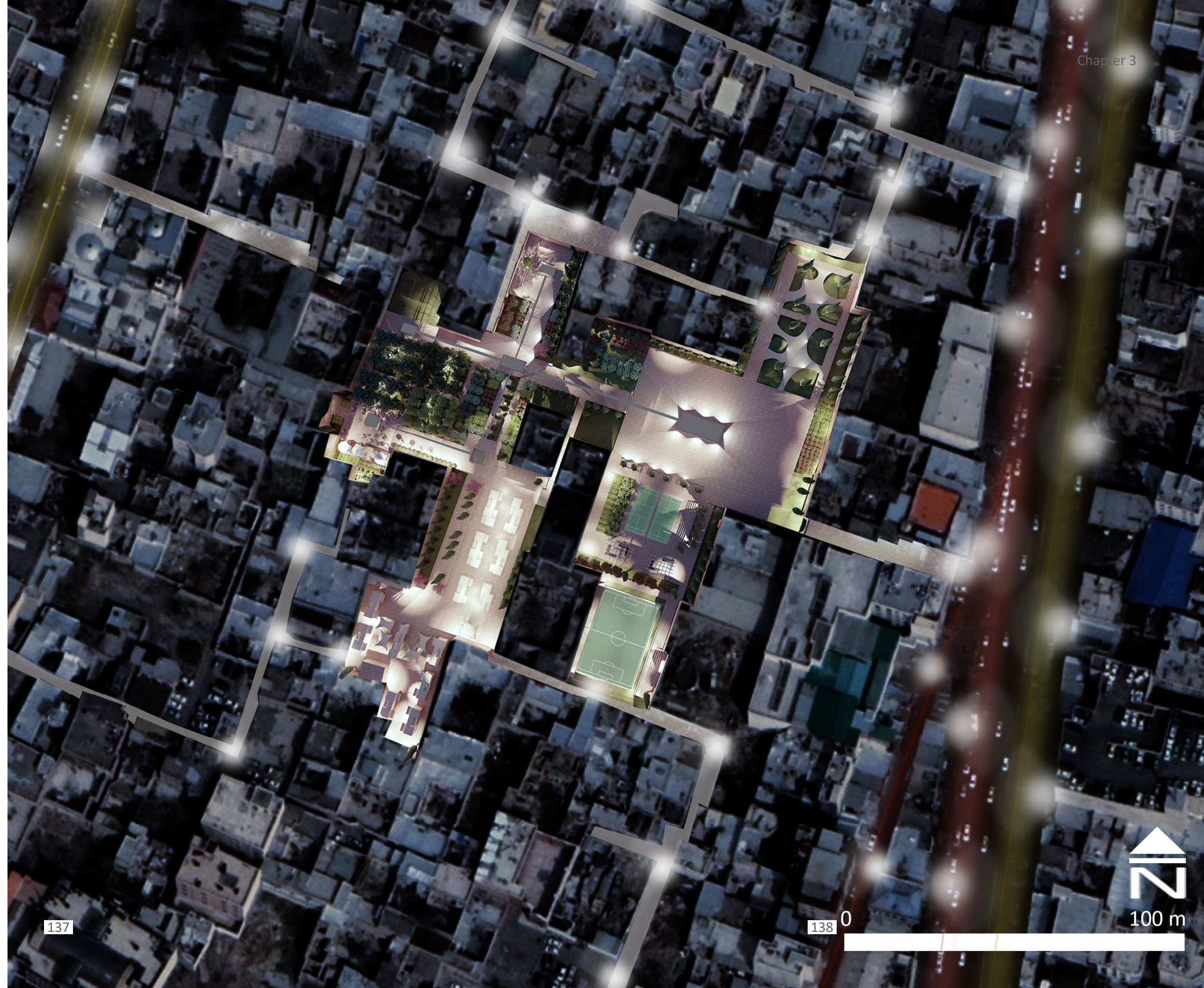
Fig. 106. Overall view of the proposed design with some details

Conclusion

The historic fabric of Tehran has been under lots of changes since it became the capital of Iran. This has had many effects on each of the inhabitant's lives. Most of the political and economic changes and decisions are out of control. The people of Borazjan had no idea when the government decided to demolish Borazjan. As a result, they just faced an open empty urban land right next to their houses, which made the neighborhood ugly and dirty and decreased their housing prices unwantedly. Therefore, Borazjan, with an area of 11000sqm in one of the oldest districts of Tehran, obviously needed a design to be given value life back to the locals.

The design methodology is considered a key feature in this proposal to reactivate the site with socio-economic programs within a landscape inspired by the cultural-historic Persian landscape design criteria. It is essential to raise public awareness by intensifying the cultural value of the site. The design will not only provide a pleasing atmosphere following the ecological studies but also exhibits the layers of events in Borazjan, illustrates how Borazjan changed from being a site for luxury residential to an insufficient open unused open urban space. The hope is to preserve Borazjan and keep other valuable historic parts of the Oudlajan district away from deterioration.

Fig. 107. The night view



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