Alternate Public Spaces for Tehran:

Reimagining the City's Leftover Fragments

by

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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.

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Abstract

Public spaces are publicly owned spaces where people may interact freely with other citizens. A public place promotes social interactions and creates tolerance for diverse interests and behaviours. But in Tehran, many public spaces are not actually accessible to the public.

Tehran, the capital of Iran, is a developing megacity with more than 8.8 million residents sprawling over an area of more than 730 square kilometres. The city has experienced a sustained process of densification since before the revolution in 1979. Due to the geographical boundedness of the city by mountains to the north, east, and west, and the desert to the southwest, Tehran has nowhere else to grow but to densify. Influenced by this rapid densification, public and private resources have mainly been concentrated on constructing more residential, commercial and institutional buildings. In this process, the importance of open public spaces has been lost.

On the one hand, political shifts in Tehran over the last several decades have caused public life to migrate in part of the private realm. Many activities still considered desirable by citizens, such as socializing, performances, or even interaction between genders, have been declared illegal by the Islamic government. These legal restrictions have resulted in a reduction of public activities which means that they cannot be accommodated within the current public spaces of Tehran.

On the other hand, the neoliberal commodification of public spaces and the development plans of Tehran in the past decades have resulted in the creation of very large public spaces (mainly parks) distributed unevenly around the city. These spaces are far from the daily life of most citizens and their formal arrangements are abstracted from the diversity of activities desired by a diverse population with a range of spatial needs and desires.

Therefore, it is crucial to imagine a new breed of public space in Tehran, whose distribution will match the contours of daily life. These interventions will have to be smaller and more local to be able to respond with agility to the spatial needs of the whole range of public activities. Finding available space in this dense city for these new public spaces is not easy. Some of the few leftover fragments of the city are the residual spaces created by infrastructural networks. The publicly owned spaces scattered around Tehran under urban bridges present immediate potential. This thesis project reimagines these leftover spaces as potential sites of intervention and rearticulates them as networked, multiscalar, performative, and contextualized typologies for alternative public spaces in Tehran.

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Fig.1- Alternate Public Spaces of Tehran

For My TEHRAN
برای تهرانـــــــــــم

Introduction

Public spaces, as understood in this thesis, are publicly owned spaces for people to use freely. As Hannah Ardent said, "No human life, not even the life of the hermit in nature's wilderness, is possible without a world which directly or indirectly testifies to the presence of other human beings"[1]. This need for social interaction requires a place and that place in cities are the public spaces. Thus, these spaces should be a place for promoting social interactions and creating tolerance for diverse interests and behaviors. All people, regardless of gender, race, ethnicity, age, or socio-economic status, should be able to access and use these spaces as they want. The nature of these spaces has changed during recent decades, with new platforms for public interaction operating at a smaller scale and with greater impact. These spaces are flourishing in the leftover fragments of various cities. In Tehran, changes to public spaces have caused many of these to become inaccessible to the public. Some of them are out of reach of the intended users, while others do not fulfill people's needs.

Tehran is the capital of Iran and the most populated city in the central region of the country. The city is bounded by mountains from the north, east, and west, and desert from the southwest. These features create a decreasing slope from north to south. Tehran's spatial and social differentiation is less from the center to periphery and more from north to south, paralleled by the topographical section of the city.

After 1786, when Tehran became the capital of Iran, population and immigration growth has never ceased. Before the 1979 Revolution, the Westernization of the city during the Pahlavi Reign encouraged people to move to Tehran for its various interesting new amenities and public spaces. This migration resulted in significant expansion of the city. After the 1979 Revolution, the process of Westernization stopped, but immigration to Tehran sped up. This massive and rapid population growth caused the city to grow beyond its geographical limits, then begin to densify over a short period of time. This densification manifested as an increase in building construction, with less attention paid to the public and open spaces of the city. In 1990s, most of the public open areas were those remaining from the Pahlavi reign. This densification has continued until now, resulting in a lack of open public spaces and a density of about 13,000 people per square kilometer[2]. Along with the history of political shifts and various urban planning and economic processes taking place in Tehran, these population dynamics create various challenges for the public spaces of Tehran.

On the one hand, because of the historical and political shifts, we are confronted with a new proliferation of "underground" public spaces. These spaces support everyday activities not approved by the government, such as underground bars, parties, and gatherings. In contemporary Tehran,

1 Hannah Ardent, *The Human Condition (*Chicago: The university of Chicago Press,1958),22.

2 Explore urban open data. Accessed December 21, 2017. http://urbandata.unhabitat.org/explore data/?indicators=slum_proportion_living_urban%2Cpopulation%2Curban_agglomeration_population_density%2Curban_population_cities%2Chiv_prevalence_15_to_49_year.

we therefore have a range of public spaces, from those for officially accepted activities, such as religious activities or governmental rallies; to secondary activities emerging as the government loosens controls, such as theatre and graffiti festivals; to underground activities that are still not officially accepted in Iran, such as *dor dor*, a public activity among youth in Iran in which they drive their cars in a cycle, rather than reaching to a destination, to socialize and make new friends, or mixed-gender partying. These activities each have various spatial needs, but this is disregarded by the governmental and Islamic laws in city of Tehran. On the other hand, development plans given by the municipality of Tehran for the city focus on large public areas, mainly parks and nature reserves, which do not appear in every neighborhood. This lack and uneven distribution of open public spaces is furthered by the municipality's for-profit sale of density and destruction of public spaces for commercial buildings.[3]

By recognizing the diverse public space needs in Tehran, new public spaces at a more local scale can be added to the city. In contrast to the large, open areas, which are not accessible for daily usage, the distribution of these new public spaces will match the distribution of the spaces of everyday life. Knowing the massive and rapid density growth of Tehran and the lack of open areas, some of the few remaining sites for new public spaces are the residual spaces created by the city's infrastructure. One key source of this kind of space, scattered across the city , is the leftover space under road bridges. These spaces can be potential sites of intervention for new social hotspots in Tehran. A new, networked, multiscalar, performative, and contextualized typology for alternative public space in Tehran is thus envisioned in this thesis, which leverages the untapped potential of these spaces, while fulfilling a key social need.

The first chapter of this thesis will look into citizen-driven and smaller-scale public spaces. It will also present an investigation into the leftover spaces in the city as potential sites for accommodating these new public uses. The second chapter will focus on the city of Tehran. It will explore the reasons for the necessity of designing public spaces in this city and the intention for using under the bridge leftover spaces as potential sites for these new public spaces. The third chapter will focus on a spine of the city, extending from north to south, and testing the potential for a series of public spaces in this area.

3 As one of the major national news agencies reports, in the most recent action of the municipality, they sell two local parks of northern regions of Tehran, in Saadat Abad and Jordan district, for residential constructions. "شهرداری تهران پارک جردن و سعادت‌آباد را به برج‌سازها فروخت/ درباره تخلفات شهرداری هشدار داده بودیم." خبرگزاری ایلنا. Accessed January 06, 2018. http://www.ilna.ir/.

Part I:

This Chapter will look into the general background of citizen-driven and smaller-scale public spaces. It will also present an investigation into the leftover spaces in the city as potential sites for accommodating these new public uses.

In search of new Public Spaces

Fig.2 Citizen occupying Nature Bridge on a Friday, one of the major and new public spaces in Tehran

1.0
Public Spaces: Beating Rythm of the Cities

> *“The pulse of the city is in its people’s hands”*
>
> *Michael Batty*[3]

1.1 The importance of public spaces in the city

The word “public” originates from the Latin populus, which refers to people and indicates a relationship with both society and the state. Many theorists have given various definitions of public space, with a general definition as: a publicly owned, open space that is accessible or shared by all of the members of the community at any time, a space that promotes social interaction and serves public affairs, and a place that creates tolerance for diverse interests and behaviours. The term “public” can refer to a group of people with shared interests, such as people watching a film or attending a music concert. UNESCO defines the public sphere as :

> *An area or place that is open and accessible to all people, regardless of gender, race, ethnicity, age or socio-economic level. These are public gathering spaces such as plazas, squares and parks. Connecting spaces, such as sidewalks and streets are also public spaces. In the 21st century some even consider the virtual spaces available through the internet as a new type of public space that develops interaction and social mixing.*[5]

Public spaces are like self-organizing public services formed from a shared spatial resource, from which experiences and value are created in ways that are not possible in private. These are the spaces that will attract you to stay, to sit and to see.[6] Defining a space as public and its publicness can be examined by:

1- *Accessibility: which can be divided into physical access, social access, access to activities and discussions, and access to information. Actors: the agencies controlling the spaces and whether it is private or public. In public spaces, control rests with a public actor, which is an agent or agencies that act and represent on behalf of the society, community and city.*
2- *Interest: public spaces should serve the common interest and benefit of all members of the society, who also control and use public spaces.*[7]

Therefore, a space that is accessible to the whole community, which all citizens can use and interact with, and which can serve its citizens’ various needs can be defined as a public space. It is important to also mention that the nature of public space changes with different societies and different publics.

Public spaces have always been the core of the urban system anywhere and reflect the complexities of the urban sphere. On the one hand, industrialization led to the fast-paced development of car manufacturing that resulted in skyrocketing car traffic; on the other, the dominant planning ideology of modernity, which was less spatially and programmatically defined, diminished the importance of public spaces, human scale,

4 Michael Batty , *The pulse of the city: Environment and Planning B: Planning and Design 37*, (Cheshire J, 2011), 577-579

5 Inclusion Through Access to Public Space | United Nations Educational, Scientific and Cultural Organization. Accessed January 11, 2018. http://www.unesco.org/new/en/social-and-human-sciences/themes/urban-development/migrants-inclusion-in-cities/good-practices/inclusion-through-access-to-public-space/

6 Melissa Mean and Charlie Tims, *People Make Places: Growing the Public Life of Cities*, (Demos, 2005).8-10

7 Ali Madanipour, *Public and Private Spaces of the City, (* London ; New York : Routledge 2003)

pedestrianism, and the role of the city as a meeting point for its citizens.

These changes have resulted in major problems in the city, not only in limitations on space, pollution, and resulting leftover spaces, but also in reducing the function of the city as a meeting place and threatening or phasing out its use as a social forum for citizens.[8] As policy and investment attention is focused elsewhere, public spaces become increasingly fragmented, dysfunctional, and unwelcoming, which means that cities are losing an essential spatial element for public fulfilment. Therefore, there is a strong need to reconsider and rethink the method for dealing with public space, reinvent the practice of everyday life, and revive the city.[9]In the past thirty years, privatization, globalization, and liberalization in the economy and social diversity have resulted in structural changes of societies around the world.[10]These changes have prompted an increasing interest in public space as a matter of social concern, political and economic action, and academic research.

8 Jan Gehl, *Cities for people,* (Washington, D.C. : Island Press 2010)

9 Urbego*, Urban pockets: reclaiming the public in left-over open spaces* (Urbego, 2015), 8, https://issuu.com/Urbego/docs/urban_pockets-reclaiming_the_public

10 Madanipour, *Public and Private Spaces of the City,*

1.2 Alternate Public Places in the City

As Margaret Crawford said, urban design and planning have traditionally been about creating a permanent and static urban condition. However, it is the people and their daily life that defines the reality of a city and in which we experience urban life.11 The urban processes that test this idea are known generally as placemaking, which is a way of designing public spaces that is more about the relations and activities between people than the design of the space itself. [12]

Placemaking is a general term referring to community vision, cost-effectiveness, collaboration, and citizen-led change at various scales, from the urban decision to smaller and effective interventions. Making a place rather than just physically creating a space takes the process out of the hands of designers and into communities. Initiating the placemaking process only makes sense if it is supported by various communities in the immediate surrounding area. The key is to get different stakeholders present, from local residents, children, and schools to businesses and institutions, entrepreneurs, and all kinds of initiators to share their dreams for a place and then actually put them into practice.[13] The community is the core of this process; however, designers and architects who can think about the organic craft of shaping the place can be a part of the approach.[14]There are various tools and catalysts for achieving these community-based placemaking processes, all of which are united under certain core principles: action-planning, guerrilla urbanism, pop-up projects, city repair, D.I.Y. urbanism. They are light, quick, and cheap, creative and citizen-driven approaches, also known as Tactical Urbanism.[15] These approaches are small-scale actions that have a larger impact: activation approaches using short-term, low-cost, and scalable interventions and policies that can be applied to any city and from which citizens can benefit. The solutions can be simple but will have a wider impact, because they have been designed based on the people's intentions (Figure 3).[16] As mentioned above, tactical urbanism is a bottom-up approach to design. As opposed to the top-down system of city making and city management, which is a process of planning, intervening, and regulating by government to fulfil the basic needs of the population, bottom-up development is a self-organized process with small-scale initiatives implemented by citizen participants. This planning process is initiated by local individuals and grassroots groups and

11 Margaret Crawford, Micheal Speaks, Everyday Urbanism, ed. Rahul Mehrotra,(Ann Arbor, Mich. : University of Michigan, A. Alfred Taubman College of Architecture ; New York : Distributed Arts Press:2005), 12-13, 42-44.

12 "What is Placemaking?" Project for Public Spaces. Accessed December 21, 2017. https://www.pps.org/reference/what_is_placemaking/.

13 Fred Kent & Kathy Madden, "Streets as Places," in *The city at eye level: lessons for street plinths*, ed. Hans Karssenberg, Jeroen Laven, Meredith Glaser & Mattijs van 't Hoff (Delft: Eburon Academic Publishers, 2016), 28-30

14 "What is Placemaking?" Project for Public Spaces. Accessed December 25, 2017. https://www.pps.org/reference/what_is_placemaking/

15 "The Lighter, Quicker, Cheaper Transformation of Public Spaces." Project for Public Spaces. Accessed December 21, 2017. https://www.pps.org/reference/lighter-quicker-cheaper/.

16 Mike Lydon, and Anthony Garcia. *Tactical Urbanism: Short-term action for Long-term change*. (Washington DC: Island Press, 2015.*)2-23.* https://issuu.com/islandpress/docs/lydon_cnu

Fig.3 Placemaking Practices all around the world

intervenes in the social, cultural, political, artistic, and communal urban realm, as opposed to "top-downers" such as architects, real estate developers, public organizations, and housing associations that make decisions for the city. In contrast to the top-down approach, in which the user plays the passive role of a consumer, bottom-up practices include users as co-decision makers, co-creators, and co-managers in the system. Also, bottom-up practices follow the needs of citizens, while top-downers create urban artifacts, infrastructure, or spaces by following market rules and political ideologies and projections. While these two systems are very different, we need both for city planning. Therefore, the goal of this thesis is to identify potential strategies for top-downers to enable further bottom-up/top-down cooperation and try to reconstruct our cities through interactive processes that respond to community needs and people's aspirations.[17]

Entrepreneurs, artists, forward-thinking government officials, and placemaker groups are increasingly viewing the city as a laboratory for testing ideas in real time. Their actions have led to a variety of creative and entrepreneurial initiatives. These actions can be seen in the rise of food trucks, pop-up stores, better-blocks initiatives, chair bombing, parklets, shipping container markets, do-it-yourself bike lanes, guerrilla gardens, and other tactical urbanism movements. Most of these solutions are light, quick and cheap. They are often temporary and people can relate to them easily. A wide range of actors, including governments, businesses, non-profits, citizen groups, and individuals can be part of these kinds of actions. Both developers and corporations are less afraid of these temporary solutions because they do not cost a lot of money. This process allows for experimentation; if an intervention does not work, they can experiment and try again.[18]

These processes are mostly taking place in the west. In Asia and specifically in Iran, a younger generation of urban dwellers are seeking to work on tactical urbanism, and the government should be more collaborative so that these experiments can happen in Tehran and other cities.

The leftover fragments of the city are some of the potential spaces where these groups of people are testing tactical processes (Figure 4). The reasons that these kinds of residual spaces occur and their effects on the city will be discussed in the next chapter.

17 Francesca Miazzo, and Tris Kee. *We own the City: Enabling Community Practice in Architecture and Urban Planning*. (Netherlands : Trancity Valiz, with CITIES and the University of Hong Kong, 2014), 2-5

18 Lydon, and Garcia. *Tactical Urbanism: Short-term action for Long-term change*, *2-23.*

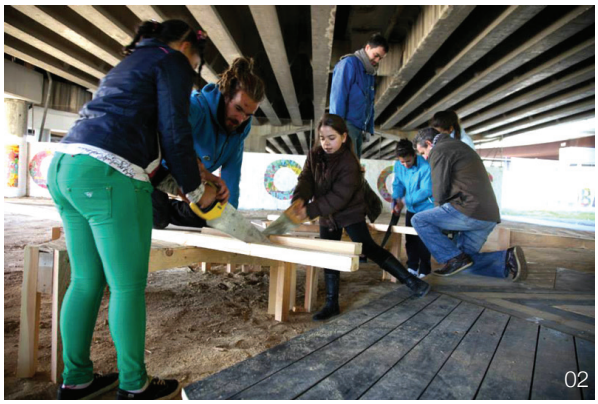

Fig.4 Pop Up city by citizen's actions

Fig.5 Residual Spaces: Blanks of Opportunity

2.0
Residual Spaces: Blanks of Opportunity

“If space-junk is the human debris that litters the universe, junk-space is the residue mankind leaves on the planet.”

Rem Koolhaus-Junk space[17]

2.1 Definition of Leftover Spaces

Within urban theory, there is a range of terms which acknowledge underused, empty or abandoned. They are variety of urban and non-urban spaces includes: lost space (Trancik: 1986), terrain vague (De Sola Morales: 1995), dead zones (Doron: 2000), junkspace (Rem Koolhaus:2002), parafunctional space (Papastergiadis: 2002), superfluous landscape (Nielsen: 2002), space of uncertainty and the margin (Cupers and Miessen: 2002), landscapes of contempt (Girot: 2005), voids (Armstrong: 2006), drosscape (Alan Berger: 2006), ambivalent landscapes (Jorgensen and Tylecote: 2007), acting territories (Lang: 2008), Citing Stalker and urban interstices (Tonnelat: 2008), leftover space, loose space, and in-between spaces. These spaces are neither slums, open spaces in the city, nor natural areas. Rather, they include places such as abandoned industrial sites, disused train yards, spaces at the edge of thoroughfares and under bridges "without content, ineffectual, vain, useless, empty".[20]

As Roger Trancik describes, lost spaces are undesirable urban areas that need to be redesigned. These spaces have no connection with the city and make no contribution to their surroundings but offer opportunities for rediscovering the untapped resources of our cities. There are three different types of urban voids in the city. The first is open areas on private or public property that are visible to city dwellers and not necessarily leftover dead zones, such as parks or waterfronts or urban squares. The second kind are ill-defined spaces that are not connected to the rest of the urban tissue. These spaces appear due to their lack of functionality[21].There are many different types of such urban void (Figure 6). These leftover, neglected, and unseen spaces could be under litigation or be government or private property, where reallocation of functions has to go through a bureaucratic process. They appear at different scales; some of them are at the scale of the individual lot and building, for example vacant lots, overgrown yards, and abandoned industrial facilities or buildings under construction.

The third type of residual spaces are at the neighborhood scale and appear as a result of infrastructural development. These are leftover spaces in the public realm and accessible to all citizens, such as vacant public lots at the intersection of the official and unofficial networks of the city, spaces at the edges of highways, under HVDC lines, on vacant railroad systems, or beneath the flyovers of massive transport arteries. These leftover spaces occur due to the development of infrastructure in modern cities, no man's lands that are not maintained, places that people pass everyday by car or as pedestrians but are not necessarily perceived as urban voids (Figure 7). These are the types of urban voids that are considered as potential sites of intervention in this thesis.

19 Rem Koolhaas, " Junkspace", *October MIT Press,* Vol 100 (2002): 175-190

20 Pamela Shaw and Joanne.Hudson, "The Qualities of Informal Space: (Re)appropriation within the informal, interstitial spaces of the city", In *Proceedings of the Conference: Occupation: Negotiations with Constructed Space*, University of Brighton, 2009, 1-2

21 Roger Trancik, *Finding lost space: theories of urban design,* (New York: Van Nostrand Reinhold, 1986) chapter 1

Fig.6 Various Types of Leftover Spaces

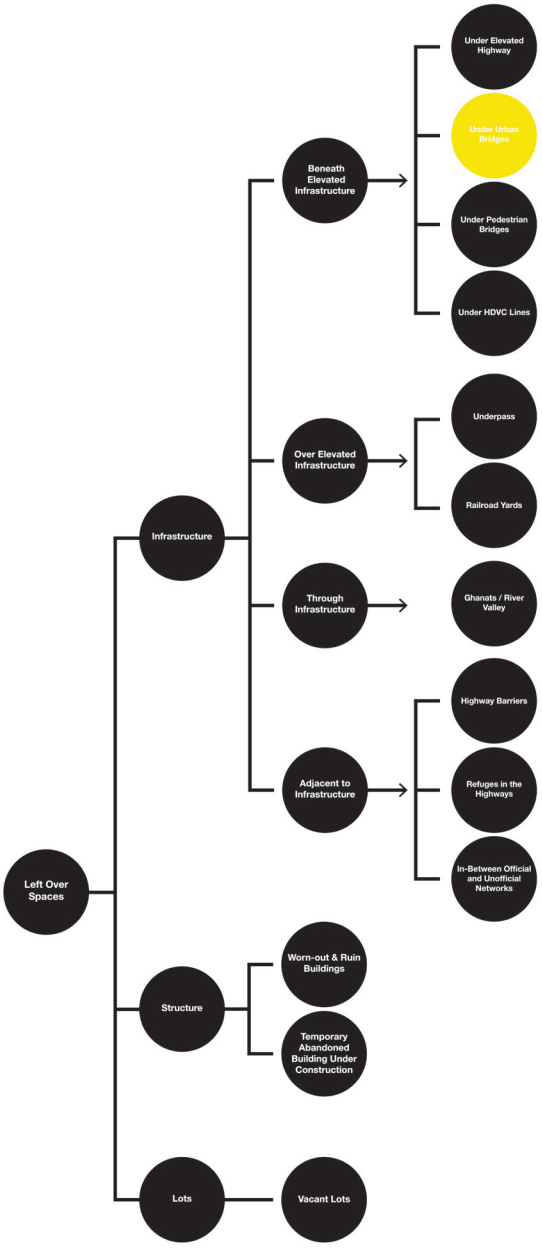

Fig.7 Categorization of Leftover Spaces

2.2 Reusing Infrastructural Leftover Spaces

Infrastructure has grown in complexity. Sewers, sidewalks, roads, medians, highways, landfills, tunnels, power plants, airports, etc. are the technological spaces that compose the urban world we live in. Urban infrastructure is both a site and a system that is designed, constructed, and continuously reconstructed.[22] Infrastructure is the interface between the biological and technological world.

In the past century, increasing demands for transportation and mobility as a result of expansion of cities towards their peripheries has led to an expansion of urban infrastructure. Ever since the exhaustion of the City Beautiful Movement at the end of the nineteenth century, the Industrial Revolution, and the population explosion, the making of cities has transformed radically. Population growth due to migration resulted in new planning policies, height restrictions, density limits, and land use compatibilities, changing the Old World principles of centralized city development.[23] A need arose for new strategies by urban planners and civil engineers. Apart from the scale of their influence, urban planning and civil engineering have shaped today's cities. The implementation of their standards and controls has gradually informed the rigid, inflexible, and detached nature of our cities. However, these planning methods have to keep pace with urban expansion, housing, and infrastructural developments.[24]

Early proponents of highway planning considered them as examples of brilliant of engineering and infrastructural, which promotes high-speed with high-capacity and fluid transport.[25] Highways were built to get people in and out of the city and to answer social and economic demands for fast and efficient travel in expanded cities. These elevated infrastructures, which have been built on the existing transportation networks of the city, are still heavily used and built in cities even in the era of smartphones and Instagram. The century-old infrastructure is as essential to getting around in the cities as it was in 1950s[26].

While the highway infrastructure provides great benefits by connecting urban, suburban, and rural communities, these infrastructure also come with significant costs by separating and creating barriers among various communities (See Figures 8, 9). As Kevin Lynch writes in *Good City Form*:

> *The modern concept of a major street is the familiar freeway, with its divided lanes of traffic, landscaped Central Island and*

22 Pierre Bélanger , "*Landscape Infrastructure: Urbanism Beyond Engineering",* in Infrastructure Sustainability & Design edited by Spiro N. Pollalis, Daniel Schodek, Andreas Georgoulias and Stephen J. Ramos (London: Routledge,2012): 276-315.

23 Norman Johnston*, Forms of Constraint: A History of Prison Architecture* (Champaign-Urbana, IL: University of Illinois Press, 2000) and Jeremy Bentham's classic "Panopticon" (1787 Letters) in The Panopticon Writings, edited by Miran Bozovic (London: Verso, 1995): 29–95.

24 Pierre Bélanger , "*Landscape Infrastructure: Urbanism Beyond Engineering",* 276-315.

25 Chloe Li,*" Transforming the Gardiner Expressway: A Vision for Personal Rapid Transit in 2015"* (Master diss., University of Waterloo, 2006), 12

26 Design Trust for Public Space (Organization) and New York (City) Department of Transportation.2015. *Under the Elevated: Reclaiming Space, Connecting Communities.* (New York: Design Trust for Public Space, 2015) 15-16

shoulders, and access only at grade separated intersections. Traffic flows easily and enjoys a bland natural setting. Passing through a city, the road is elevated above city streets, which improves the driver's view, but imposes even more of its noise on abutters. The division of the city is more severe, and there are dark, unusable spaces under the roadway. While the freeway in the country is often a beautiful accomplishment of modern engineering, its insertion into the urban fabric has never been properly solved.[27]

The architecture and design of the spaces along the highway corridors has not kept pace with the design and construction of the highways themselves. Thus, over time, we have seen isolated and divided communities in the vicinity of these infrastructures. Enthralled with the notions of speed and efficiency that highway infrastructures bring in themselves, many urban planners hastily construct highways without considering the urban environment. In many cities, citizens protested these transformations, especially when neighbourhoods were to be demolished for building new highways, such as some protests happening in New York, Philadelphia or Chicago against the highways constructions in their cities. [28]

Despite the undeniable need for infrastructure in the city and the fact that metropolises cannot work properly without them, these new systems left behind residual spaces in the urban fabric. As discussed in the previous section, there are various types of these leftover spaces beneath,

Fig.8 Dual Effect of Infrastructure Elements in Modern Cities

Fig.9 Sadr Highway in Tehran causing Disconnection in Neighborhoods

over, or adjacent to infrastructures. One of the most common of these residual spaces in the city of Tehran appear beneath urban bridges, and these sites form the main focus of this research. Understanding the causes of these leftover spaces in modern cities is important to achieve successful solutions for them.

Leftover spaces perceived as dead zones, the neglected or forgotten spaces of contemporary cities, are not readily identified and included in the understand-

27 Kevin Lynch. *Good City Form.* (Cambridge, MIT Press, 1981)

28 C. W. Wells, "From freeway to parkway: Federal law, grassroots environmental protest, and the evolving design of Interstate-35E in Saint Paul, Minnesota", *Journal of Planning History,* , (2011). 8-26.

ing of cities. These spaces are unused and left behind not just because of the temporary absence of a function but also because the public eye does not readily perceive. As Roger Trancik writes in his 1986 book *Finding Lost Space: Theories of Urban Design*, the usual process of urban development treats building as isolated objects and sites in the landscape and not as part of a larger fabric of streets, squares, and open spaces. The pattern of growth is also designed on a two-dimensional plan, without consideration of the three-dimensional relationship between the building and the surrounding space and without a real understanding of human behaviour. Therefore, the two-dimensional plans result in anti-spaces and urban voids.

Trancik lists five major reasons for leftover spaces in cities:

1- Growing dependency on the automobile;
2- Attitude of Modern Movement architects toward open space;
3- Zoning and land use policies of the urban-renewal period that led to division in the city;
4- Privatization of public spaces;
5- An abandonment of industrial, military or transportation sites in the inner core of the city.[29]

These often functionless, abandoned spaces, imagined as dirty, unwelcome, and unsafe zones of the city are a result of: industrialism, which originated with the massive production of automobiles and the need for constructing connecting infrastructures; poor design of the contemporary or past urban design movements, which abandoned the principles of urbanism and human scale in the open spaces established in the urban design of cities of the past; social, economic, and political factors, such as war and economic fluctuation; and the fact that these spaces lie outside the zones of official use and occupation of city planning. [30]They are situated somewhere between commercial, recreational, and residential zones, at the limit between private and public space. Without belonging to either, they are without an agent to manage and prevent them from becoming unsafe and unwelcoming spaces in the city.

As Bélanger concludes at the end of his article, Landscape Infrastructure: Urbanism Beyond Engineering, "If we don't pay attention to the effects of global change and engage urban networks as constructed ecologies, it is not 'we' who will design the future flows of urbanization, but rather 'they' who will be designing us." [31] Therefore, it is crucial to consider the underutilized infrastructural spaces and try to design them rather than leaving them behind, in order to overcome these barriers for the continuity of the city's urban fabric.

As mentioned, one of the spaces that entrepreneurs, artists, forward-thinking government officials and placemaking groups are using as potential sites for testing their placemaking ideas are these kinds of leftover spaces. The definition of "junk" itself implies its potential for re-use. Junk's destiny is unstable and open to changes in time, use, value and function. Junk sites circulate the urban environment awaiting re-entry and transformation by the forces of urban renewal—dual narratives of urban demolition

29 Roger Trancik, *Finding lost space: theories of urban design,* (New York: Van Nostrand Reinhold, 1986) chapter 1

30 Ibid, 3

31 Pierre Bélanger , "*Landscape Infrastructure: Urbanism Beyond Engineering",* 276-315.

and preservation.[32]

The contrast between the unexpected need for construction, rapid horizontal and vertical development, and the increasing lack of space entice the placemakers to use these spaces. While it inevitable to have underutilized spaces in modern cities, in both developing and developed countries, using the leftover spaces intelligently is a way to solve this problem, improve the quality of urban life, and encourage citizens to contribute to their city. These leftover spaces should be monitored, maintained and reused (Figure 10).

32 Hilary Powell "Junkspace", *AHRB funded Art /Site*, 2005, CD Rom project

Fig.10 Leftover spaces, placemakers new idea testing spot

Part II:

city of Tehran and how and where to design alternate public spaces for this city. In Tehran, many public spaces are out of reach of the public or are not fulfilling their needs. In what follows, Tehran and its official and alternate public spaces will be discussed.

Tehran: City of Opportunities

Fig.11 General View of Tehran

3.0
Public Spaces of Tehran not for Public

“The city itself becomes a “body politic” and expresses through planning and subsequent citizens’ renegotiation of urban spaces”

David Harvey[32]

3.1 General Information about Tehran

Tehran is the capital of Iran, an important Middle Eastern country. The city is located in the central region of the country, with the highest population of any city in Iran and the second highest in the Middle East, after Cairo. Tehran is a developing city with more than 8, 693,706 residents [34]sprawling over an area of more than 730 square kilometres. The megacity of Tehran is part of the metropolitan area of Greater Tehran, which consists of sixteen different provinces, with more than 15 million people spread over 1274 square kilometres of land.[35] (Figure 12)

Geographically, Tehran is bounded by the Alborz Mountains to the north, east, and west and the Tehran desert to the southwest. (See Figures 13, 14) This cause the city to have semiarid climate with cold winters with the average temperature of -1ºC and very hot summers with average temperature of 26 ^{oC} . The dominant wind direction of the city is from west and south. [36](Figure 15) It is important to point out that the boundedness of the city, the direction of the wind from west to east and high rate of car usage cause an ever-growing air pollution crisis in Tehran. (See Figures 16, 17)

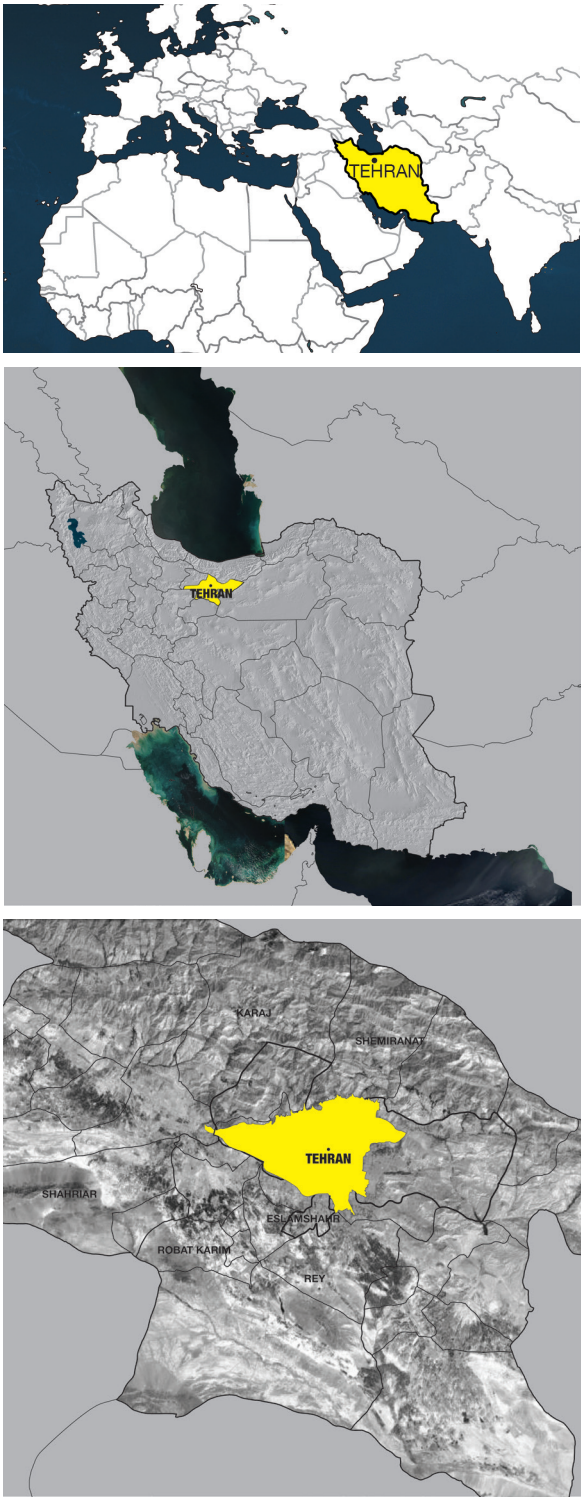

Fig.12 National and Regional Location of Tehran

33 David Harvey,"The Political Economy of Public Space" in *The Politics of Public Space,*ed. Setha Low and Neil Smith(New York: Routledge,2005),17-35

34 سرشماري عمومي نفوس و مسكن سال ۱۳۹۵،" درگاه ملی آمار. Accessed December 23, 2017. https://www.amar.org.ir/.

35 :: TEHRAN official home page. Accessed December 23, 2017. http://en.tehran.ir/

36 Tehran Atlas. Accessed December 23, 2017. http://atlas.tehran.ir/

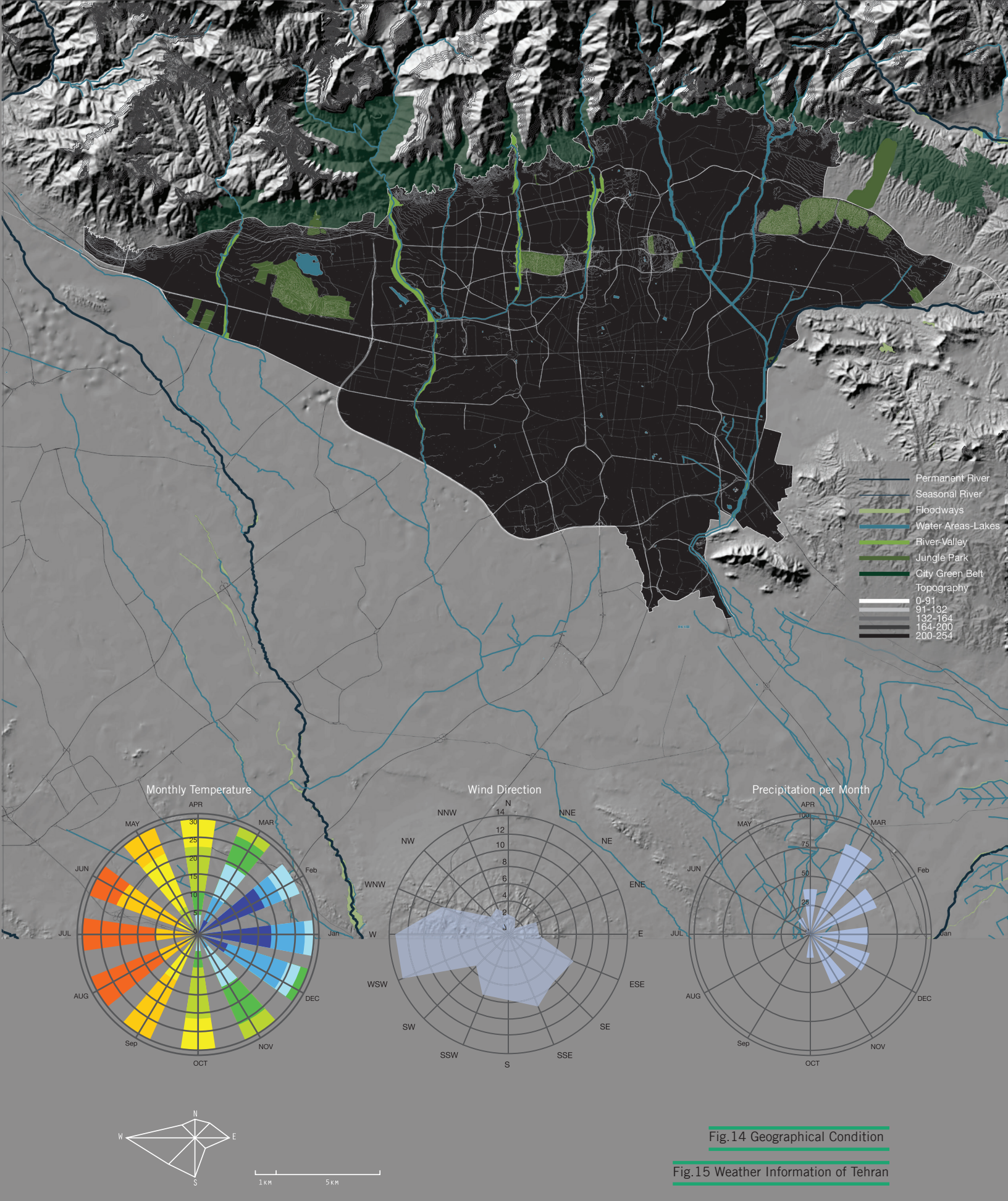

Fig.14 Geographical Condition

Fig.15 Weather Information of Tehran

Fig.13

Fig.16 Panoramic View of Tehran

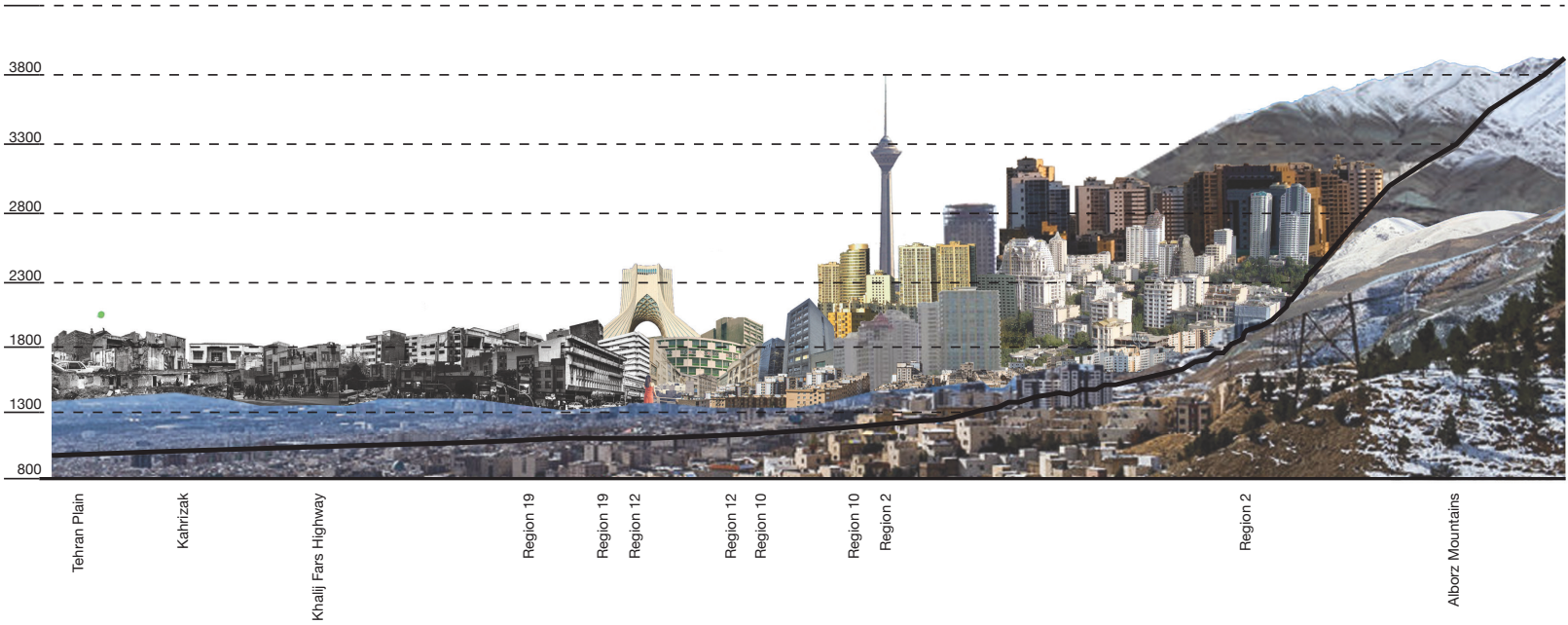

Fig.17 Geographical Section of the city

The city of Tehran, like all other megacities in the world, has a very diverse population. As Debeljak (2013) identifies, there are four social tendencies within Tehran, ranging from the most socially religious and traditional (Ultra-conservatives and Conservatives) to the less traditional (Mainstream and Non-Traditionalists)[37]. (Figure 18) As we can see, all of Iran's diversity is represented in Tehran's population.

As is obvious in the city, the socio-demographic differentiation of class and lifestyle of its inhabitants varies more from north to south, rather than from centre to periphery, as is more common in European cities. This variation is almost paralleled by the geographical section of the city.(Figure 19) The northern part of Tehran, like many other cities, is inhabited by a range of socially conservative to socially liberal, wealthy people living in expensive, high-rise buildings with bigger houses and lower street density. Compared to the city's south, household expenditures are three times higher and the residential floor consumption is four times higher.[38] As we move to the central region of the city, there is a mix of various people with very different beliefs and backgrounds, from nontraditionalist to ultra conservative, living in more dense areas and lower-cost buildings. In the middle of Tehran, a mix of the younger, modern generation and older, conservative and traditionalist people live next to each other. As we move down to the south, people become less wealthy, less educated, and, for the most part, conservative. The land price decreases, the street density becomes higher, and the houses become smaller.

37 Klara Debeljak "Youth in Iran: A Stroy Half-Told. Values, Priorities and Perspectives of Iranian Youth." *Young Publics Research Paper Series*, No.1 (Iran. Retrieved 2013),10

38 Z, Helene. "Discover Tehran." Chapter 4: Population Density and Polarization in Tehran. June 20, 2013. Accessed December 22, 2017. http://discovertehran.blogspot.ca/2013/06/chapter-4-population-density-and.html.

Ultra-Conservatives

22%

Least educated | Most traditional | Most likely to support status quo

Social and Political attitudes:

Strong trust in state institutions

Believe that human rights are protected in Iran

Conservatives

24%

The second most traditional and conformist segment

Social and Political attitudes:

Strong trust in state institutions

Believe that human rights are protected in Iran

Non-Traditionalists

18%

Best educated | Most liberal | Most open to change

Social and Political attitudes:

Lowest trust in state institutions

Most concerned about the lack of protection of human rights in Iran

Mainstream

36%

The middle of the road for personal values and beliefs

Social and Political attitudes:

Moderate trust in state institutions

Moderate protections of human rights in Iran

Fig.18 Social Tendencies

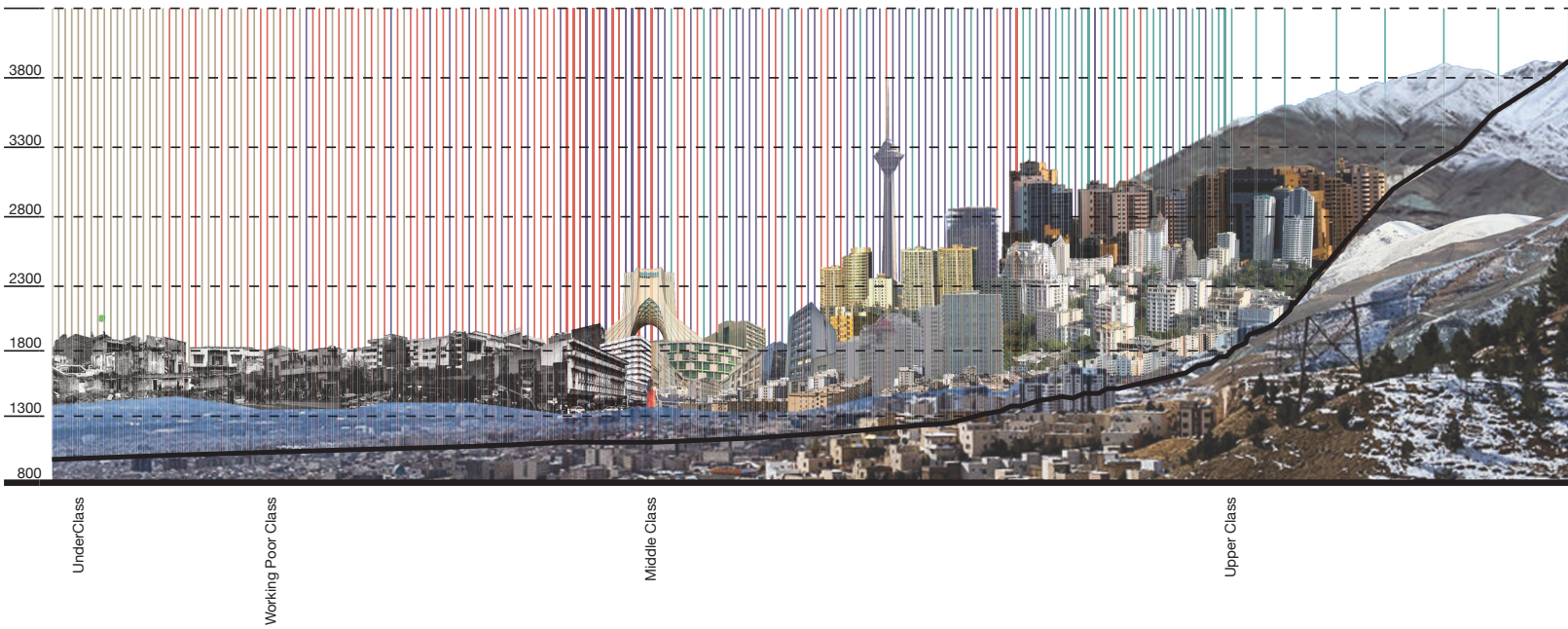

Fig.19 Socio-Demographical Section of the city

3.2 History of Growth and Expansion of the City

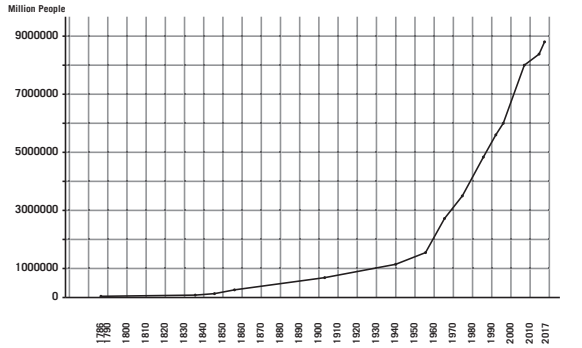

Fig.20 Population Growth

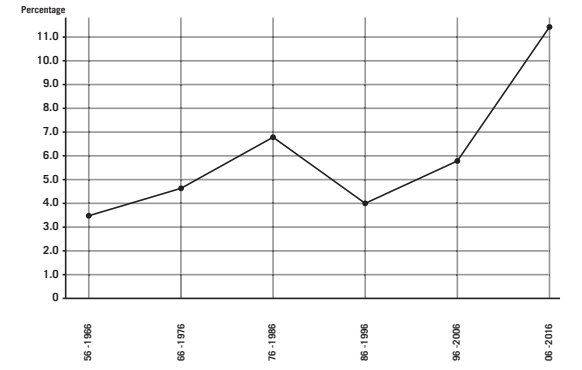

Fig.21 Immigration Rate

The population of Tehran has been increasing due to population and immigration growth since 1786, when it became the capital of Iran. More people immigrate to Tehran everyday with the hope of finding a better future. In 1786, Tehran was a small, walled city with less than 500,000 people. [39]Once its growth accelerated, the city's walls were demolished to allow more people to live in the city, as well as more streets and faster movement. A major shift in population and immigration to Tehran started in 1930 and reached its apex in the 1960s, when the king of Iran attempted to replace its traditional feudalism with a capitalist economic system. (See Figures 20, 21) This change entailed major land reforms; as a result, a lot of landless peasants migrated to Tehran. [40] Many people moved to the city to find jobs in the new factories and offices.[41] These increases in immigration to Tehran caused the city to expand it borders. (Figure 22) After the Revolution in 1979, the rate of population growth became even higher. The Iran-Iraq War (1980-1988) and the subsequent stagnation of agro-businesses caused refugees and rural workers to immigrate to Tehran in search of jobs. The state's policies of encouraging high birth rates and early marriage during the war also caused a tremendous rise in the population of the city, mostly among the poor families who had immigrated there.[42] This population growth sped up the expansion of the city to its extents but, because of its geographical boundedness, it started to densify over a short period of time. This increase in densification has proceeded until now: the current density of the city is almost 13,000 people per square kilometre, , which, compared to other populated cities, such as Mumbai, India with a population of 12.5 million people and with a density of 18,000 people per square kilometer, among

39 Iran Statistical Yearbook." درگاه ملـی آمـار. Accessed December 22, 2017. https://www.amar.org.ir/english/Iran-Statistical-Yearbook/Statistical-Yearbook-2011-2012.

40 Ali Fard and Ghazal Jafari. "Tehran: Planning the unpredictable" *MONU 17,* (2012):64-71

41 Z, Helene. "*Discover Tehran."* Chapter 2: Population development, Age pyramid and Sex Ratios. June 20, 2013. Accessed December 22, 2017. http://discovertehran.blogspot.ca/2013/06/chapter-2-population-development-age.html.

42 Ibid, chapter 2

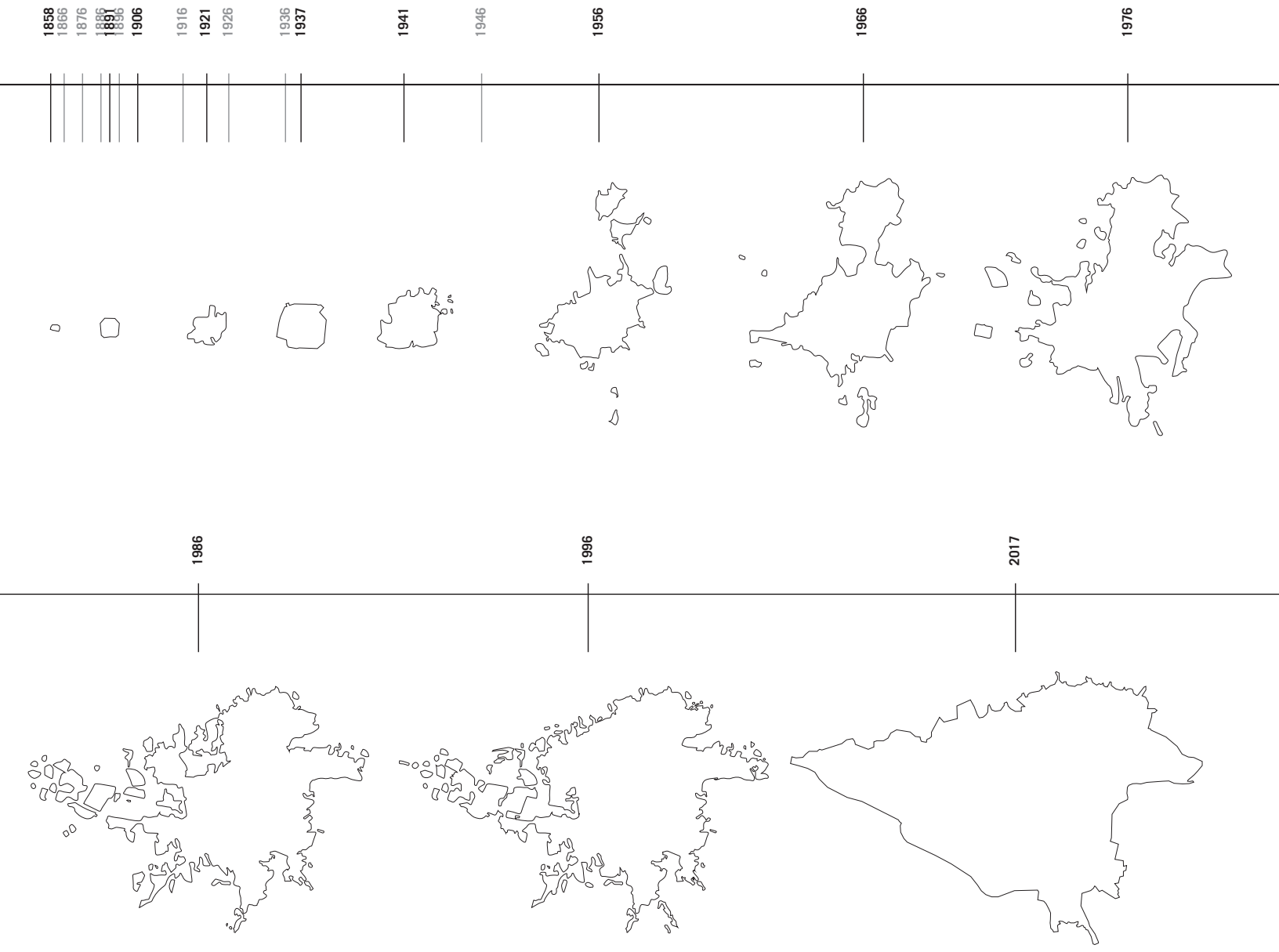

Fig.22 Expansion Process of the city

the highest compared to other major cities.[43] (See Figures 23, 24)

Following the Revolution and eight years of the Iran-Iraq War, the attention of the public and private sectors was mainly on constructing more residential, commercial and institutional buildings. At that time, the municipality illegally sold density and gave permission to build residential or commercial buildings in the public zones of the city.[44] In this process, the importance of open public spaces was lost in Tehran. Multiple open spaces were demolished and there was almost zero new space allocated for public developments. The only public spaces were the ones built in the reign of the late king of Iran in 1960s. Today's Tehran is almost the same: the major open public spaces are very large parks spread unevenly around the city, with some smaller public interventions in some areas for social interaction.

The results of historical and political changes, as well as various urban planning and economic processes, remain in today's Tehran, with huge public spaces scattered around the city. These are separated from daily life and do not fulfill the needs of the vast range of citizens living in this megacity. Looking into the roots of these problems is important to understanding the issues surrounding public space in Tehran.

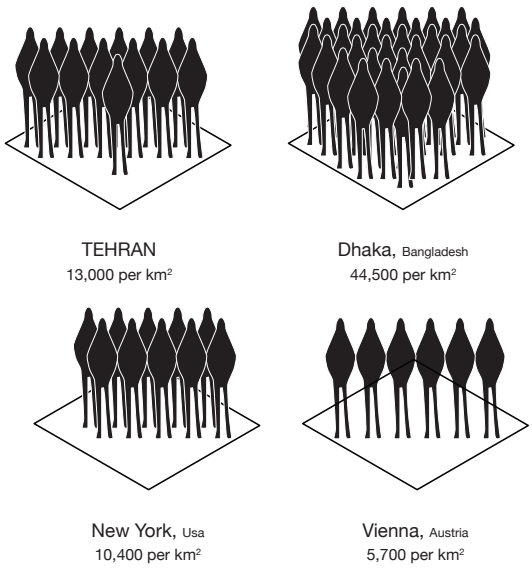

Fig.23 Tehran Comparison Density

43 Explore urban open data. Accessed December 21, 2017. http://urbandata.unhabitat.org/explore data/?indicators=slum_proportion_living_urban%2Cpopulation%2Curban_agglomeration_population_density%2Curban_population_cities%2Chiv_prevalence_15_to_49_year.

44 Fard and Jafari. "Tehran: Planning the unpredictable" , 64-71

Fig.24 High Density at Gisha District

3.3 History of Tehran and its Public Spaces

Tehran is an old city, first appearing in history around 1,200 years ago [45]and known as the city of "fine pomegranates and gardens." [46]Before its development, this city was a small village with walls around it and a small population of villagers. The development and importance of Tehran started at the time that the first Qajar king declared Tehran as the capital of Iran. The history of Tehran's development can be studied in three periods: first, the premodern, small, walled city with a traditional structure; second, the Pahlavi era in which the city faced extensive modernization; and third, the period from the Islamic Revolution of 1979 till the present.[47]

Qajar Reign (1785- 1925) - Premodern era

The first map of Tehran, from 1858, depicted a small, walled city. (Fig 8) This was the era of the first Qajar king, ruling the kingdom that made Tehran its capital. The city was surrounded by walls and battlements, with four entrance gates on each side of the city. The enclosed area of about 440 acres (4.4 square kilometers) included gardens, farms, a bazaar, the citadel, and three residential neighbourhoods. (Figure 25) In this era, tradition and religion were two important aspects of society. Like all other cities in Iran, Tehran followed the traditional pattern of Iranian-Islamic cities, with few public spaces used mainly for religious and national rituals. The main public open spaces of the city were two urban squares along the main axis: one in front of the Arg (citadel), called the Arg square (Figure 26), and the other in front of the bazaar (Sabze Meydan) (Figure 27), along with the bazaar itself (Figure 28). These two squares, which connected the Arg to the Bazaar, were meeting places for men to interact with each other and with authorities. The bazaar was located at the heart of the city centre and, during the emergence and expansion of the city, it became the main centre of occupation, activity, and trade. Rather than two major squares working as open public spaces, there were some enclosed public spaces such as the

Fig.25 Tehran's Earliest Map, Created by Berzin in 1852

45 Zohreh Soltani, "The Transformation of Public Space: City Squares as Locations for Power Struggle- The Case of Tehran (1934-2009)" (Master diss., Middle East Technical University, 2011), 19

46 Ali Madanipour, *"Tehran: The Making of a Metropolis,"* (Sussex: John Wiley & Sons, 1998), ix.

47 Tania Fiuzie,*"Public Spaces Of Tehran; Official Repression, Subversive Alternative"* (Master diss., University of Waterloo, 2013), 45-46

hamam (public bath), *zoorkhane* (traditional sport place) or *ghahve khane* (traditional café). These were introverted buildings off the main axis and enclosed with built elements (Fig 29). The housing systems were also introverted, with small openings facing streets, and major activities happening inside houses rather than in the street. Women in this era did not have a very active presence in the public spaces of the city.[48]

Fig.26 Arg Square of Tehran early Qajar era

Fig.27 Sabze Meydan early Qajar era

Fig.28 Tehran Bazaar early Qajar era

During the rule of the first three Qajar kings, over a period of sixty years, the city frequently expanded upon its initial development but remained within its original walled area. The first major shift in the city's planning happened during the reign of Naser al-Din Shah. The old walls were destroyed and a new, larger battlement, with twelve new entrance gates, was built. Due to Tehran's rapid growth and extensive construction, the area within the city limits began to fill up. Some royal palaces, gardens, embassies, and foreigner's houses were built outside the city limits. (Figure 30) As Naser al-Din Shah paid various visits to Europe, Western culture started to influence the city and Iranian culture. The traditional face of the city was changed to a more European face. The king achieved his dream of abandoning the traditional pattern of the Persian cities and building a city like Paris. In consequence, the traditional and

48 Ibid, 47-53

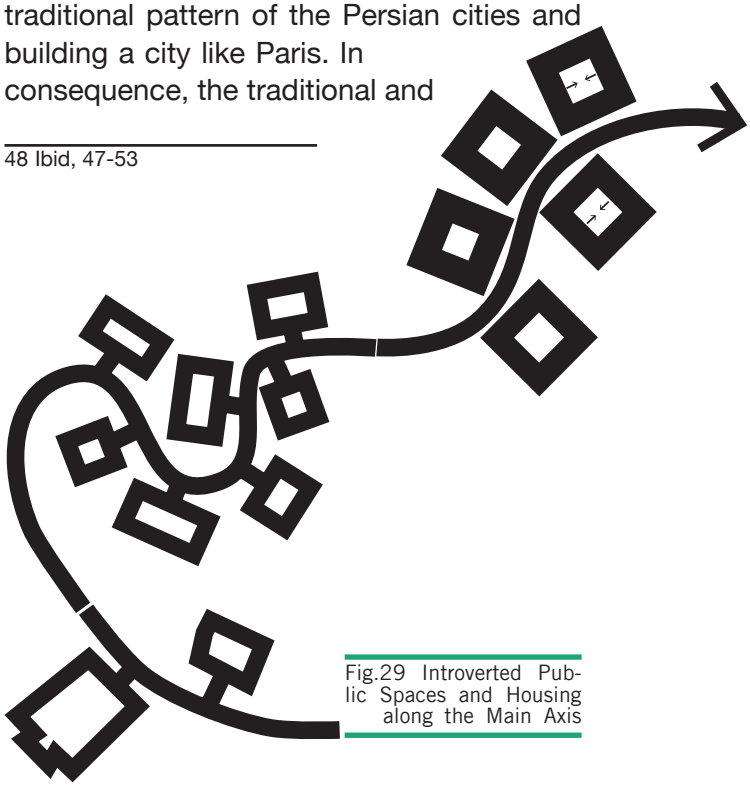

Fig.29 Introverted Public Spaces and Housing along the Main Axis

religious aspects of the city began to be influenced by Western culture. At the beginning of this era, the city's structure was still linear, with only one main city centre. Over time, new centres, which were connected by new roads to the original urban spine, were introduced and created a "multi-centered" city. The emergence of new, large open squares, such as the *Topkhaneh* square (Figure 31), and the eventual introduction of motor ve-

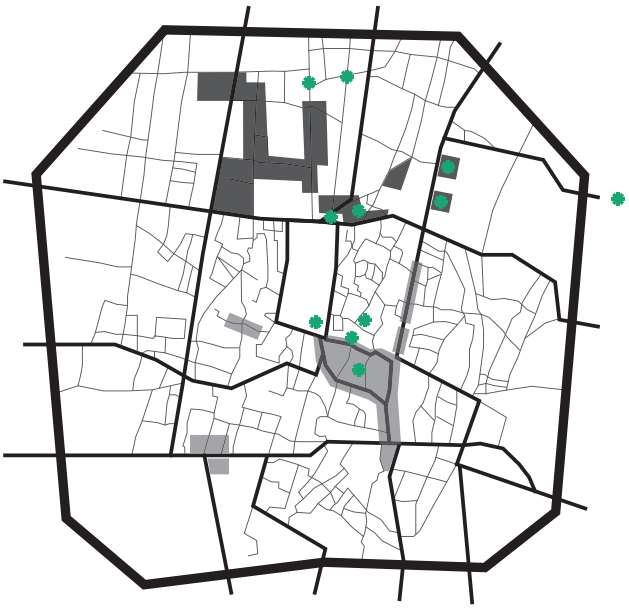

Fig.30 Tehran's Plan as Dar-Ol-Khalafeh-Naseri 1891

hicles transformed the confined, compact, interwoven and organic structure of the city. The influence of Western culture was confined to the public realm, while the housing of the city remained introverted (Figure 32).[49] The urban transformation of Tehran during the reign of Naser al-Din Shah Qajar changed Tehran from a small village to a more modernized city with car-accessible streets and European-style shops. This urban transformation, not only helped in establishing a

49 Fiuzie,*"Public Spaces Of Tehran; Official Repression, Subversive Alternative"* , 54-57

Fig.31 *Topkhaneh* square Tehran

national and international importance for the capital, but also had social and economic impacts on the city[50]. After the death of Naser-Al Din Shah, the process of Westernization slowed down as the country was in chaos and the Qajar reign was losing its power. Finally, in 1925, Reza Khan, a modern-thinking military man, was appointed as the legal monarch of Iran and established the Pahlavi dynasty to replace the Qajar dynasty. [51]

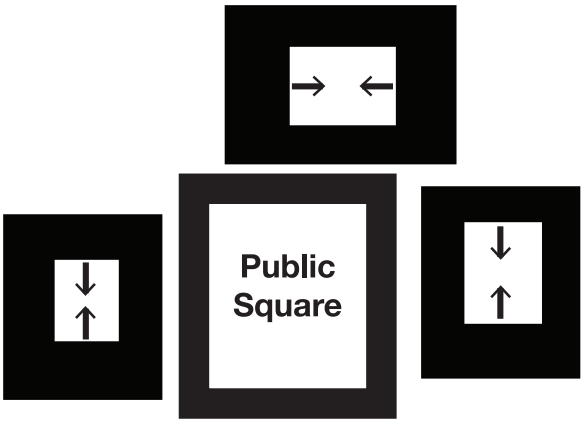

Fig.32 Emergence of Large squares

50 Soltani, "The Transformation of Public Space: City Squares as Locations for Power Struggle- The Case of Tehran (1934-2009)" , 23

51 Fiuzie,*"Public Spaces Of Tehran; Official Repression, Subversive Alternative"* , 54-57

First Pahlavi Era (1925- 1941)

This era saw the “modernization” of Tehran. The Pahlavi Reign desired to Westernize Iran and, particularly, Tehran as the centre of all major public activities. To emphasize the new regime, the first action was to demolish the old wall around the city and the citadel (Arg). The most prominent transformation of the physical fabric of Tehran in this era was the introduction of wide, straight streets and geometric squares.[52] These were modelled after European cities and cut through the dense, traditional, and interwoven structure of the city and created a new geometrical network of streets and avenues. (Figure 33). Squares as places to gather and hang out were changed to large, open, geometric squares with the aim of easing flow and movement for cars. At this time urban design based on cars rather than people was increasing in the world at large, and consequently in Iran and Tehran.[53]

Due to these changes, the linear structure of the old city, with its few public spaces that branched of the main axis , changed to a network of perpendicular streets with several public spaces scattered between those streets. In moving Tehran from an introverted, Islamic urban fabric to an extraverted metropolis, Reza Shah created many modern open public spaces: large avenues, urban squares, pleasure parks, and some streets that were built only with the purpose of shopping and walking.

Many new Western-style public spaces and buildings also emerged along the newly constructed streets. Most of these spaces had never existed before in traditional Tehran. These new spaces varied from government buildings such as ministries, banks, airports, or embassies to cultural buildings like cinemas and theatres, which became highly popular. The first university in Iran, the University of Tehran, was built. Other public spaces appeared, including public libraries, cafés, social clubs, boutiques, shopping passages (similar to Paris‘s arcades, in contrast to the old bazaar), luxury restaurants with Western cuisine, and many European-style hotels. (Figure 34) [54]

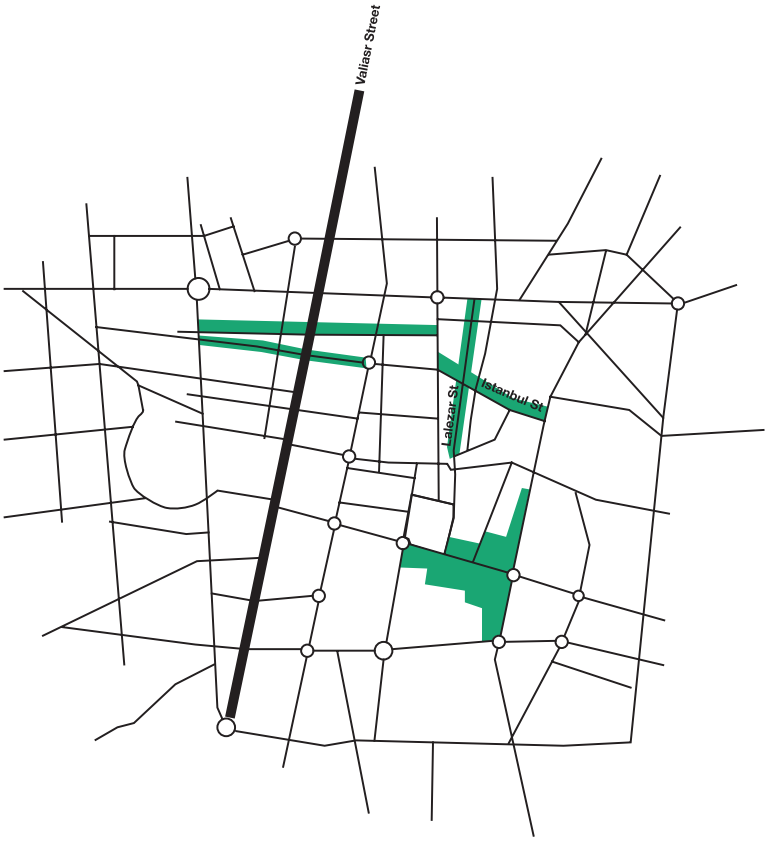

Fig.33 New Geometrical Network of streets

52 Soltani, “The Transformation of Public Space: City Squares as Locations for Power Struggle- The Case of Tehran (1934-2009)” , 24

53 Fiuzie,*“Public Spaces Of Tehran; Official Repression, Subversive Alternative”* , 58- 61

54 Fiuzie,*“Public Spaces Of Tehran; Official Repression, Subversive Alternative”* , 61

Along the path of modernization and Westernization of public spaces, the private realm began to Westernized too. Housing in this era changed form an introverted style to a completely extroverted style, connected directly to the main roads and streets of the city. (Fig 35) Women, who had always been kept in houses and did not have an important role outside the home, also started to get more involved in the city.[55]

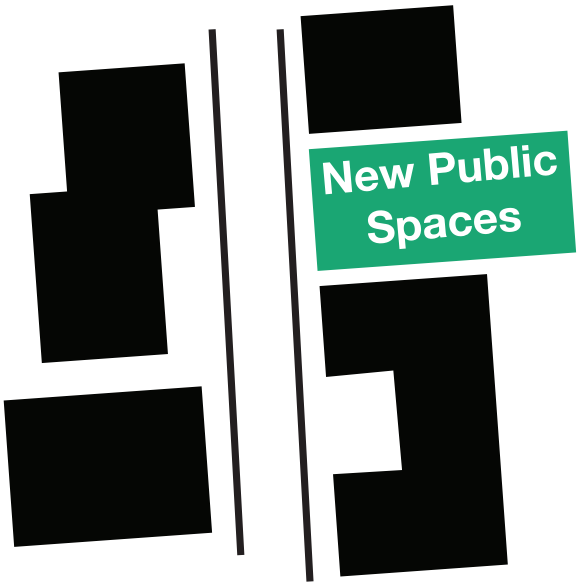

Fig.34 Pahlavi's city structure- Open Public Spaces and Extraverted Housing

Fig.35 Lalezar Avenue, Tehran, 1937- Tehran's entertainment district with theatres,cabarets, and clubs

55 Ibid, 61

Second Pahlavi Era (1941- 1979)

During World War II, Reza Shah was forced to step down and power was transferred to his son, Mohammad-Reza Shah, in 1941. In the first years of his reign, Tehran continued to grow as the country's centre of industrialization and employment. Following the 1930s, the development of the new network of urban roads facilitated movement of cars and people in the city, but fragmented urban spaces.[56] Due to two main attracting public zones, Tajrish in the north and Rey city in the south, with Pahlavi (Valiasr) street connecting them, the city started to expand along a north-south axis.

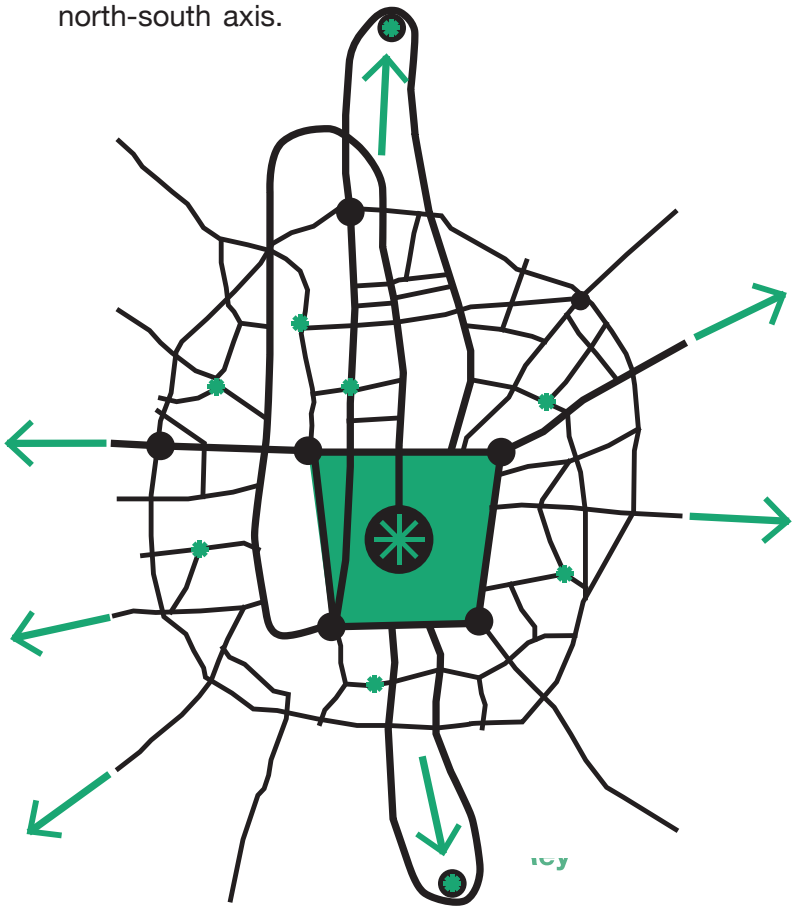

Fig.36 City's Expansion in Second Pahlavi Period

56 Ali Madanipour. "City Profile: Tehran." *Cities. Vol. 16*, No. 1, pp.57-65, 1999, p.60

But this expansion led to a segregation of poor and rich in the city from 1950s to 1960s. Offices and businesses were concentrated in the central area around old Tehran, especially the bazaar, while industrial centers extended from the southern parts to the eastern and western ends. However, the residential building concentration took two very different directions. One group was concentrated in the northern part of the city, which was modern and clean, with wider streets, lower density, and at a distance from the compressed, high-density and poorer southern neighbourhoods. The poor immigrant population was marginalized and created slums around Tehran. This contrast of form and demographics in the section of Tehran was also association with cultural differences between the two parts of the city (Figure 36).[57]

This rapid development caused some changes in the traditional public gathering spaces of the city. Public squares as spaces of gathering were demolished because of the streets constructed for more cars. The semi-public, narrow spaces of the traditional city, which were spaces of socialization for its citizens, were lost due to the widening of the streets. (Figure 37)

In this era, the planning of huge parks became important to answer the needs of this huge population for open public and green spaces. However, these parks never completely fulfilled the need for these spaces in Tehran. (Figure 38) Rather than big parks, sport complexes and European-style shopping centers, among other recreational and entertainment centers such as sport clubs, bars, cafés, cabarets, and discotheques, were built in the city. (See Figures 39, 40) These service and recreational

57 Fiuzie,*"Public Spaces Of Tehran; Official Repression, Subversive Alternative"* , 62-65

Fig.37 Street Widening for movement of Cars: Pahlavi Avenue towards Tajrish Square, 1960's

Fig.38 Large Open parks built around the citybuilt around the city

Fig.39 Western style Public Space- Ferdowsi Square with Western Signs

centres remained in the core despite the expansion of the city every direction. More houses were becoming extroverted. The public role of women expanded in this era, and women nearly achieved equality with the men in the city.

Fig.40 Western style Public Space- Plasco Shopping Mall

In the last seven years of the Pahlavi era, a rise in oil income caused a battle between modernity and tradition. On the one hand, there was social dissatisfaction among people because of the huge gap between the poor and the wealthy. On the other hand, government sped up modernization through growth of construction in the cultural and institutional sectors, monuments and public spaces, and the number of art and cultural festivals in the city and country. These two changes caused social and political movements against the Shah's dictatorship and autocracy, which signalled the start of revolutionary thought among the people. At this time, the public spaces built by the government were used differently from what they were designed for: the urban environment was repeatedly used by the masses to protest, to present themselves as a larger population, and to become visible in public. (See Figures 41, 42) In response, urban policies serving the government were modified against those movements.[58] This process proceeded until the winter of 1979, when the Pahlavi dynasty was overthrown and 2,500 years of continuous Persian monarchy was replaced by an Islamic republic government.

Fig.41 Using Public Spaces against government in 1979

Fig.42 Using Public squares for protesting

58 Soltani, "The Transformation of Public Space: City Squares as Locations for Power Struggle- The Case of Tehran (1934-2009)" , 135

Islamic Republic (1979 - Present)

The Islamic Revolution of 1979, which was named the "largest protest event in history," [59] was led by clerics, bazaaris (the traders and sellers of the bazaar in Tehran and other big cities), and the urban poor, with strong support from the masses. These groups of people, along with the intellectuals, were unsatisfied with the Shah's imperialist policies, the huge gap between Islamic traditions and contemporary social practices, and the vast Westernization of the country, which prompted them to demand change.[60]

Right after the revolution, the government's goal was to diminish all of the Shah's Westernized, anti-Islamic public spaces, such as bars or cabarets, or to change their identity and use them in the Islamic-approved way. (Figure 43) As Pamela Karimi says, these were the government's attempts to Islamicize the city's architecture without razing buildings and keeping the Persian art and architecture intact.[61] In other words, the aim of the new government ruling the country was to diminish previous places of sociability in the cities and expand the ways of religious sociability instead. Public spaces were patrolled by the state and new Islamic rules. (Figure 44) Subcultural public spaces such as the street corner, where young men gathered to socialize and pass the time, were lost through the policies of state forces. Bright colours suddenly disappeared from the city's visual landscape, replaced by black and grey, also embodied in women's

Fig.43 Adding anti-western sentiment to the city- Karimkhan Street

Fig.44 Friday Prayer in Tehran Streets- Advertising religious sociability

Fig.45 Laleh Park, Tehran

59 Ervand Abrahamian. *Mass Protests in the Iranian Revolution*, 1977-79. Ed by: Adam Roberts & Timothy Garton Ash. Civil Resistance & Power Politics; The experience of non-violent action from Gandhi to the present. Oxford University Press, New York, 2009, pp.162-163

60 Fiuzie,*"Public Spaces Of Tehran; Official Repression, Subversive Alternative"* , 66

61 Teun Voeten. *Parsing Tehran; Mottos and martyrs flank the streets of Iran's capital*. ID (New York, N.Y.), 53, no 6, September/October 2006, pp.38-39

chadors and men's beards.[62]While these shifts toward increased religious sociability occurred, the public parks built during the Shah's era were the only public spaces in Tehran that remained untouched. They were the only public spaces left for people to gather and socialize. (Figure 45)

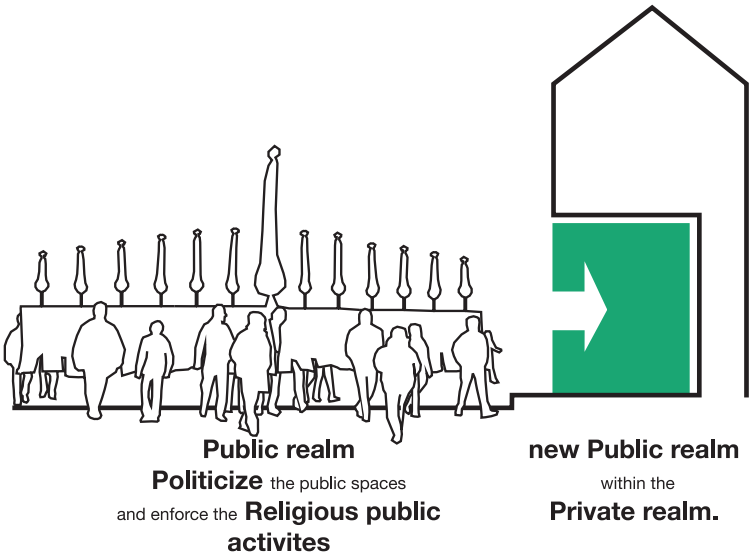

Fig.46 Public Activities in Tehran after Revolution

Less than a year after the revolution, the Iran-Iraq war began. Attention and energy at that time was directed toward the war and survival, and away from urban development and public spaces. After eight years of destructive war, Tehran started to regain its urbanity. Architects and urbanists concerned about Tehran started to take action. Massive and unlimited construction began in every part of the city. The municipality's attention was focused on construction of cultural and institutional buildings or beautification of the city. Once the state opened up the natural facilities of Tehran, the large public parks remained the major open public spaces in the city. The major activities that happened in public were religious gatherings at Ashura and Tasua and other religious activities. All the other desired public activities were completely disregarded and limited by the government.

The outcome of limitations on public activities was not the full destruction of public life, but an over-privatized public realm. The character of public space as a space of, and for, control, became very intense in post-revolutionary Iran.[63] For that reason, urban public life reshaped itself in the private realm. When the public display of some activities is not only disapproved but also punishable, the only way to do those activities is behind closed doors. (Figure 46)

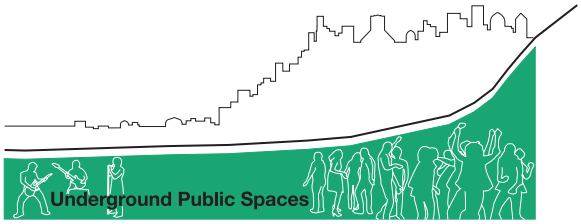

Fig.47 Under the skin of public space in Tehran

These activities create an underground life in Tehran, which is quite different from the one outside private boundaries. These are more culturally subversive activities, such as socializing, music, movies, performances, and public interaction between opposite genders in general. Behind closed doors, in almost any part of Tehran or in the expensive, shaded gardens of the suburbs, there is another life going on, different from the tense, oppressed life on the surface of the city. (See Figures 47, 48)

62 Asef Bayat,. "Tehran: Paradox City". *New Left Review*, 66, November – December 2010, 99-122, 108

63 Don Mitchell. "Introduction: Public Space and the City". *Urban Geography 17*, 1996, 127-131

In the past few years, after the new president, Hassan Rouhani came into power at 2013's election, some of these underground activities started to reappear in the public realm. Although only a small number of them can be performed and not shut down, they represent a new wave of previously underground activities happening in the outdoor public realm. (See Figures 49, 50)

Fig.48 Underground Partying

Fig.49 Deep House music concert for public

Fig.50 Public Partying in the streets

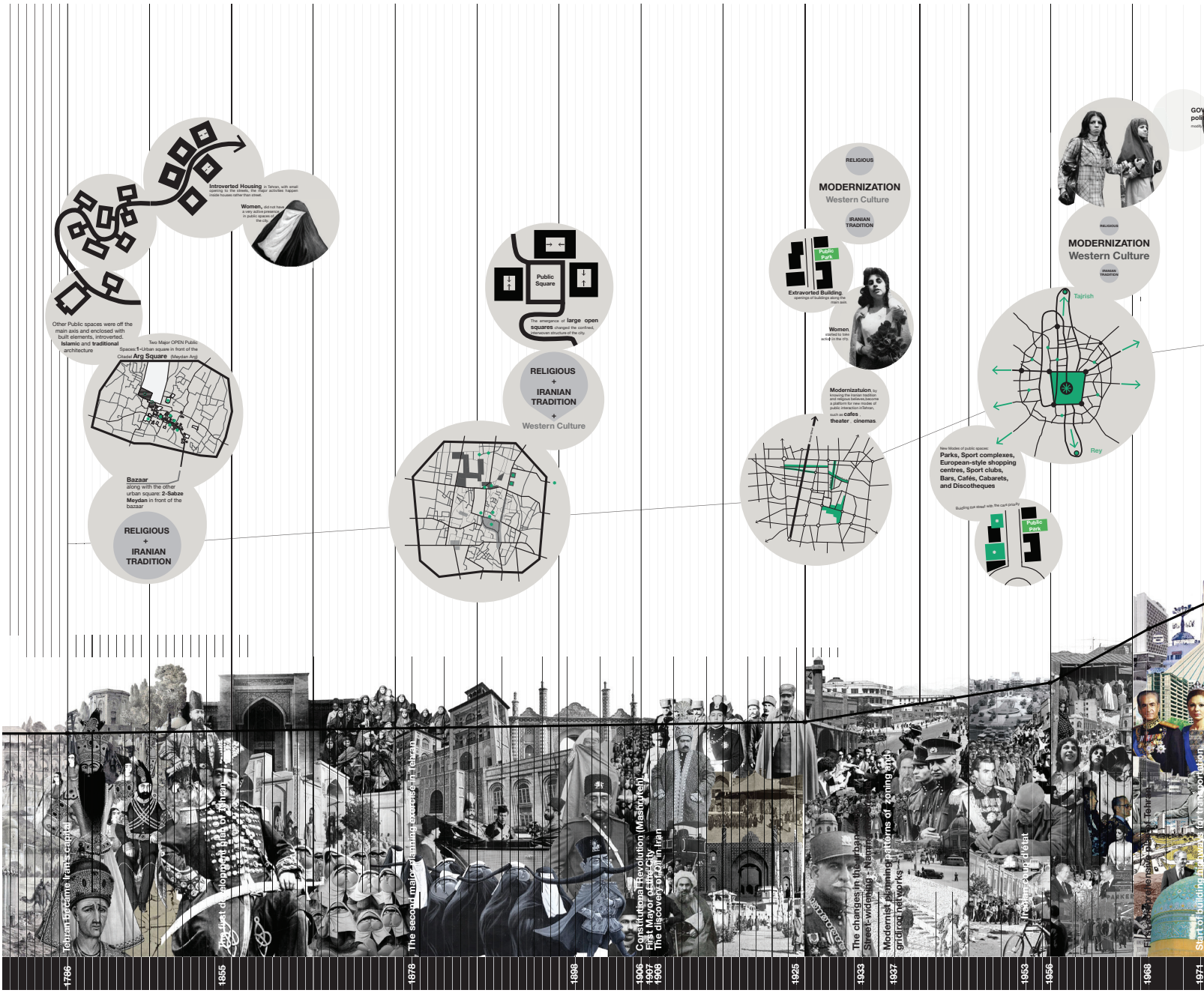

Fig.51 Timeline of Tehran

RELIGIOUS
Citizens Needs
Underground Public Spaces
Public realm
Politicize the public spaces and enforce the Religious public activites
new Public realm within the Private realm.
Parkway- the first cable bridge of Tehran
Islamic Revolution
Iran-Iraq War Began
Iran-Iraq War Ended
First Master Plan of Tehran
The plan of Tehran's conurbation
Ghalibaf as Mayor of Tehran
Resalat, the First Urban Tunnel in Tehran
Master Plan of Tehran
Milad Tower
Sadr, the First Multi-Layered Highway
Nature Bridge opened
1979
1980
1988
1991
1996
2001
2005
2006
2008
2009
2013
2014
2016
Start of Islamic Republic of Iran
Ruhollah Khomeini
1979- 1989
Islamic Republic of Iran
Ali Khamenei
1989- now

01

We can see four different types of public activities happening in Tehran today. The first category is that of the public activities held by the government and which are socially, culturally and religiously accepted and encouraged for citizens to take part in, such as governmental rallies or religious events. (Figure 52) National events are also part of this category and the municipality and government is trying to manage public spaces for these kinds of activities in the city, like Norooz or Sizdah Bedar. These activities happen all around the city, on the streets, and in the parks. (Figures 53)

02

03

Fig.52 Religious and Governmental Public Activities

02

02

03

Fig.53 National Events all around Tehran

The next two categories of activities are socially, culturally and religiously accepted, but they are not mainstream activities. The government neither encourages them nor shuts them down. The first of this type of activity does not have any political or religious connotations, such as sports gatherings or unplanned occasional celebratory gatherings. (Figures 54)

Fig.54 Secondary Stream Activities in Tehran

The third type is emerging because of the government is becoming more moderate, while creating some regulations around these events, such as graffiti gatherings or street music concerts. These events happen in the streets or in more private spaces such as cafés or cultural centres. (Figure 55)

Fig.55 Public Activities that are becoming acceptable

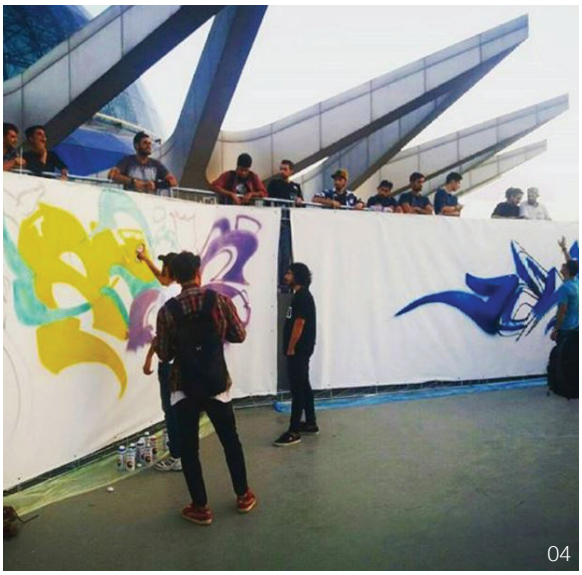

Fig.56 “Under Ground” Public Activities

The fourth category consists of “underground” activities, which have no public platform designed for them. These activities are accepted by more socially liberal citizens and happen all around the city, but are not approved by the government. In some cases, they are not religiously accepted, such as drinking and socializing with the opposite gender, which is against Islamic rules. (Figure 56)

In contrast to these major public activities, there are other, small public interventions happening in the city and in Iranian lives. If one is designing for and with the people of Tehran, understanding the temporal cycles of use and activity all around the city becomes key. One can then design to address local needs in terms of site, program and users (Figure 57)

Fig.57 Pattern of small intervention activities

TEHRAN Picture Agency

ISNA
PHOTO: MEHDI GHASEMI

ISNA
PHOTO: MOHSEN ISMAEILZADEH

TEHRAN Picture Agency

ISNA/PHOTO: MONA HOOBEHFEKR

FARS

Theater Festival
تئاتر فجر
MEHR
Photo:Armin Karami
MEHR NEWS AGENCY

PHOTO:MAEZIEH SOLEIMANI
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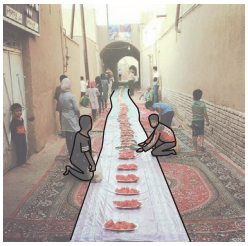

ISNA PHOTO
Kimia Nik

TEHRAN Picture Agency
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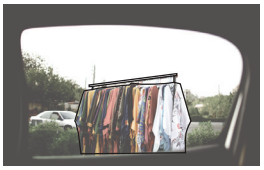


Honaronline.ir
Photo : Alireza Farahani

3.4 History of Development Plans

Development plans for Tehran, besides unplanned profiteer decisions, caused the uneven distribution and inaccessibility of public spaces in the city.

History of Development Plans

While the city was expanding its borders, various development plans were created in different periods that rapidly changed the face of the city against its natural growth. In the beginning, they were basically actions that happened based on no given plans. (Figure 58)

The first actual master plan for the city that influenced its future development was the Tehran Comprehensive Plan by Farmanfarmaian consulting engineers in Tehran, in cooperation with Victor Gruen in Los Angeles, under the direction of Fereydun Ghaffari in 1968. This plan resembled Ebenezer Howard's "garden cities" and attempted to reshape Tehran with a decentralized, LA-type suburban organization. [64]The plan imagined Tehran with ten centres scattered around the city, with highways and motorways connecting them. (Figure 59)

Even though this master plan was not realized, it was the basis for future plans for Tehran after the Revolution. These later master plans all focused on large, open public spaces in each neighbourhood (mainly parks and nature reserves), with certain kinds of possible public activities. These public spaces, presented in all of these master plans, were not at the scale of the citizen's everyday life. (Figure 60- 62)

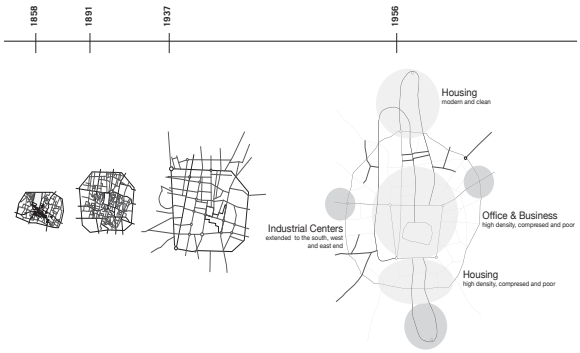


Fig.58 Early attempts of city development

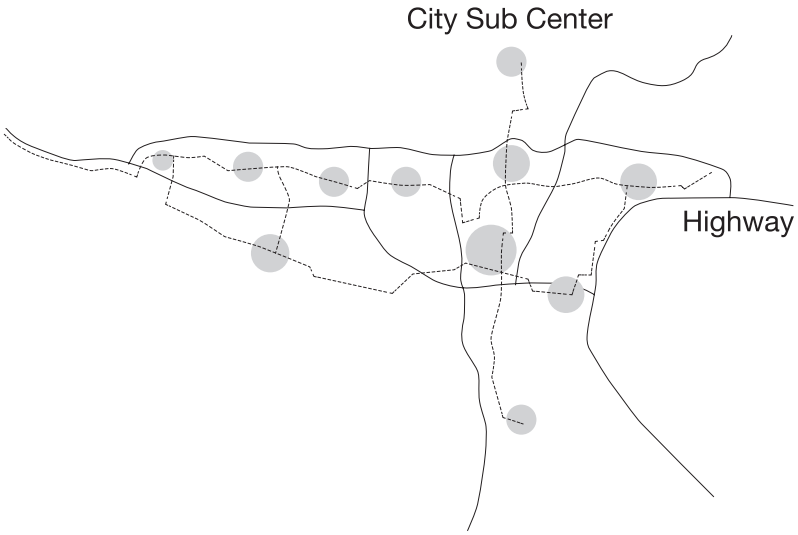


Fig.59 Comprehensive map of Tehran

64 Soltani, "The Transformation of Public Space: City Squares as Locations for Power Struggle- The Case of Tehran (1934-2009)" , 80

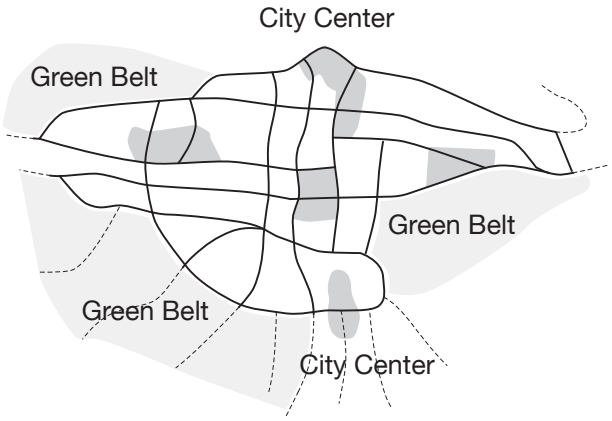


Fig.60 First Master Plan of Tehran by ATEC after Islamic Revolution 1991

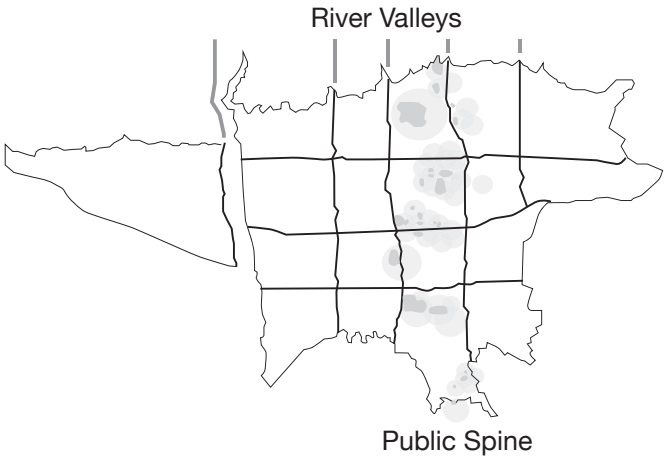


Fig.61 Second Master Plan of Tehran 2001

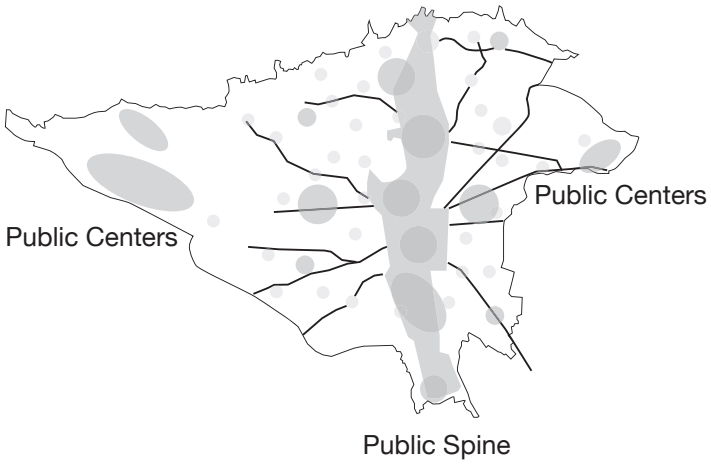


Fig.62 Recent Master Plan of Tehran 2006

3.5 Economic processes in Tehran

Primarily after the Revolution, the municipality of Tehran made various decisions for its own economic profitability that created a lack of publicly accessible public spaces. One of these were the *land reforms* in 1978-1982, after the Revolution and during the war. Based on Sharia's law, the municipality started to sell public lands to developers for housing construction. This was in response to the increasing accommodation needs of new immigrants spread throughout the city.[65]

Another important action that affected public spaces in Tehran was *selling density* in the 1990s. To make money to launch major, city-scale infrastructural projects and the beautification of the city, the municipality started to collect fees and taxes from developers who wished to build more densely than the zoning allowed for. [66]As the gained money was used in the fundamental infrastructural developments of the city, many public spaces were thus destroyed. (Figure 63, 64)

In last few years, the municipality has played a major role in causing a lack of proper public spaces in Tehran. They commodify the public spaces of Tehran and dismiss public spaces out of the public's reach. They change the urban land use of gardens, green areas, and public spaces to financially beneficial commercial complexes. They also privatize public space, which is free of charge, and enclose these spaces. [67] The results of these actions are obvious on a map of public spaces in Tehran (open public spaces and buildings): their uneven distribution in the city and a lack of open public spaces for gathering. (Figure 65)

Fig.63 Super Large Public Parks of Tehran- Abo Atash Park

65 Fard and Jafari. "Tehran: Planning the unpredictable" , 68

66 Ibid, 68-69

67 "فضاهای عمومی.» شهردیگر. Accessed December 22, 2017. http://shahredigar.ir/public/.

Fig.64 Open Large Public Spaces

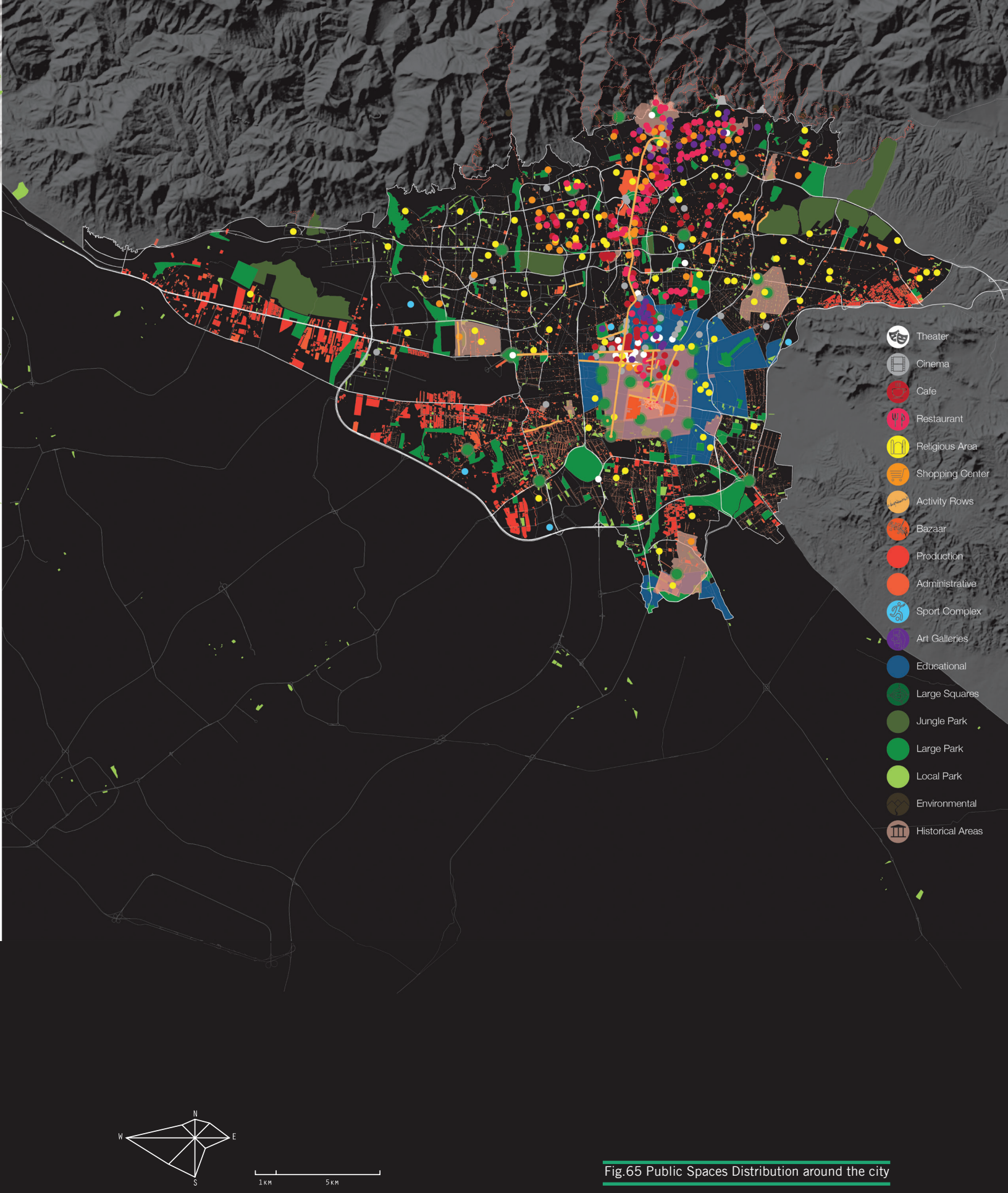


Fig.65 Public Spaces Distribution around the city

The uneven distribution of public spaces and the inaccessibility of some of these reveal the need for alternate public spaces in Tehran. In contrast to the large open areas, these new public spaces could match the distribution of daily life activities, spread all around the city in every neighbourhood.

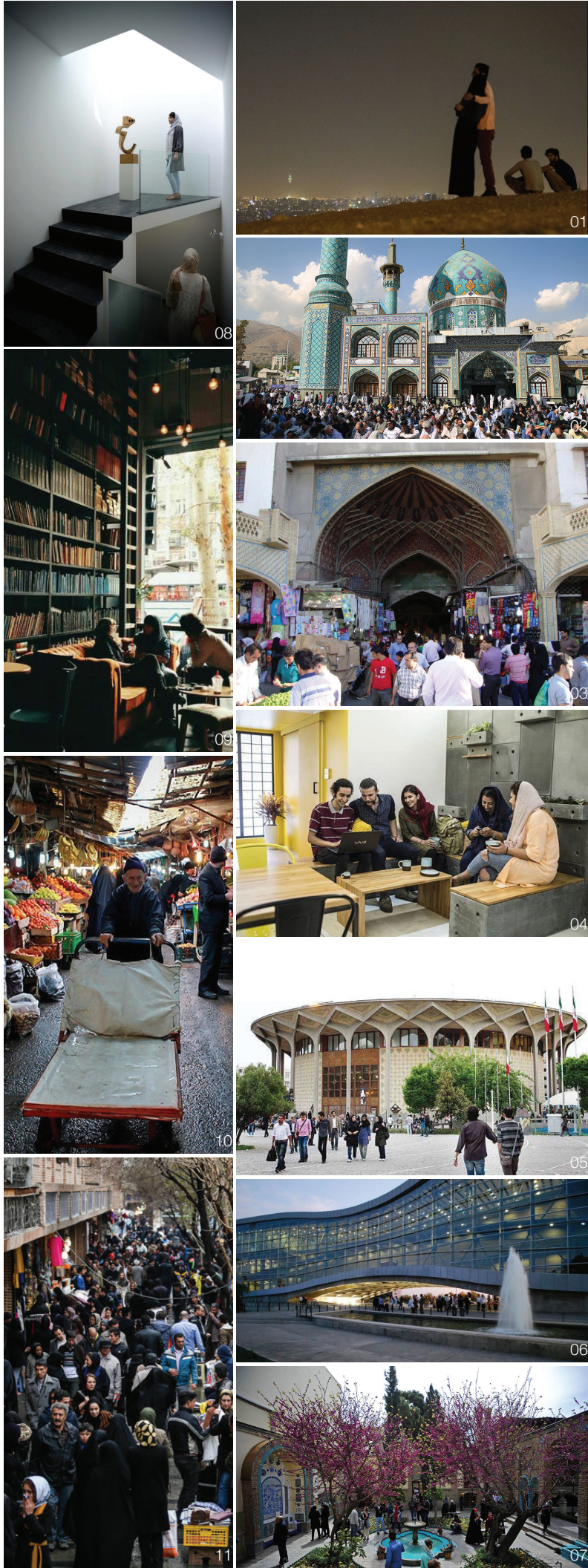


Fig.66 Spatial quality of available public spaces of Tehran

Fig 66- Under Most of Tehran bridge used as Taxi Stops- Seyed Khandan bridge

4.0
Under the Bridges: Untapped Potential

4.1 Under the Urban Bridges: Infrastructural Leftover Spaces

Because of the consistent densification of Tehran, there are few open spaces left in the city to use as a platform for new public spaces. Most residual fragments have been occupied illegally as parking spaces or space for junk. Some of the rare leftover spaces of the city are found adjacent to the infrastructure itself. As discussed, the process of infrastructure development was prompted by the population growth in Tehran and has never stopped since then. New highways, streets, subway lines, bridges, and underpasses are being built in Tehran almost every day. These infrastructures are distributed throughout the city. (Figure 67) As discussed in Chapter 1, while infrastructure is highly needed for fast and efficient travel in expanded cities like Tehran, they also cause dislocation of its citizens, disconnection between different neighbourhoods, and create leftover spaces at their periphery. These residual spaces are public property, out of sight of the public, with no agent to manage them. (Figure 68, 69) The residual spaces appear under urban bridges and occupy a massive area of almost 822,000 square kilometres in Tehran, larger than the combined area of three of the city's famous and most visited public parks: Mellat, Saee and Abo Atash Park. (Figure 70) These leftover spaces are potential sites of intervention as nodes of public spaces. There are almost 400 bridges with leftover space beneath them, of which 180 are accessible to the public and can be redesigned as public spaces.

Fig.67 Map of the infrastructural routes of Tehran in 2017

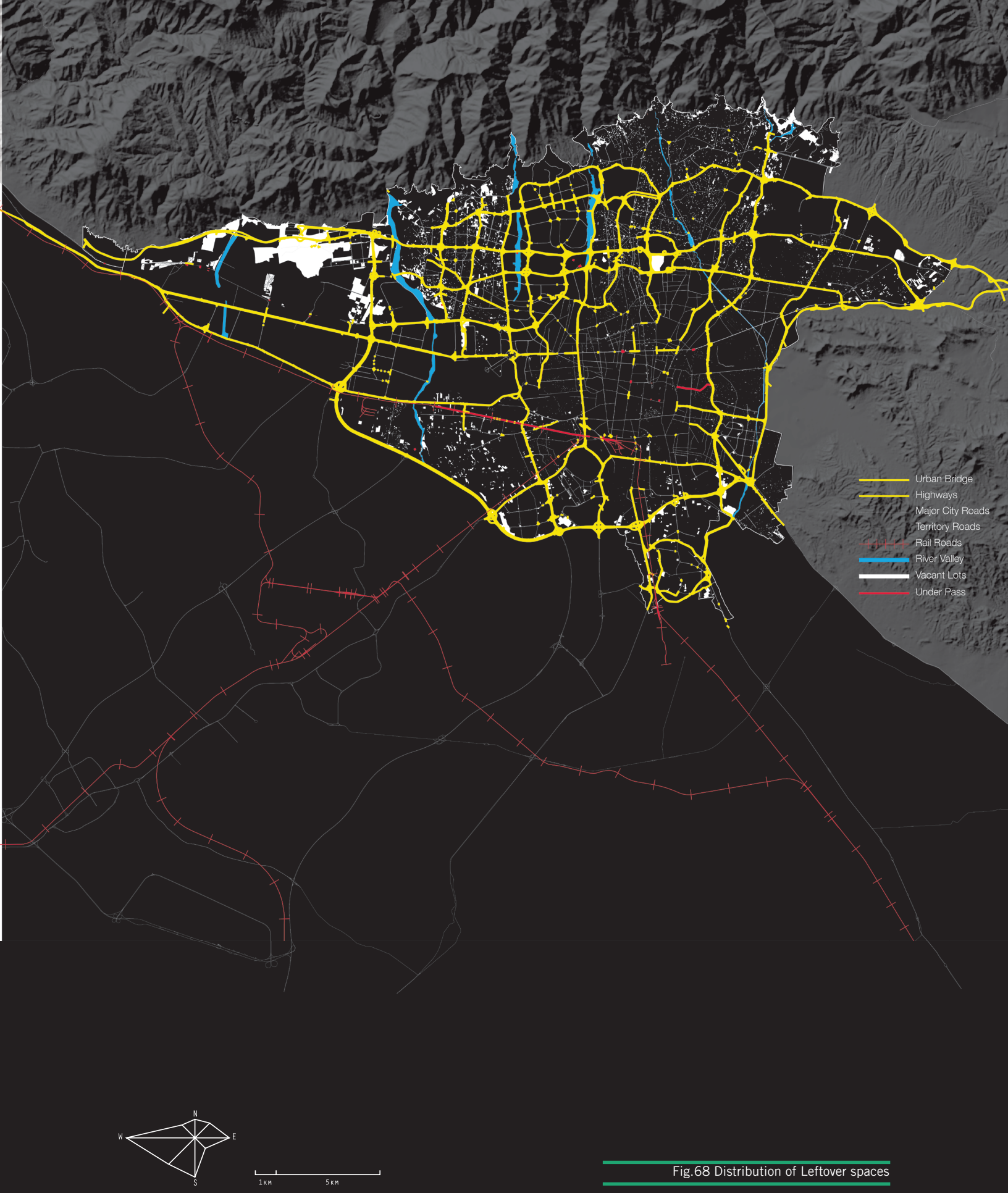


Fig.68 Distribution of Leftover spaces

Fig.69 Spatial quality of leftover spaces of Tehran

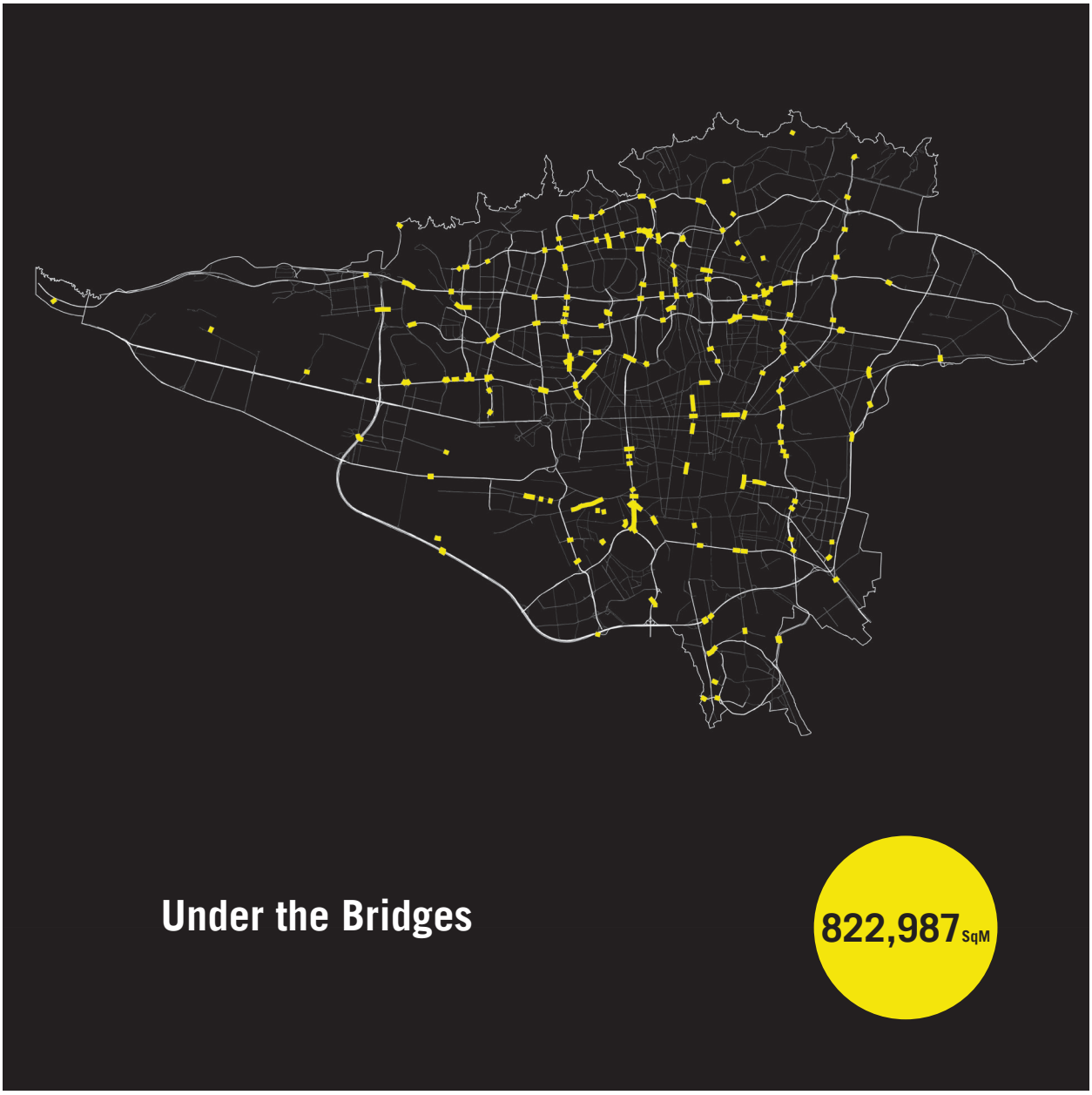

Under the Bridges
822,987 SqM

Fig.70 Comparison map of Leftover spaces and Popular public parks of Tehran

Part III:

By recognizing this untapped potential in Tehran, this project focuses on the city's spine to design typological nodes of public space in the various typologies of leftover spaces of this region.

Re-imaging Tehran's Leftover Fragments

Fig.71 Tehran Now

5.0
Lets keep Tehran Alive

“Tehran is the nation’s dynamic beating heart and the place to get a handle on modern Iran and what its future will likely be.”

Lonley Planet

5.1 Spine of Tehran

As discussed previously, the spatial and social differentiation of Tehran appears not so much from centre to periphery, but from north to south. The central spine of the city, in the middle of Tehran, thus extends from Tajrish Square and the mountains in the north to Rey and the desert in the south. This is the most important zone of Tehran that is also the cross section of the demography and geography of the city (Figure 72). The spine is almost the cross sectional cut through the center of Tehran. of Tehran that is also the cross section of the demography and geography of the city (Figure 72). This vertical transect of the city offers a good place to test the potentials of the design proposal across a range of sites. This region represents a good sample of the mix of demographic and religious tendencies in the city, with various programs located in the area, from commercial to educational, cultural, and various amenities. (Figure 73) Different infrastructure routes, which are activated at different times of the day, cross this region. (Figure 74, 75)

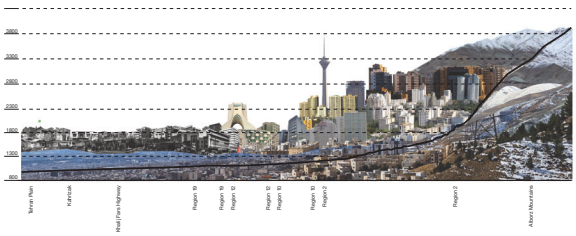


Fig.72 Spine of Tehran

Fig.73 Valiasr Street the important street in this region

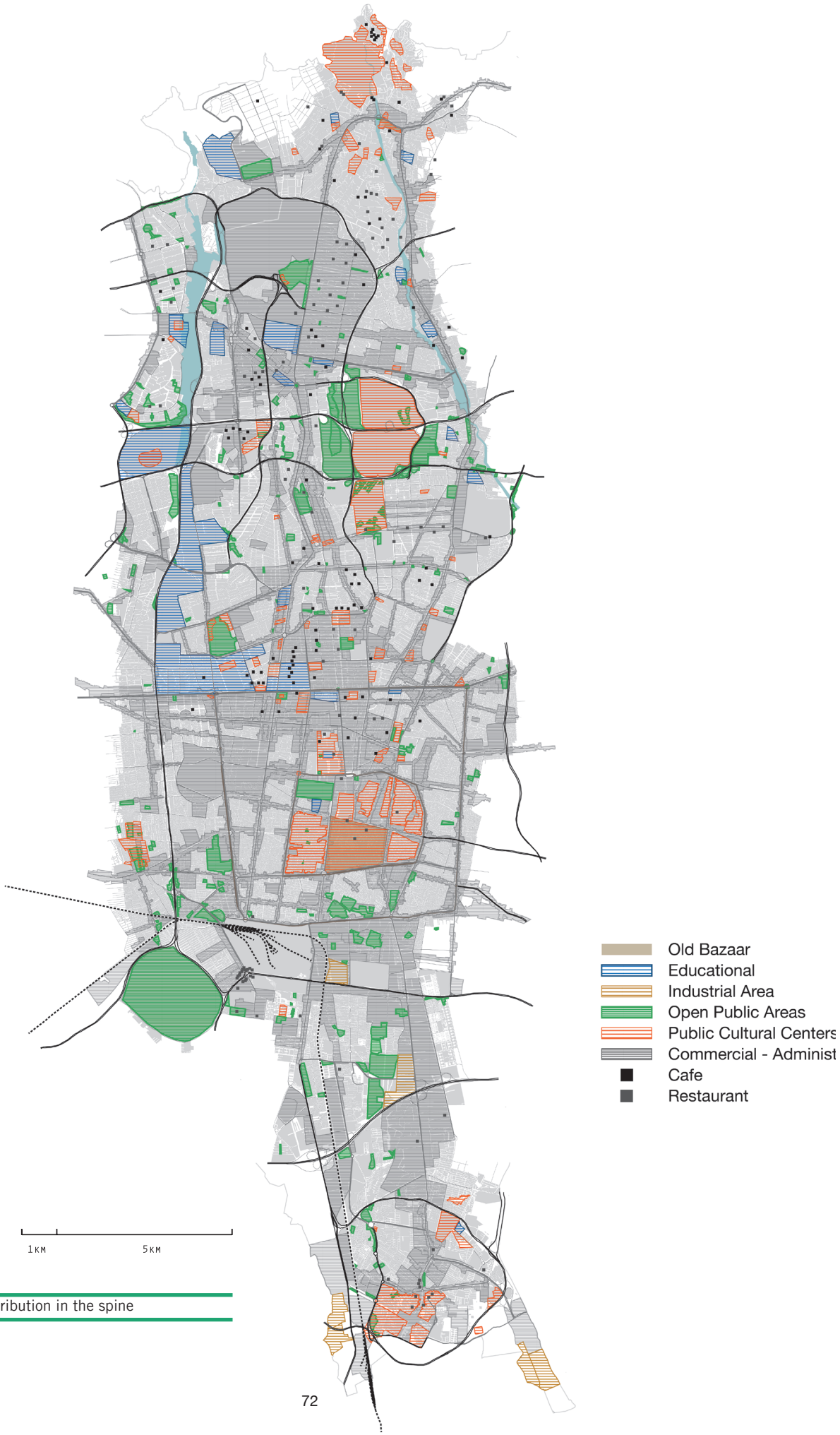


Fig.74 Program distribution in the spine

Fig.75 Connectivity Routes

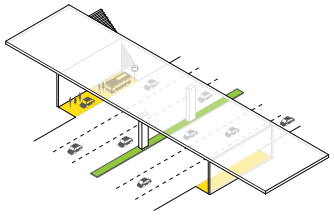
Fig.76 Daily usage of the major streets

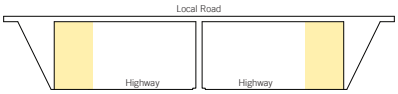
5.2 Typology of Sites of Intervention

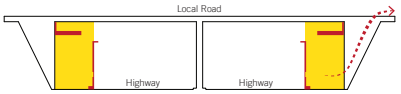
The infrastructures crossing the region create Eighty-two under-the-bridge spaces in Tehran. These spaces have been considered as sites of intervention in this thesis (Figure 77). All of the chosen sites of intervention are accessible by pedestrians and all inaccessible under-bridge spaces were omitted for further analysis. Based on the accessibility of these spaces, they have been categorized into seven different types. The different categories vary from the spaces under bridges that cross highways, which are appropriate for very short stops, to spaces that are preferable for longer stops and as a destination, such as those on islands in the middle of streets under bridges. They also include a cross section of multiple infrastructures, where highways intersect with the railroads and streets around them. Each of these categories has different features and requires different kinds of interventions. (Figure 78)

Fig.77 Under the bridge leftover spaces of the “Spine”

Highway Underpass

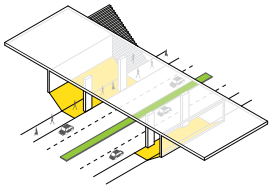


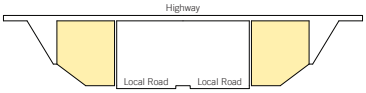


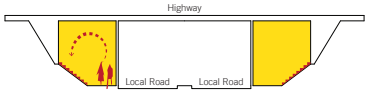


- Moderate this space for instant stops
- Making a warm | cool space depend on the season

Walking Underpass

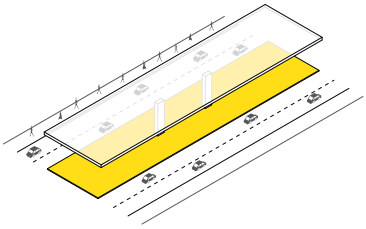


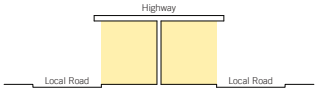


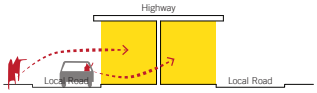


- a public place for staying and pause along the walking path
- not necessarily a final destination
- passing by public activity

Island

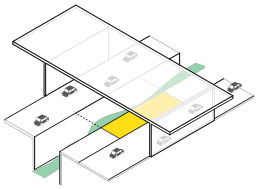


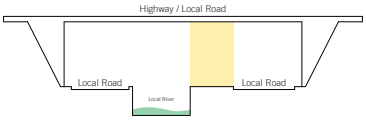


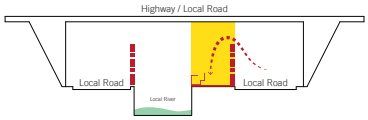


- a public place for long time staying
- a final destination public space

Center Tunnel

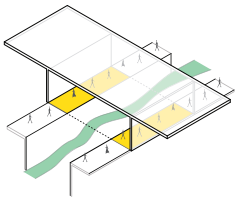


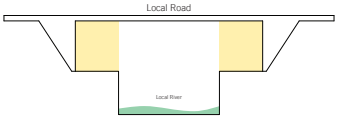


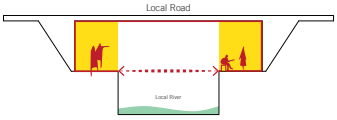


- a public place for locals
- sound and pollution barrier from the road

Corridor Tunnel

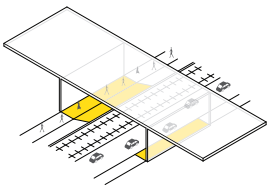


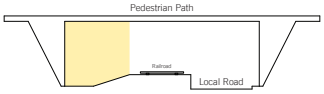


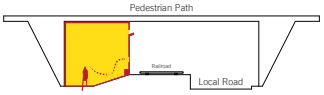


- a public place along the path in an environmental area
- small interventions

Barrier







- a public place as a barrier
- Longitude public space

Fig.78 Typology of Sites of Intervention

Fig.79 Distribution of Types of Sites of Intervention

5.3 Typology of Interventions

As mentioned before, a lack of public spaces that caters to all of the various types of activities, the uneven distribution of public spaces, and the inaccessibility of some of these spaces to the public, reveal the need for alternate public spaces in Tehran. Being distributed in every neighborhood, they would fulfill the spatial needs of the range of citizens and their public activities. These alternate public spaces will be formed by both general, top-down actions and a bottom-up toolkit of possibilities. Creating these new public spaces in Tehran is a bottom-up/top-down cooperation that tries to reconstruct under-the-bridge leftover spaces as public spaces through interactive processes that respond to community needs.

The general process is a collaboration between the designer and the city, decisions made by the designer, and management by the municipality of Tehran. These are the actions taken to create a platform for citizens to use as public spaces and to bring their attention to these leftover spaces. These actions are:

1- ***Adding a suspended ceiling*** *with a distinctive color to draw attention to these sites of intervention. These suspended ceilings will become a specifying element for these spaces as well as a place for people to hang design elements, such as lighting components or moving walls.*

2- ***Plug-in elements*** *designed and installed at each site of intervention that will develop a platform for further components to be added on.*

3- ***Infrastructural connectivity****, at some of the sites of intervention that are themselves disconnected by a second infrastructure, such as a railroad or river, a pedestrian bridge will be installed for connecting the two separated zones. The bridge is not only a connector but also a place to stay, gather and interact.*

The toolkit of possibilities is a kit of parts that gives various options for citizens and local communities to look into, get ideas, manipulate and place at various sites of intervention. This is a series of components, designed based on both the everyday needs of people of various social groups and the nature of each type of site of intervention, for use as public spaces for gathering, entertaining, interacting, or socializing. There are thirty-one components in six different categories of intervention in the catalogue. These interventions vary and include an academic category, which has components that will support students, such as studying boxes in which boys and girls can do their group projects together, and a cultural category, which has components that will support street musicians by giving them a spot to themselves. These components are not just cinemas or cafés, but also taxi drivers' amenities, chess tables, or prayer mats that match the needs of Tehranis. (Figure 80) It is worth mentioning that this catalogue has a varied range of components, but most attention is paid to the needs of youth, because this group

forms the largest proportion of Tehran's population. They are the third generation of Iranians, range from sixteen to thirty-four years old, and were born after the Islamic revolution in 1979. (Figure 81).

A booklet has been provided for a more detailed introduction to each of these components (see appendix A). (Figure 82) It is important to mention that these components are not the final design but hints for the possibilities for under-the-bridge leftover spaces in Tehran. They can be changed in the process of using them in the city.

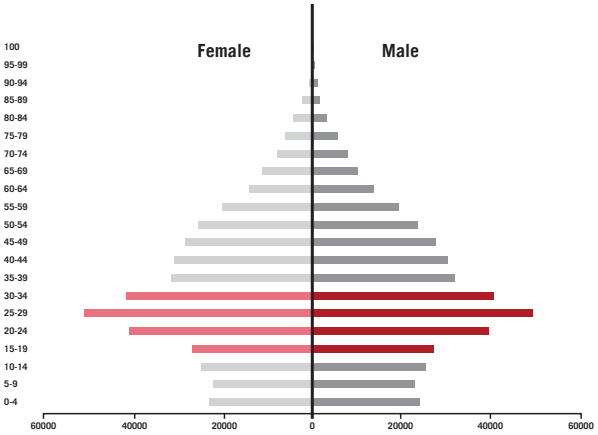
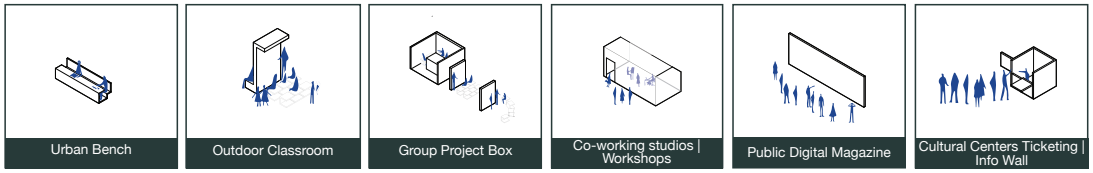
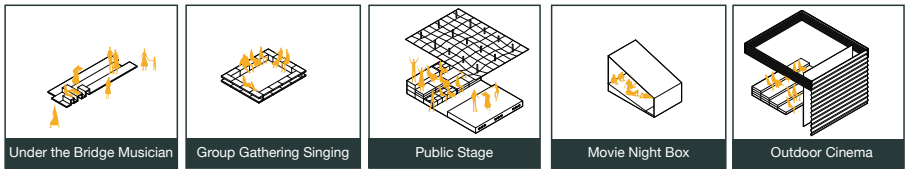


Fig.80 Age Pyramid of Tehran

Academic



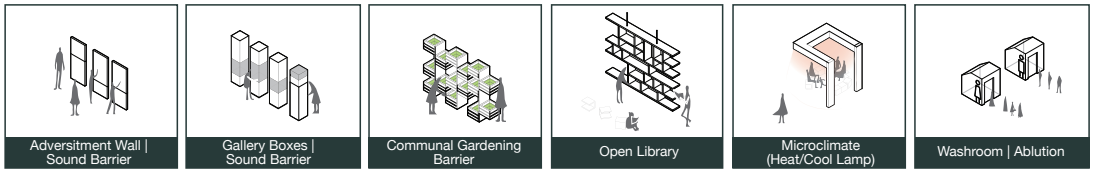
Cultural



Commercial

Entertainment

Utility



Religious

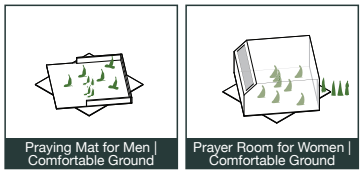


Fig.81 Typology of Intervention

Fig.82 Toolkit of Alternate Public Spaces of Tehran

The intervention process and user involvement for the toolkit of alternate public spaces in Tehran is more or less a bottom-up/ top-down collaboration, with the main focus remaining on the local community and citizens. The actual process is explained here:

1-This booklet of toolkits can be presented to a local partner to help link the designer group with the local community, private local organizations, and the public sector for contributing to the project. This local partner can be an NGO (such as Tehran Urban Innovation Center [TUIC], a new, innovative centre for urban proposals in Tehran), a private or public institution, or a design practice with similar concerns about public spaces and leftover spaces in Tehran.

2-The local partner and the designer group will collaborate to get the required permissions from the municipality of Tehran to set up the various components at the sites of intervention.

3-Each of these components can be used at each of the sites of intervention that has been categorized. Based on the features of each of the typologies of the sites of intervention, the appropriate components form the catalogue of interventions that can be chosen, made, and installed on the site.

4-Even though these components are generic, typological, and will be chosen based on the categories of the sites of intervention, they are also very site specific. Selecting any of them for use on a particular site is based on the history, programs, needs, stakeholders, actors using the site, communities, and local interventions. Therefore, analyzing each site individually is very important.

5-To understand every detail of the community's activities, their needs, and the nuance of the local community, surveys and group discussion sessions can be arranged. Based on these discussions, the group can determine which of the toolkit components are needed at each specific site. In these group meetings, citizens can propose design ideas. Each of the components can be affected and transformed in shape, based on the local community's ideas. Therefore, the basic genes of these components will remain the same, but their design can change at each specific site.

6-After the design is completed, the local institution can, with the help of the citizens, start the fundraising phase of the project to actually build it.

7-Because this toolkit is designed based on the ideas of Light | Quick | Fast, the components can be easily built and changed based on the users' needs. Therefore, with the help of the local community and citizens, the construction phase can be a fun, new event in Tehran. When the components are made by citizens, they will have a sense of connection to the project and can help in its maintenance.

8-These components are temporary elements that allow for experimentation. If an intervention does not work, the community can experiment and try again by changing or even using another component altogether to fit the specific site. If the components are effective for the community, they can be maintained and expanded in Tehran as broadly as the citizens want. Responsibility for maintaining them is held by the citizens, with supervision from the designer group. (Figure 83)

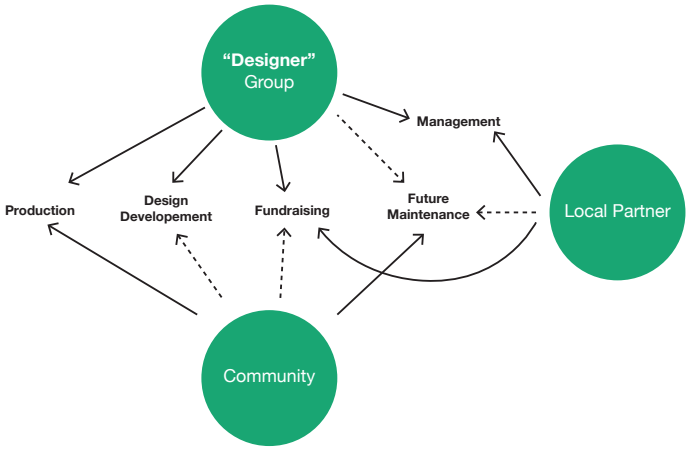
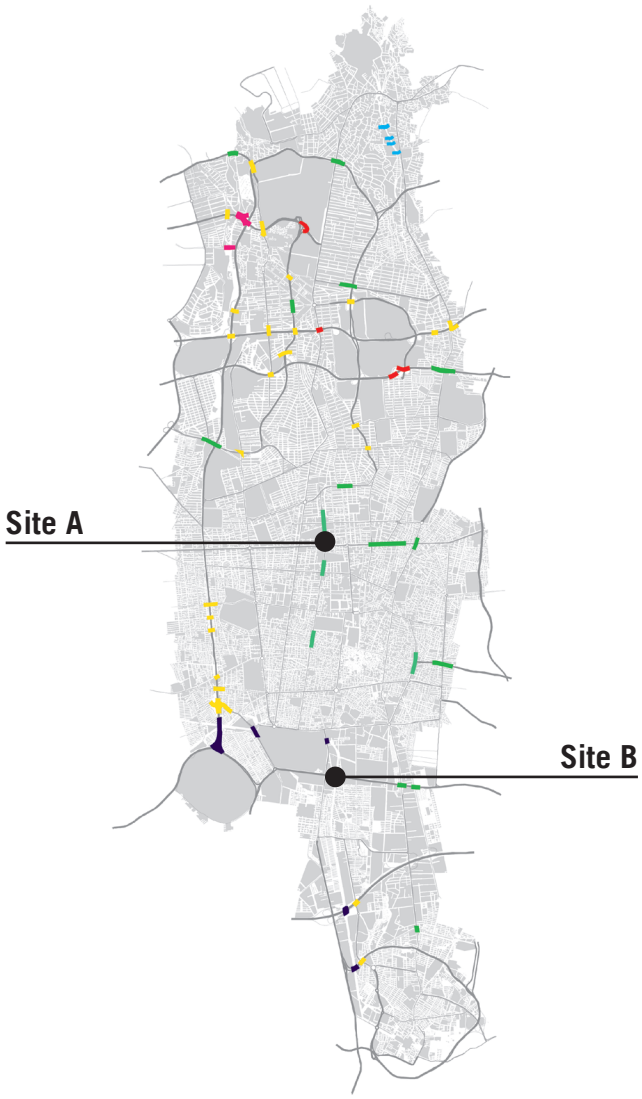


Fig.83 Citizen Participatory Process

5.4 Prototype and Design Process

Two sites were picked for detailed design and component testing. The interventions are located in two different neighbourhoods of Tehran, one with a mix of actors in the centre of the city (Site A) under the College bridge the intersection of Hafez and Enghelab Street. The other in the less affluent, southern part of the city (Site B) under the Besat bridge intersection of Tehran railway and its surronding local streets with Besat highway. (Figure 84) (Some early analysis of the other sites of interventions have been attached in the Appendix II)



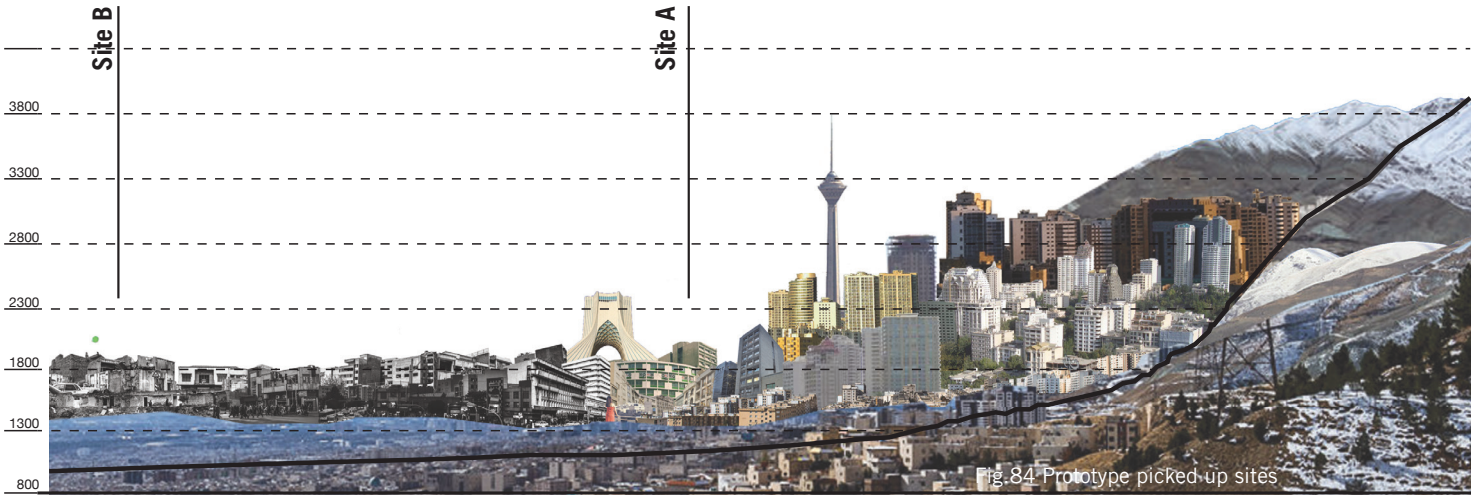
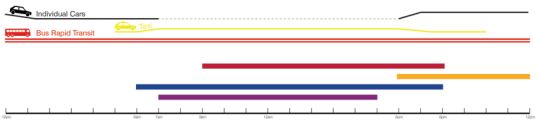


Fig.84 Prototype picked up sites

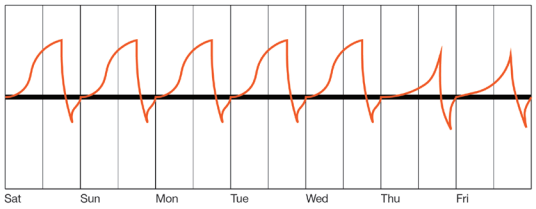
Site A

College Bridge / Enghelab Street

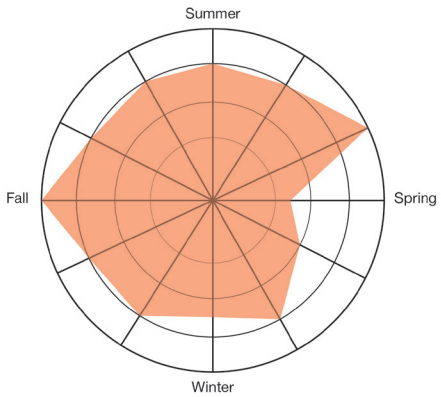
Site A is part of a group of three bridges that are near each other in the center of Tehran. This site is one of the "Island" type of sites of interventions, in an educational and cultural district of the city. Near the site are the three most important and highly ranked university campuses of the country—the University of Tehran, the University of Amirkabir, and the Art University—as well as many small buildings of the Islamic Azad University. The major cultural buildings of the country are in this area too, such as the Shahr Theatre and Vahdat Hall, which hosts theater performances and concerts. Also there is an important administrative district in the Motahari street near this site. Because of this combination of programs, there are many stakeholders at this site of intervention, from students and street musicians to taxi drivers, older people and government employees, all of whom might have different needs for these alternate public spaces. Therefore, the major programs at this site of intervention are chosen from the cultural, commercial, and utility type of programs that transform this space into a place for different groups to come, socilize and interact. Because this site is an "Island" type, the components have been chosen so that people will use them for longer stays and citizens from other neighbourhoods will also choose this location as a destination. These components will address the daily needs of the various actors, but the intervention could be changed to accommodate special occasions such as student art exhibitions or political debates. Because universities are not accessible to the public in Iran, this new public space can be an opportunity for university students to exhibit their works to the public and even find job opportunities out of that.



Daily usage of the public spaces



Weekly usage of the public spaces



Seasonal usage of the public spaces

Fig.85 Timeline of actors activities

6 Under College Bridge spaces

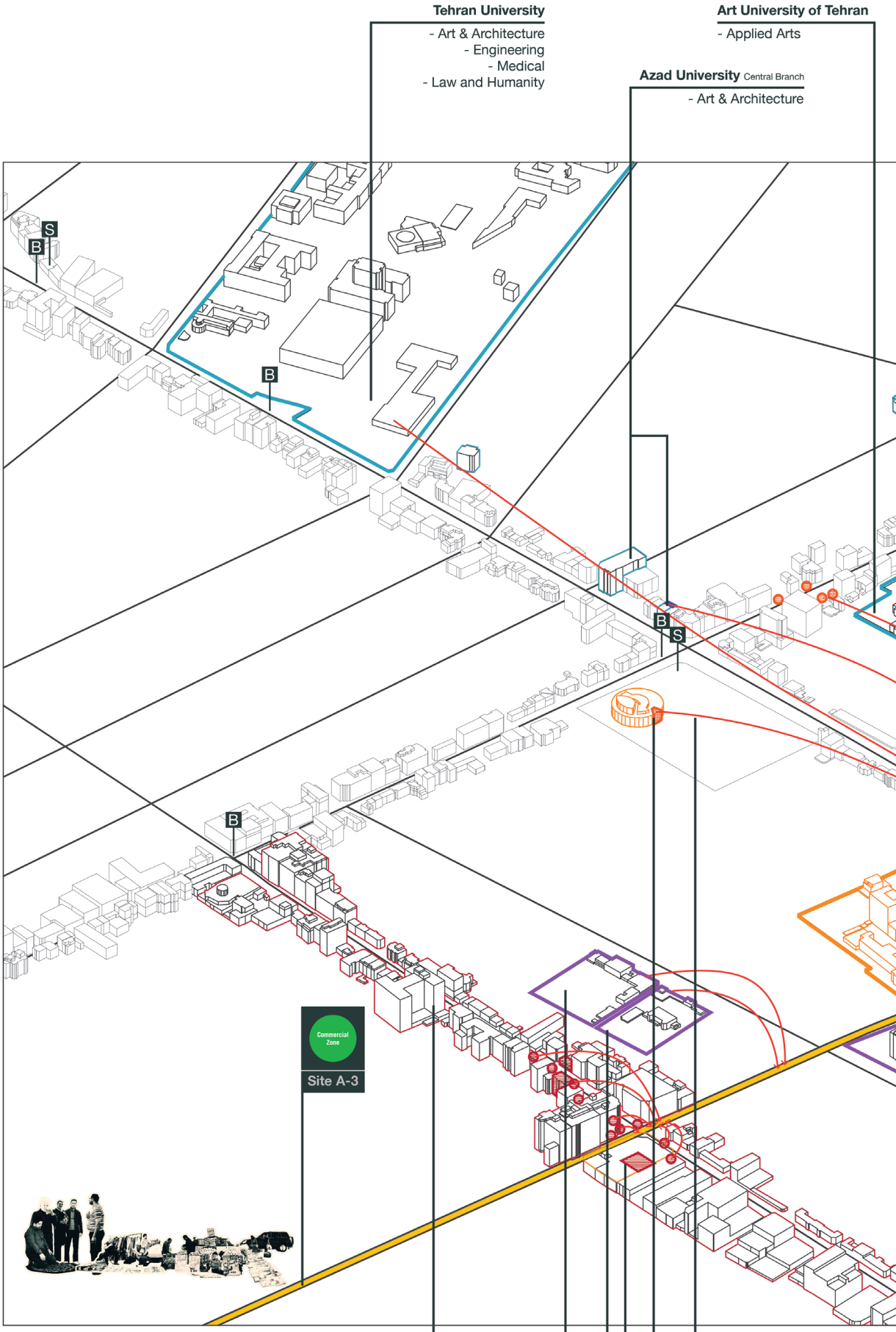
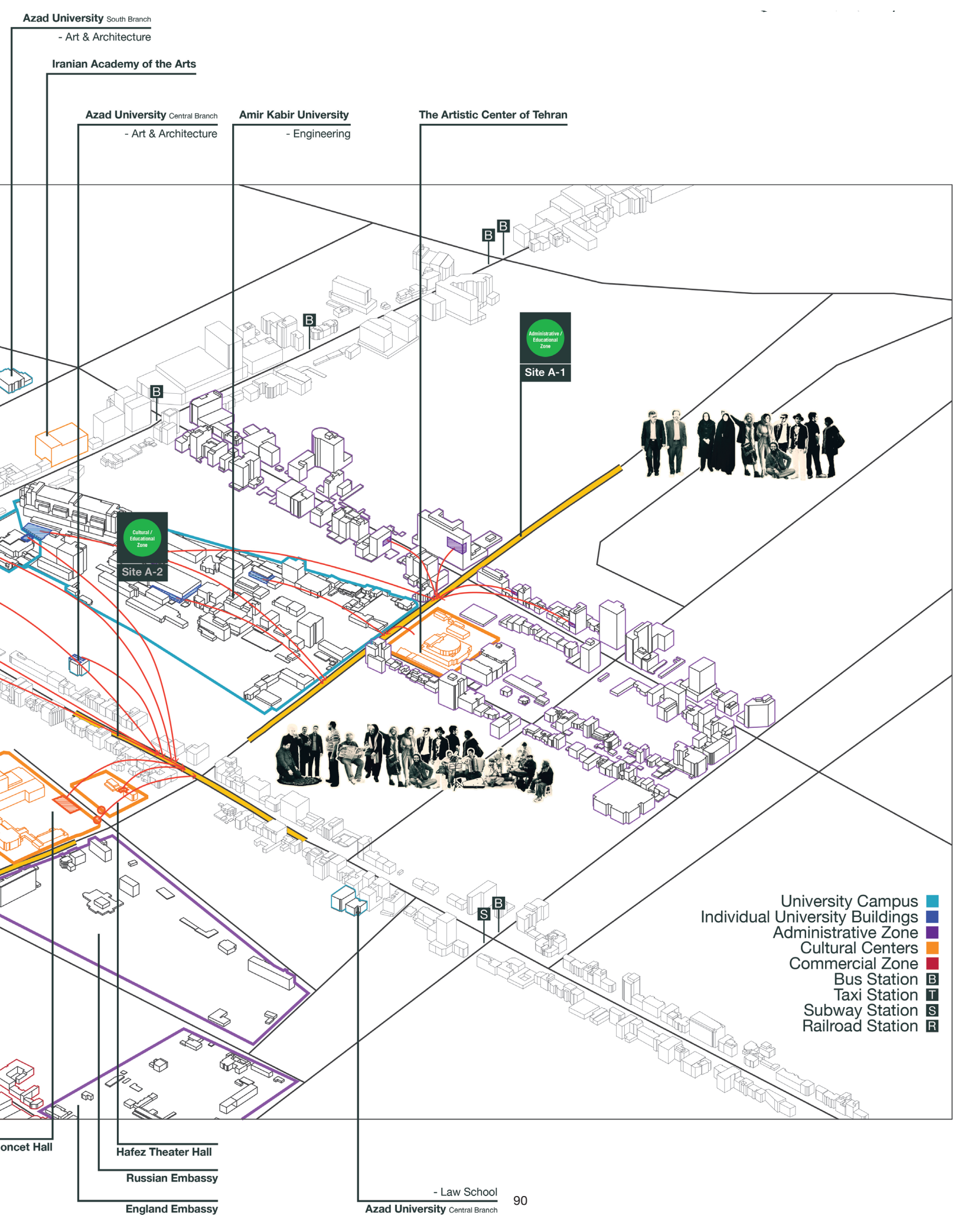


Fig.87 Site Analysis


Azad University South Branch
- Art & Architecture
Iranian Academy of the Arts
Azad University Central Branch
- Art & Architecture
Amir Kabir University
- Engineering
The Artistic Center of Tehran
Administrative / Educational Zone
Site A-1
Cultural / Educational Zone
Site A-2
B
S
University Campus
Individual University Buildings
Administrative Zone
Cultural Centers
Commercial Zone
Bus Station B
Taxi Station T
Subway Station S
Railroad Station R
oncet Hall
Hafez Theater Hall
Russian Embassy
England Embassy
- Law School
Azad University Central Branch

Government employee

Social Group

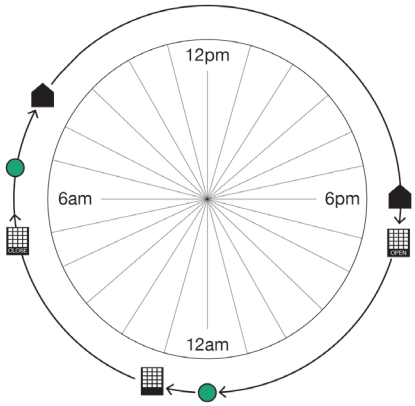
Ultra-Conservative
Conservative
Mainstream
Non-Traditionalist

Ages

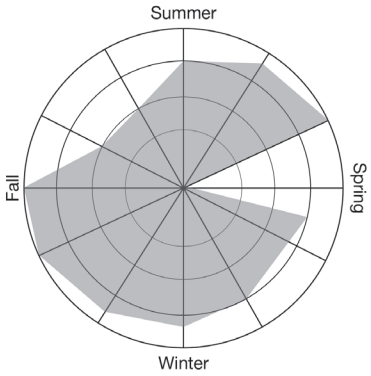
30-60 years

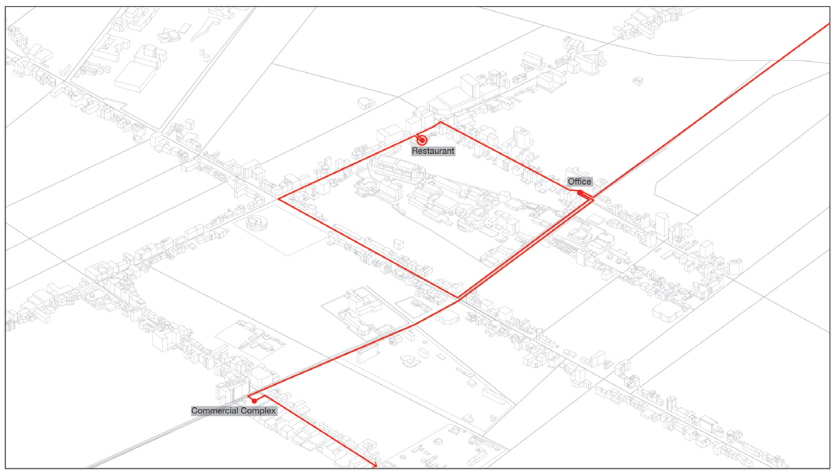
Social Group

Daily



Seasonality





There is no proper place provided for these group of people in the offices for lunch-time or their leisure. They need a place to socialize with themselves and the other citizens.

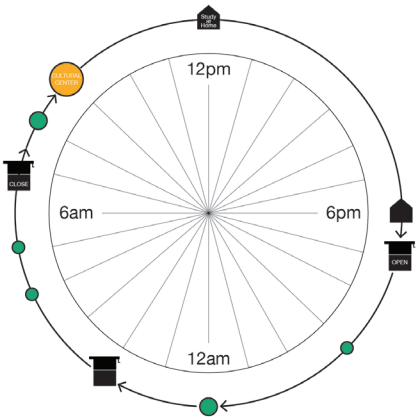
Social Group

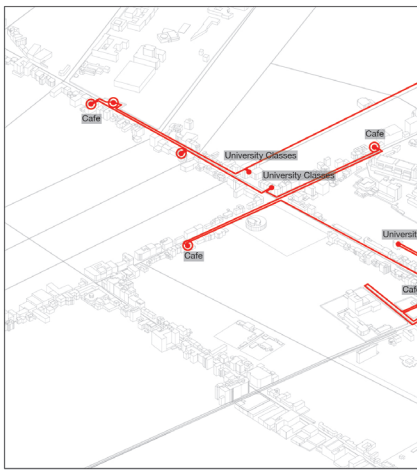
Ultra-Conservative
Conservative
Mainstream
Non-Traditionalist

Ages

18-30 years

Daily





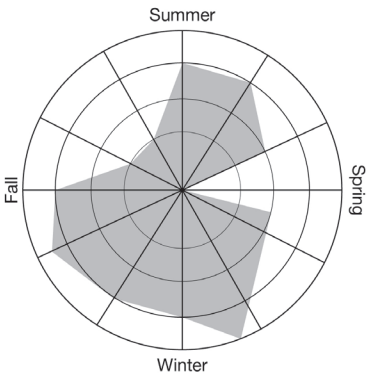
Because of the many universities in this d university students, the younger generatio all over the city. They lack a socializing pla for using it), a place for them to work toget open to the public), and a place that they c a place to them to perform themselves wo

Fig.88 Actors in the site

University Students

Social Group

Seasonality



istrict, the most people in the area are the
on in Tehran which are bringing new ideas
ce(rather than cafes that have limited time
ther as a team (in Iran the universities is not
can use at any time of the day. Also giving
uld be beneficial.

Street Musician

Social Group

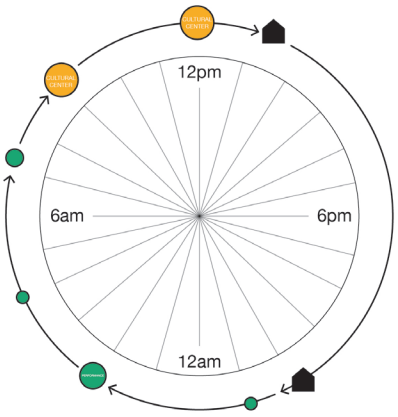
Ultra-Conservative
Conservative
Mainstream
Non-Traditionalist

Ages

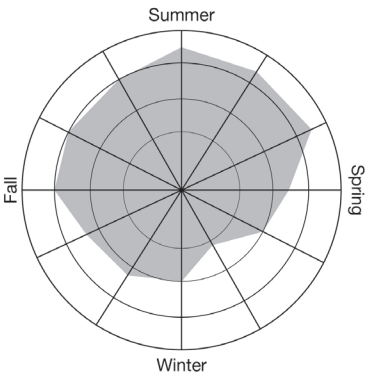
9-40 years

Social Group

Daily



Seasonality



The street musician does not have a planned schedule for where to display. But they will find places where the mass of people are. One of the important zones they will perform, in this area, is in front of the Vahdat hall when there is a performance going on or in the Shahr Park. But these are not suitable for them and they need a better place to gather people to listen to their music.

Taxi Drivers

Social Group

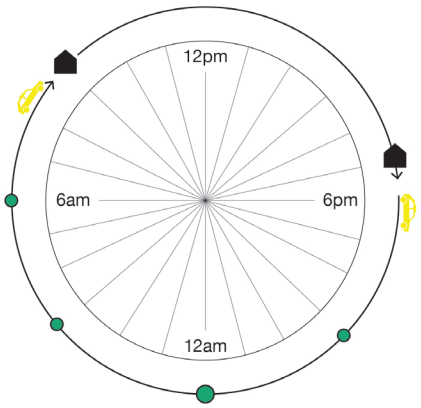
Ultra-Conservative
Conservative
Mainstream
Non-Traditionalist

Ages

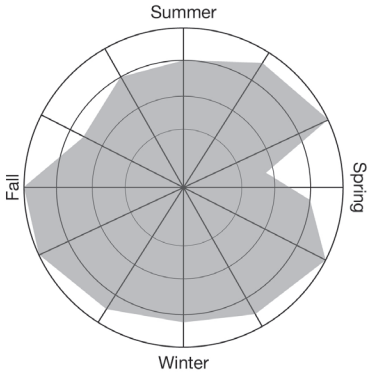
30-50 years

Social Group

Daily



Seasonality



Tehran traffic seems chaotic yet it flows smoothly. Taxi is one the most important public transportation system in Tehran. There are many taxi drivers sprawling in the street always, early in the morning or at midnight. They do not have a place for themselves. No resting area, no place for their lunch or dinner time, they almost use their car as their room to store their foods and eat their foods. Having a place to sit, rest and socialize could be beneficial for them.

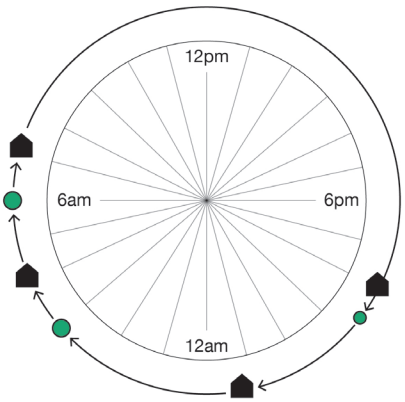
Social Group

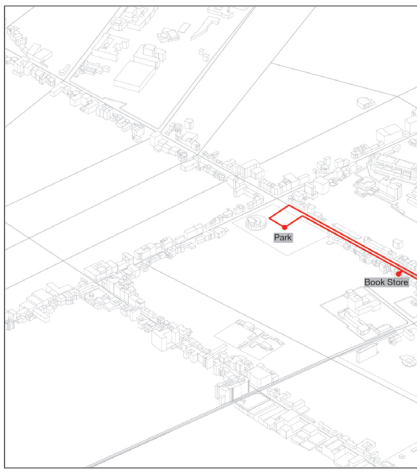
Ultra-Conservative
Conservative
Mainstream
Non-Traditionalist

Ages

65-90 years

Daily





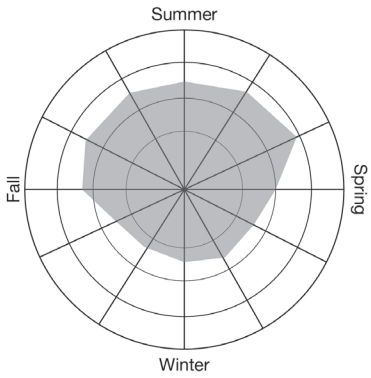
This district is one the old regions of Tehra
one who moves here 50 years ago. They
for themselves. Senior women love plantir
like to talk and socialize, even though be
diminishing. However, the important hobb
the newspaper and also socializing.

Fig.88 Actors in the site

Elderly People

Social Group

Seasonality



n, many senior residents living here are the do not have a lot of public gathering place ng and taking care of them, also they really cause of Islamic rules this may have been y among the men is chess playing, reading

Street Vendor

Social Group

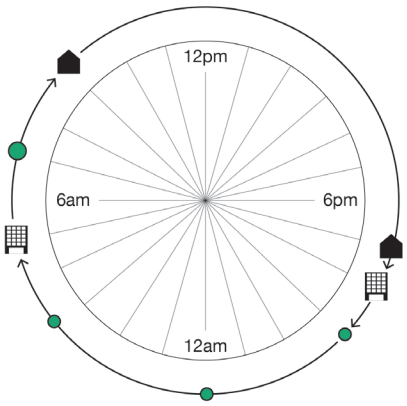
Ultra-Conservative
Conservative
Mainstream
Non-Traditionalist

Ages

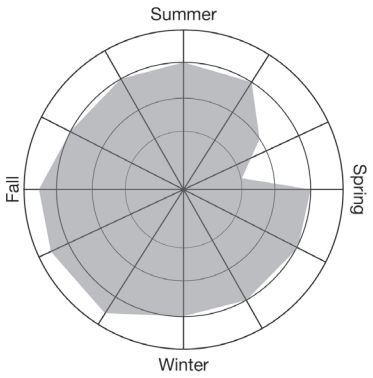
15-30 years

Social Group

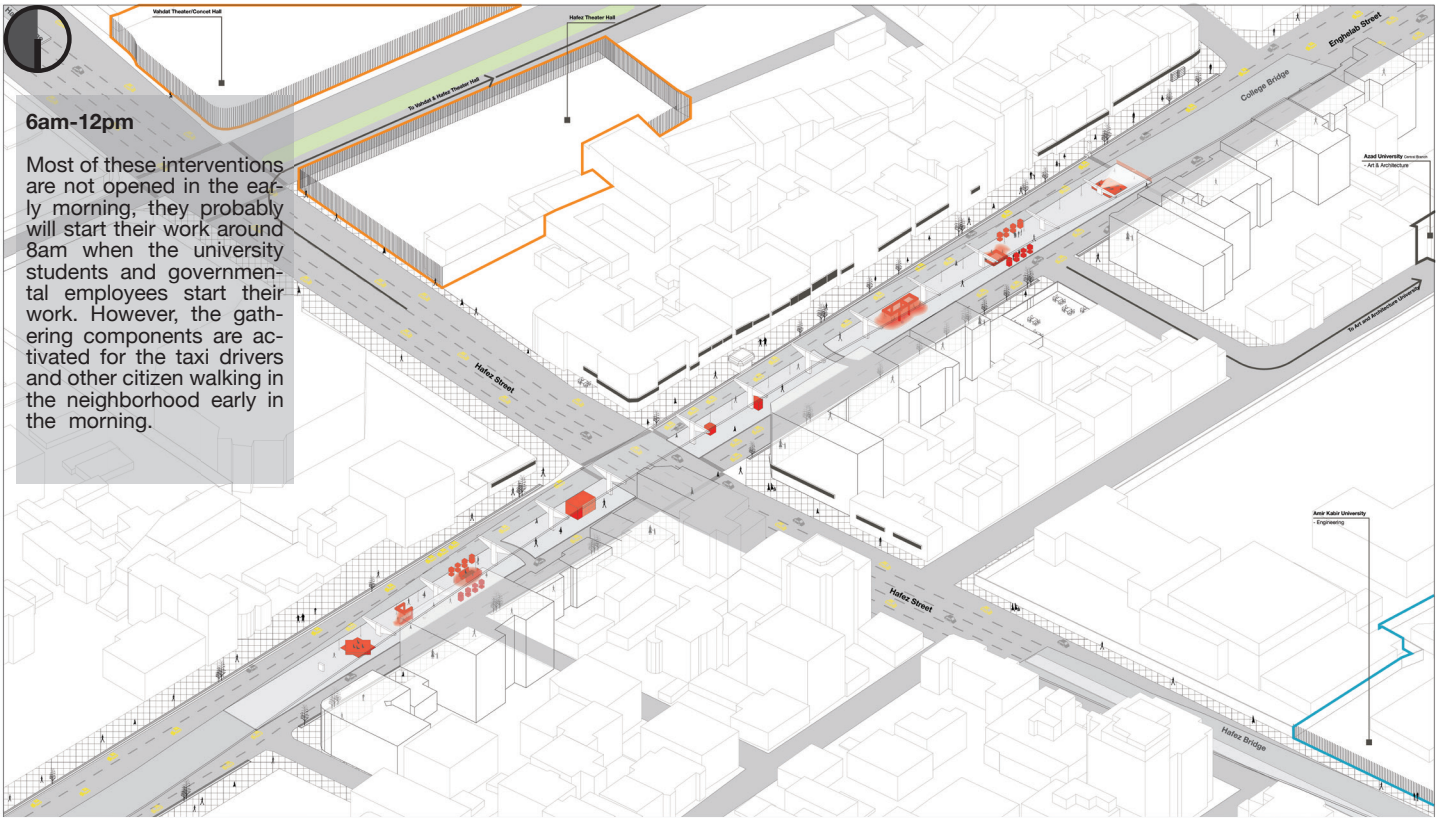
Daily



Seasonality



This district is an important destination for street vendors. There are many street vendors on the sidewalks selling very different goods, from books to paintings or even clothes. The new rule is not to let them set up on the sidewalk, therefore, they need a place to display their product and sell them without paying any rent for a store.



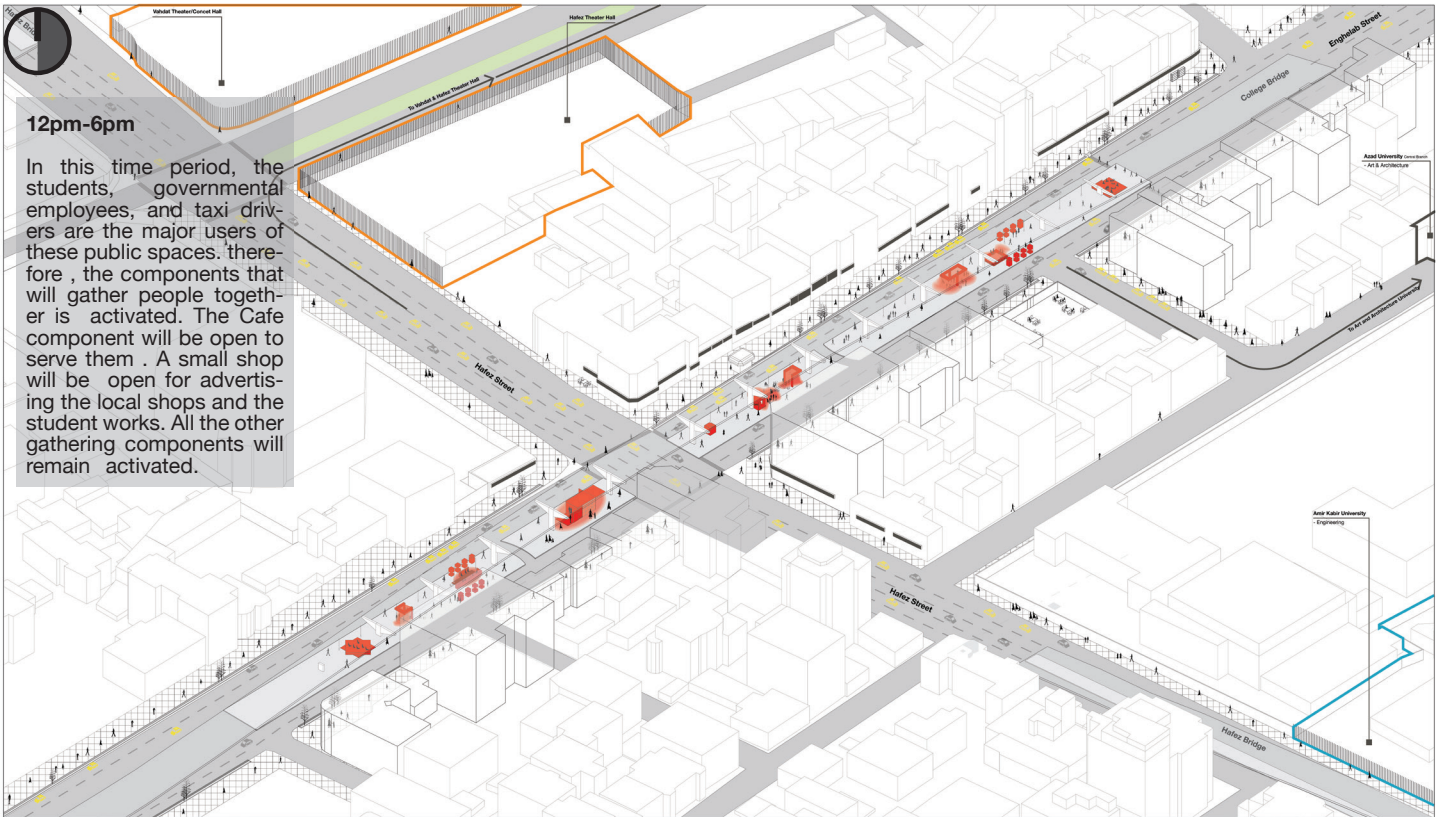
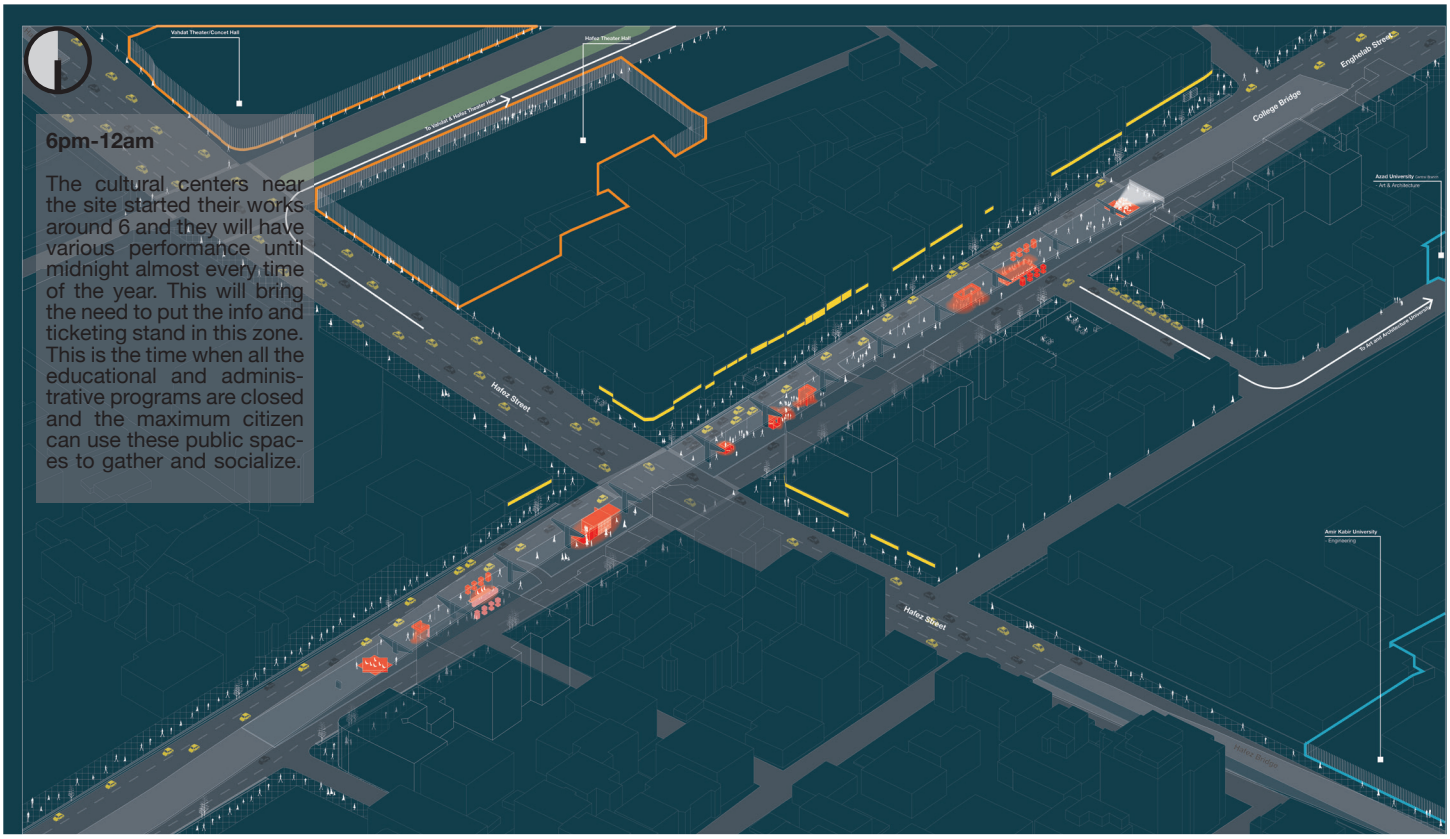
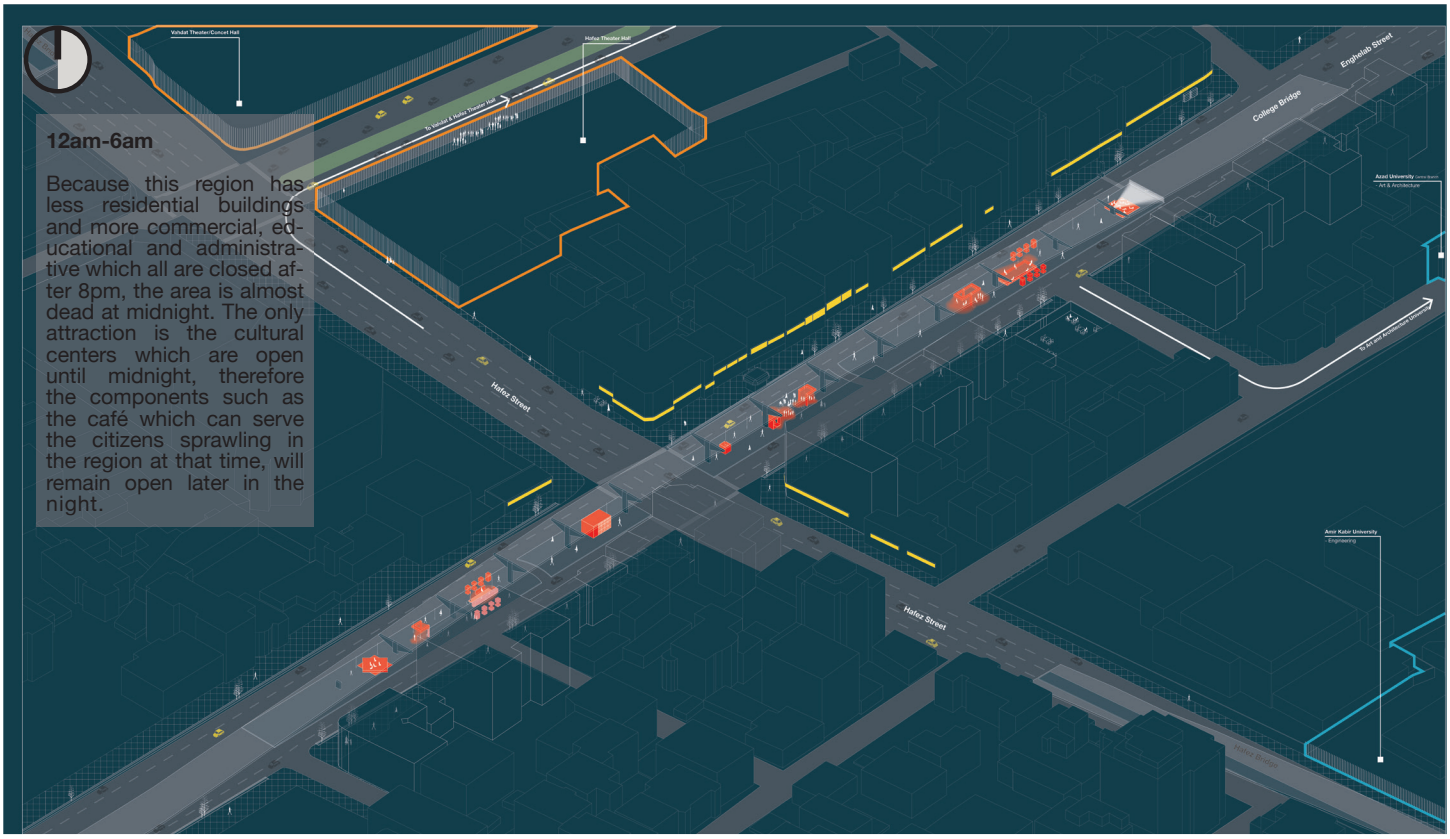


Fig.89 Components added to the site and their daily changes



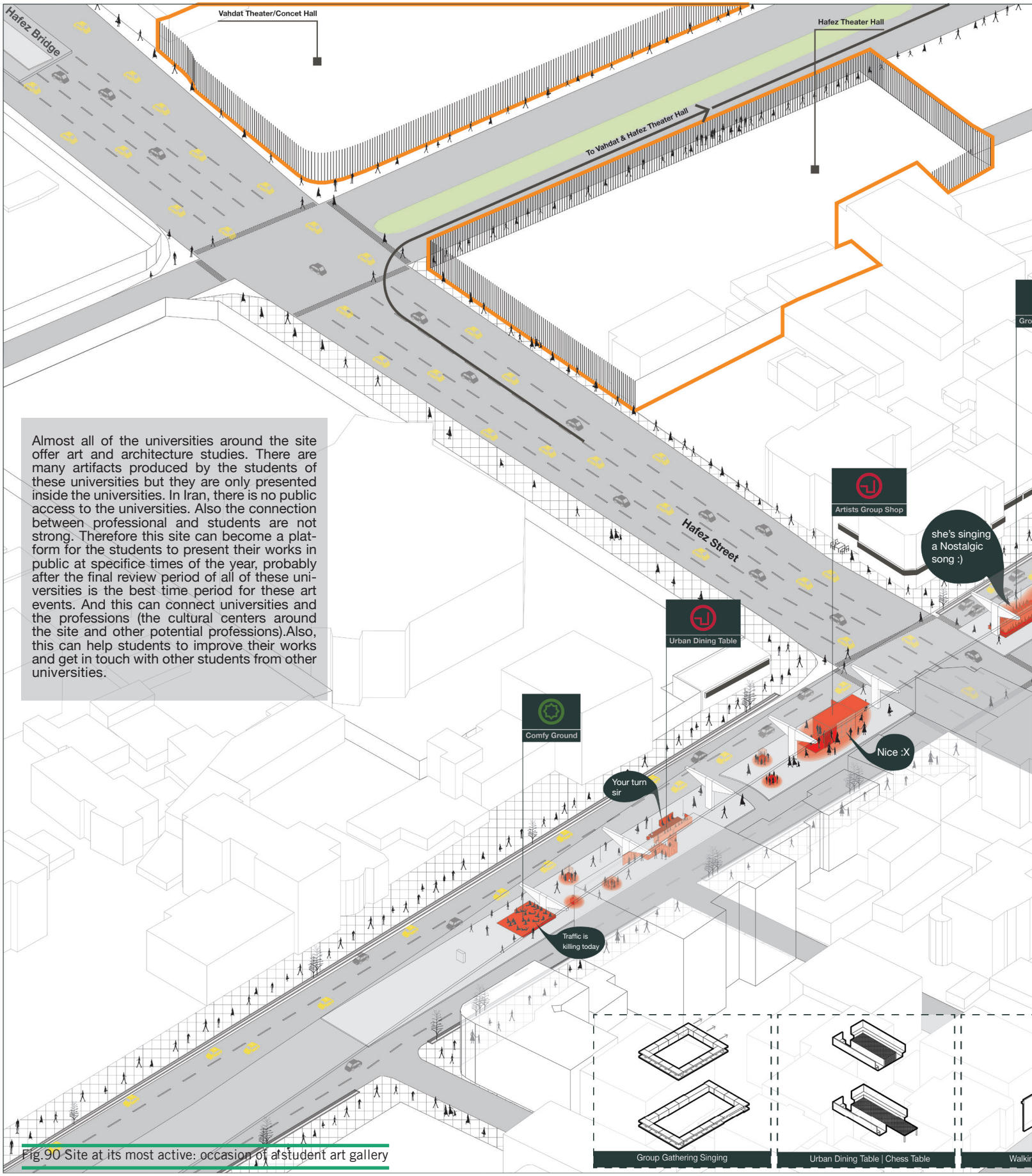
6pm-12am

The cultural centers near the site started their works around 6 and they will have various performance until midnight almost every time of the year. This will bring the need to put the info and ticketing stand in this zone. This is the time when all the educational and administrative programs are closed and the maximum citizen can use these public spaces to gather and socialize.



12am-6am

Because this region has less residential buildings and more commercial, educational and administrative which all are closed after 8pm, the area is almost dead at midnight. The only attraction is the cultural centers which are open until midnight, therefore the components such as the café which can serve the citizens sprawling in the region at that time, will remain open later in the night.



Almost all of the universities around the site offer art and architecture studies. There are many artifacts produced by the students of these universities but they are only presented inside the universities. In Iran, there is no public access to the universities. Also the connection between professional and students are not strong. Therefore this site can become a platform for the students to present their works in public at specifice times of the year, probably after the final review period of all of these universities is the best time period for these art events. And this can connect universities and the professions (the cultural centers around the site and other potential professions).Also, this can help students to improve their works and get in touch with other students from other universities.

Fig.90 Site at its most active: occasion of a student art gallery

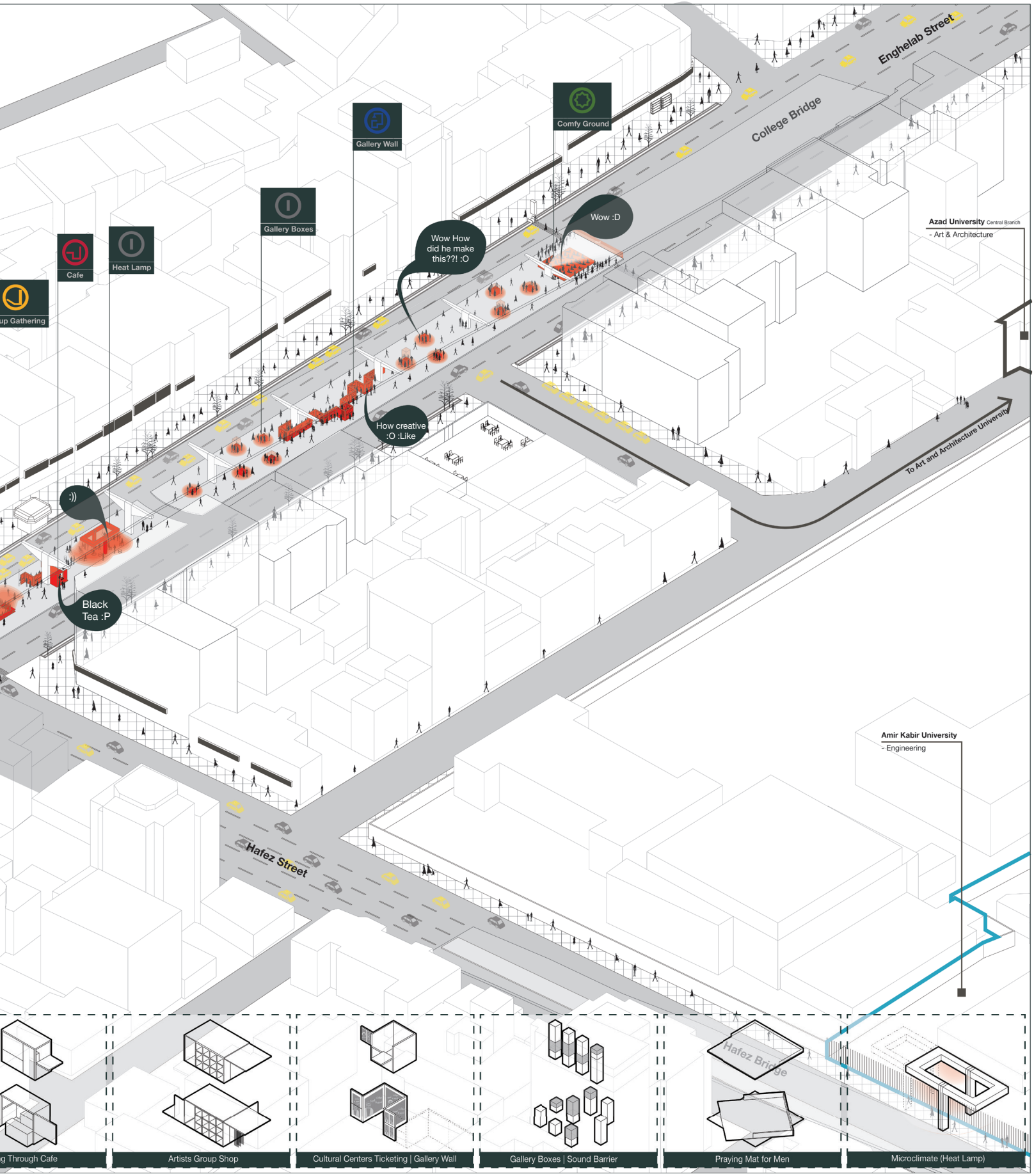

Enghelab Street
College Bridge
Comfy Ground
Gallery Wall
Gallery Boxes
Cafe
Heat Lamp
up Gathering
Wow :D
Wow How did he make this??! :O
How creative :O :Like
:))
Black Tea :P
Azad University Central Branch
- Art & Architecture
To Art and Architecture University
Amir Kabir University
- Engineering
Hafez Street
Hafez Bridge
g Through Cafe
Artists Group Shop
Cultural Centers Ticketing | Gallery Wall
Gallery Boxes | Sound Barrier
Praying Mat for Men
Microclimate (Heat Lamp)

Fig.91 Before

Fig.92 After- Gallery wall used for student exhibition
Adding Suspended ceiling as the general proceeding for hanging the lightnings

Fig.93 Before

Fig.94 After- Café managed by youth in the afternoon and night and by seniors in the morning
Adding Suspended ceiling as the general proceeding for hanging the lightnings

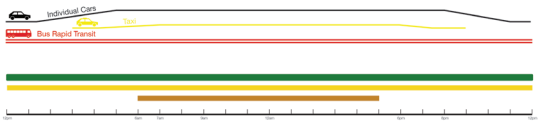
Fig.95 Before

Fig.96 After- Urban dining table for gathering
Adding Suspended ceiling as the general proceeding for hanging the lightnings

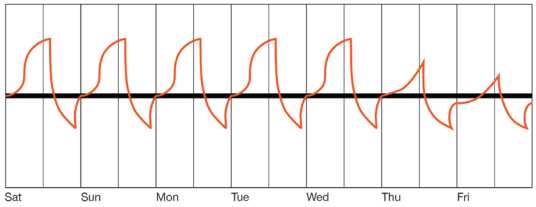
Site B

Besat Expressway / Tehran Railway- Hamdeani Street

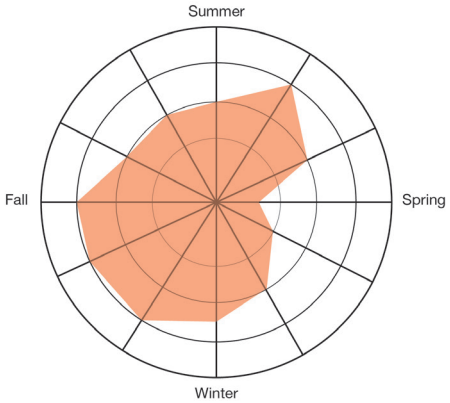
Site B is a “Barrier” type of under-the-bridge space in the southern part of Tehran, in an industrial and residential zone. This site of intervention is located under a bridge but is also crossed by the Tehran railroad, and has thus been separated into two areas. One of them has compact and dense residential buildings and the other is a detached-industrial zone. The major actors in this area are poor and mainly conservative people. The residential area is occupied mainly by women, kids, families and elderly people, while the industrial site has more men and factory workers. The first important element added to this site is the pedestrian bridge connecting the two sides of this site under the bridge. Because this site of intervention is a “Barrier” type, the components used are those for longer stays as well as those that act as sound barriers. The side that is in the industrial zone has more workshops and co-working elements for the factory workers in the area. These spaces can be used by the younger generation seeking a workshop to start their small business; there will also be small shops available for other people to visit and maybe buy their products. The other side is more of a family gathering area, with places for kids to play and places for their mothers and the elderly to hang out. This area provides an urban kitchen, where the women can cook and sell food. Workers on the other side can visit and buy food at their lunch time. A connection is thus created between these two spaces, physically and programmatically, as well as different groups of people.



Daily usage of the public spaces



Weekly usage of the public spaces



Seasonal usage of the public spaces

Fig.97 Timeline of actors activities

Fig.98 Under Besat Bridge spaces

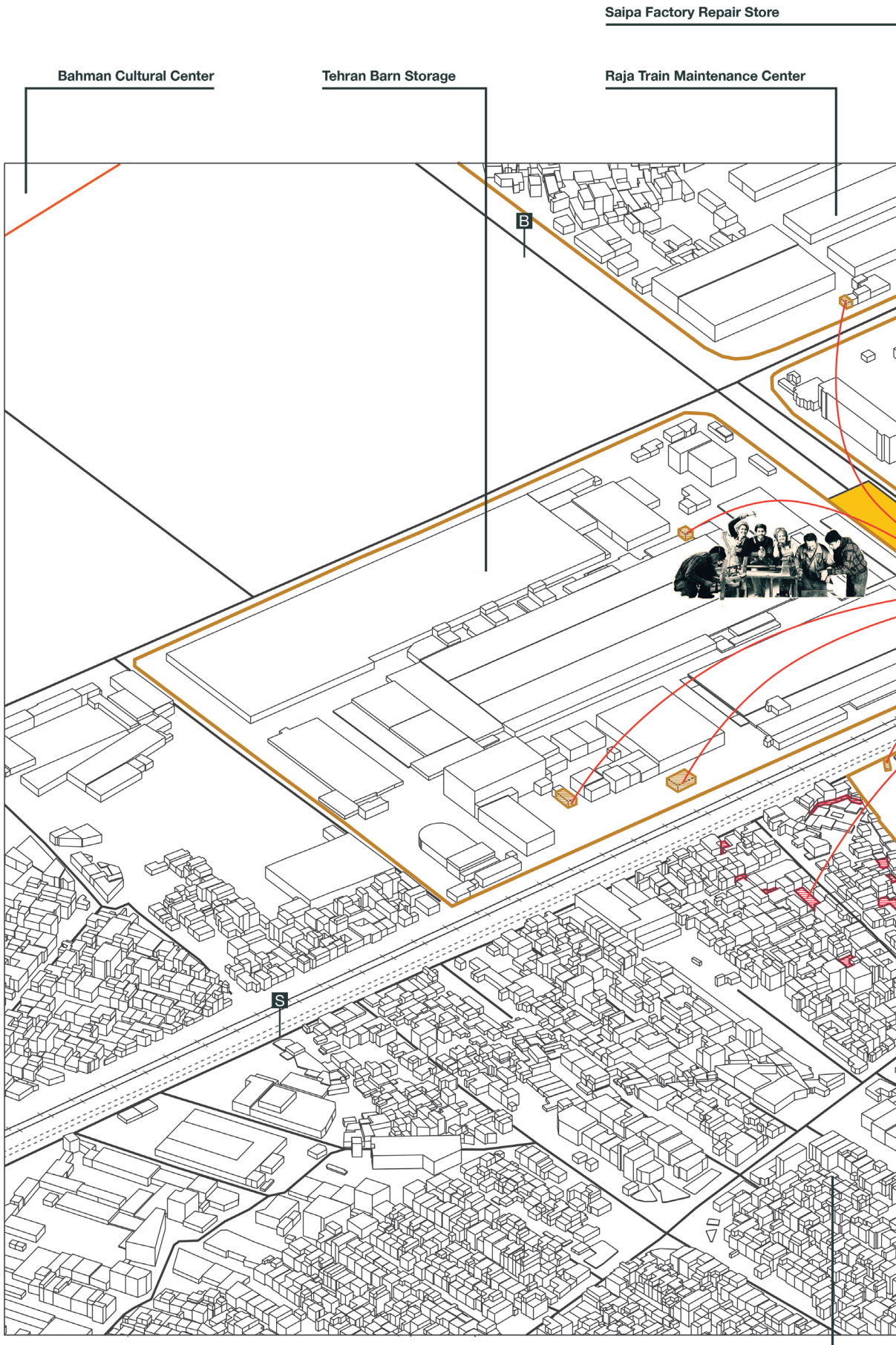
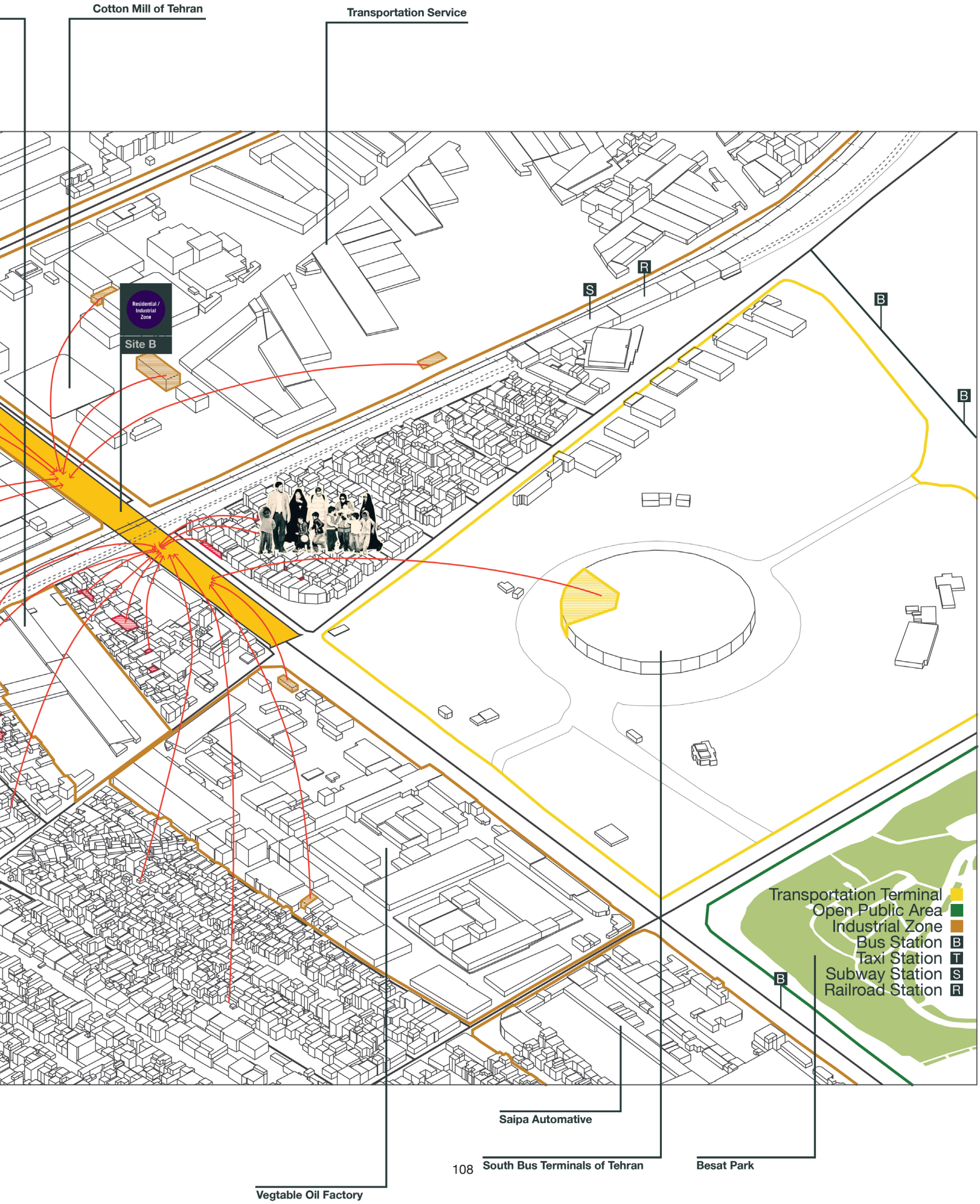


Fig.99 Site Analysis


Cotton Mill of Tehran
Transportation Service
Residential / Industrial Zone
Site B
R
S
B
B
B
Transportation Terminal
Open Public Area
Industrial Zone
Bus Station B
Taxi Station T
Subway Station S
Railroad Station R
Saipa Automative
South Bus Terminals of Tehran
Besat Park
Vegtable Oil Factory

Housewives

Social Group

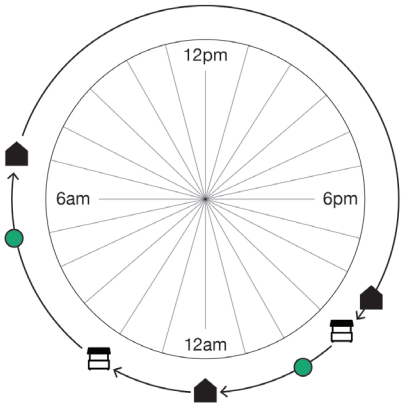
Ultra-Conservative
Conservative
Mainstream
Non-Traditionalist

Ages

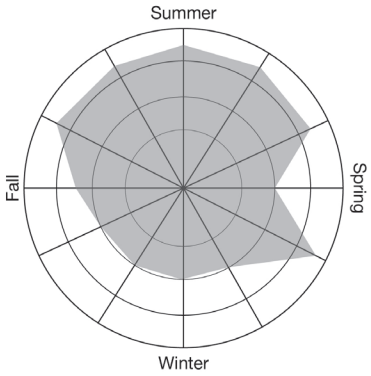
20-40 years

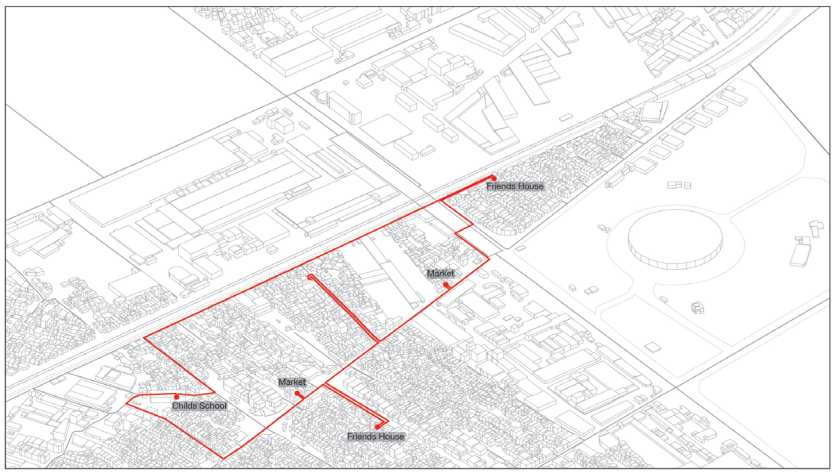
Social Group

Daily



Seasonality





The women living in the southern region of Tehran, still have their religious and traditional beliefs. They like to interact with other women, but it is hard for them to find a place rather than their private houses. Therefore, the intervention that provides a proper place for them to have their leisure time, would be beneficial. Also, they need a place for their kid's entertainment while they can be able to look after them. These socializing components will be near the entertaining components to fulfill this need.

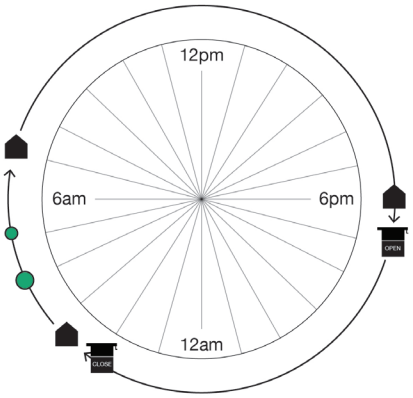
Social Group

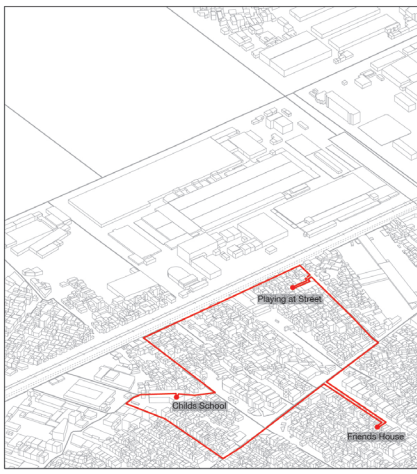
Ultra-Conservative
Conservative
Mainstream
Non-Traditionalist

Ages

4-15 years

Daily





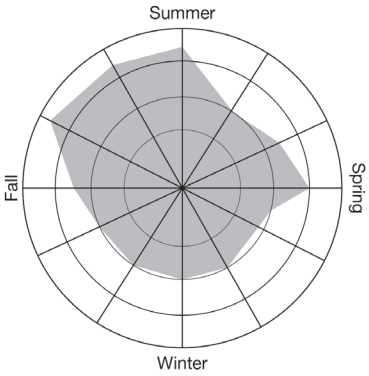
In the residential district, there is a high po
a safe and proper place for their entertainr
adding entertainment components to this s
play while their parents (especially their mo

Fig.100 Actors in the site

Kids

Social Group

Seasonality



opulation of kids. In this dense area, lack of ment, even a local park, brings the need of site of intervention. A safe place for them to others) watching over them.

Elderly People

Social Group

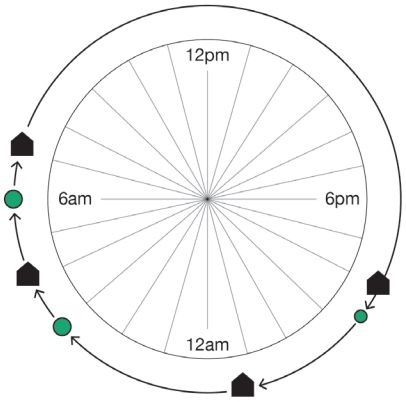
Ultra-Conservative
Conservative
Mainstream
Non-Traditionalist

Ages

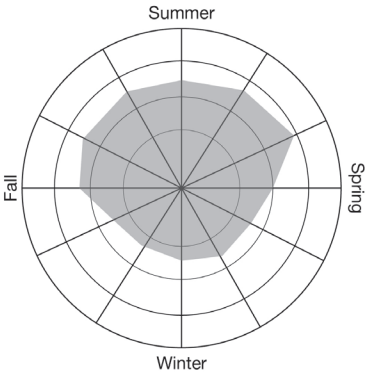
65-90 years

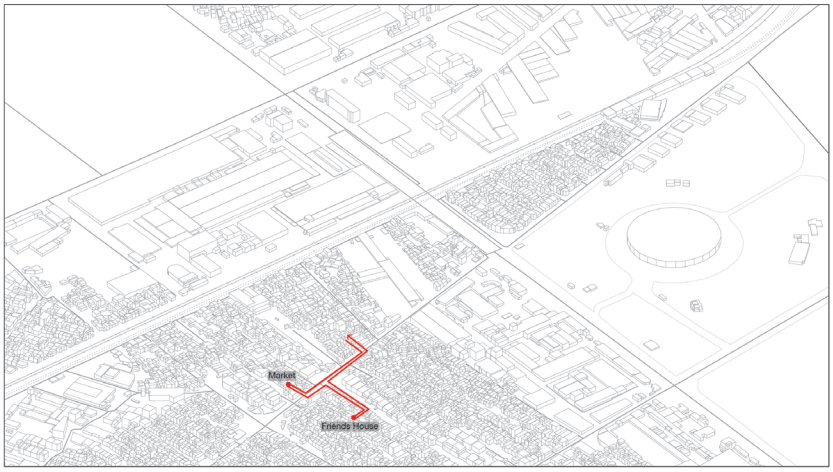
Social Group

Daily



Seasonality





This is a residential district, therefore there will be senior residents, even few. Therefore it is important to fulfill their needs for having a place to interact with other citizens .

Factory workers

Social Group

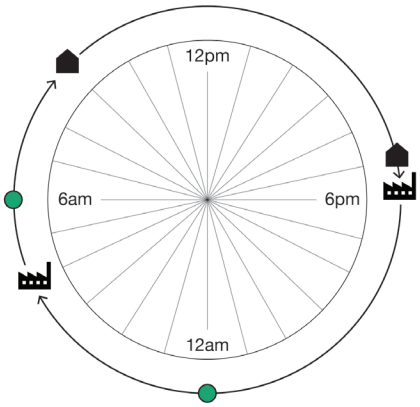
Ultra-Conservative
Conservative
Mainstream
Non-Traditionalist

Ages

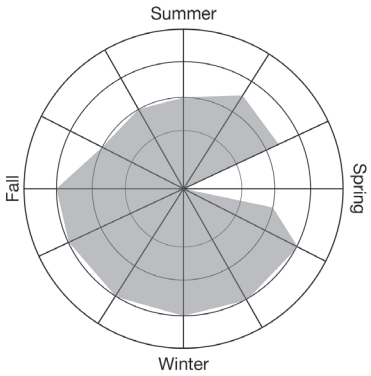
20-50 years

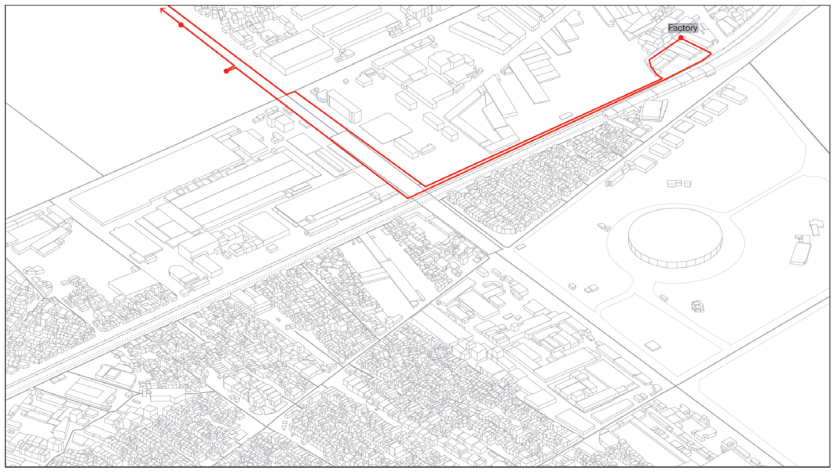
Social Group

Daily



Seasonality





The workers in the factory, need a place for their lunchtime and leisure. They need to rest and socialize. Also because of their ability they can start their own small business if the facilities can be added on the site. The workshops and co-working studios can be a place for them to use.

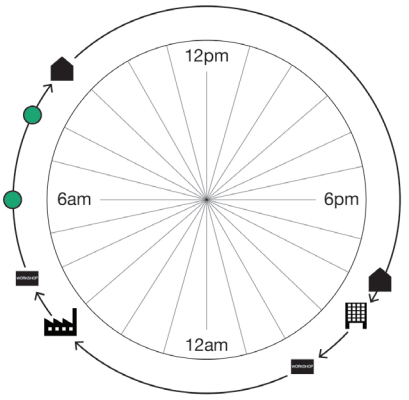
Social Group

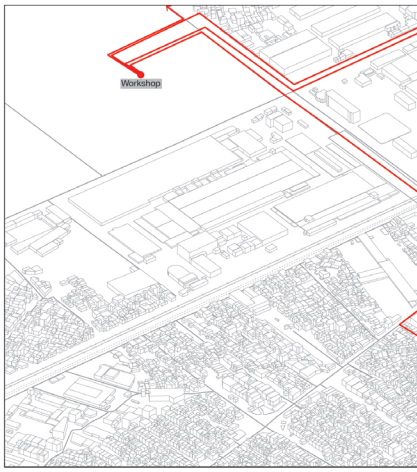
Ultra-Conservative
Conservative
Mainstream
Non-Traditionalist

Ages

20-40 years

Daily





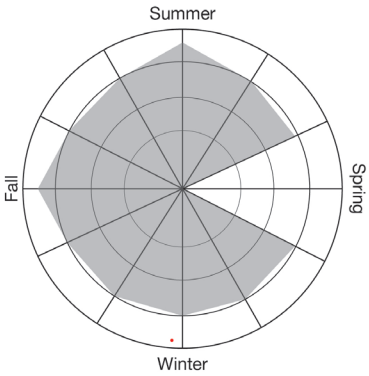
As talked before the majority of Tehran's p
that they can run their own business. The
for them because the major resources are
their works.

Fig.100 Actors in the site

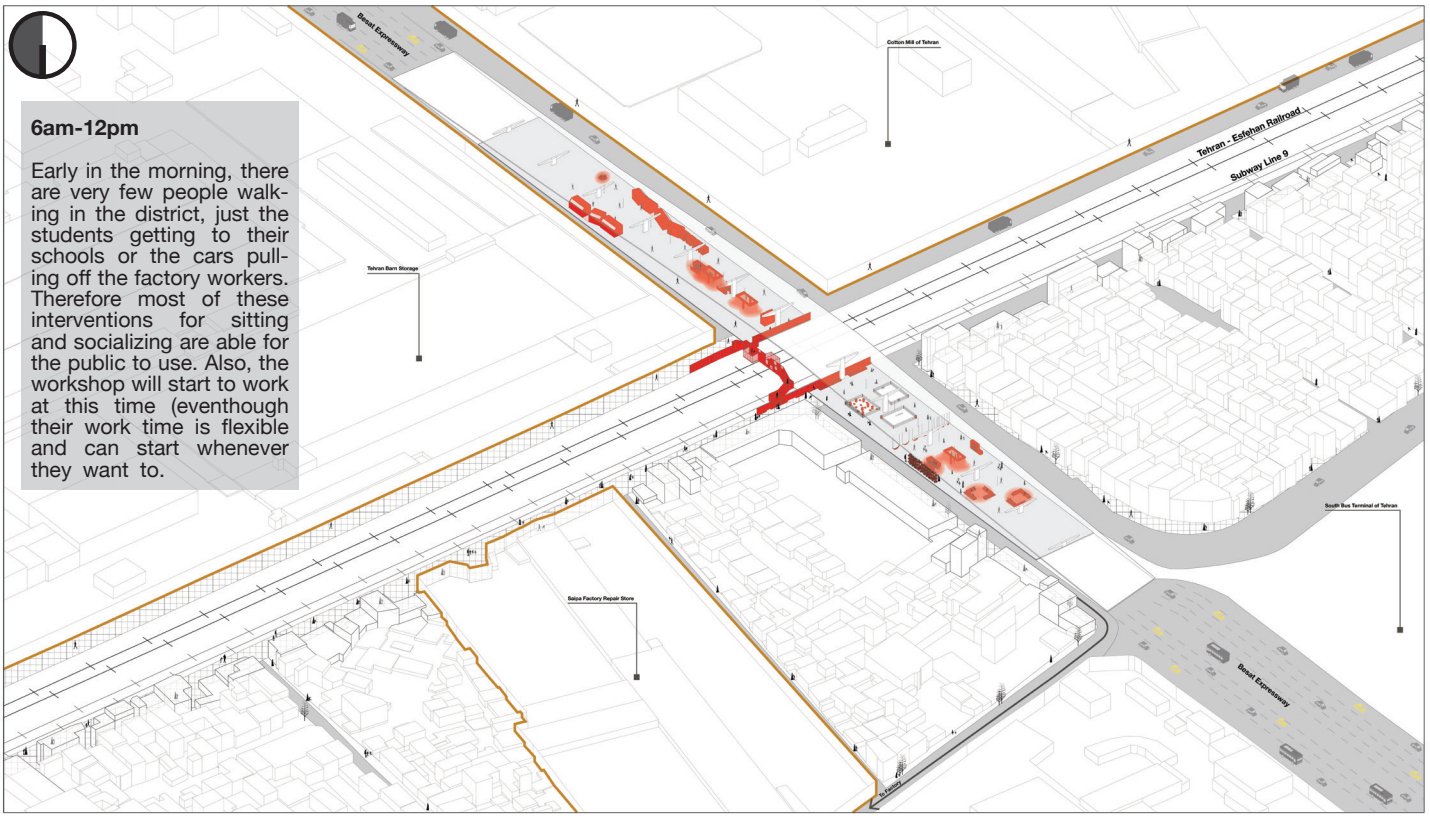
Entrepreneur

Social Group

Seasonality



opulation are youth. They all seek a place
se industrial districts can be a good place
near them at it is easier for them to manage



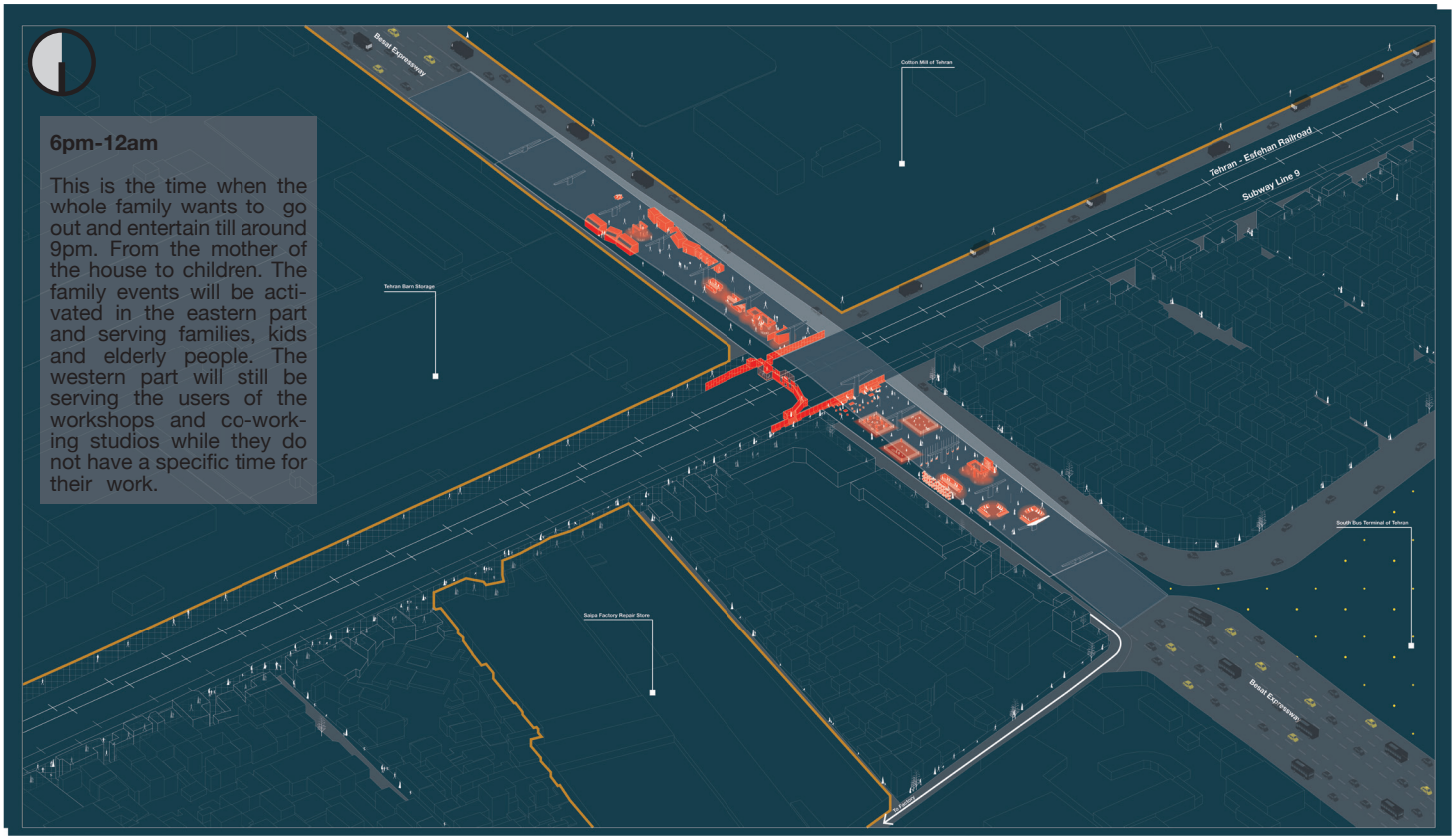
6am-12pm

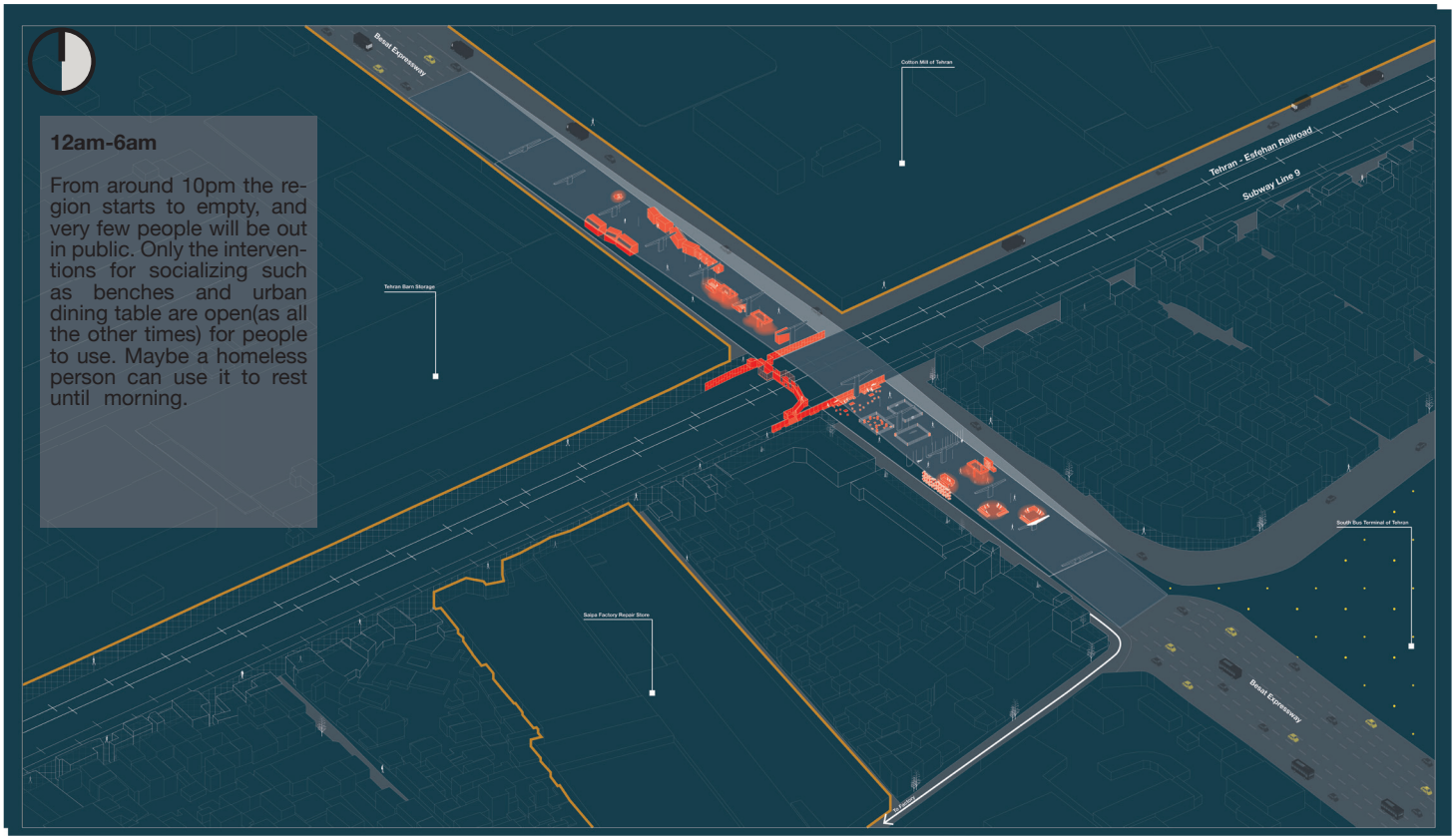
Early in the morning, there are very few people walking in the district, just the students getting to their schools or the cars pulling off the factory workers. Therefore most of these interventions for sitting and socializing are able for the public to use. Also, the workshop will start to work at this time (eventhough their work time is flexible and can start whenever they want to.

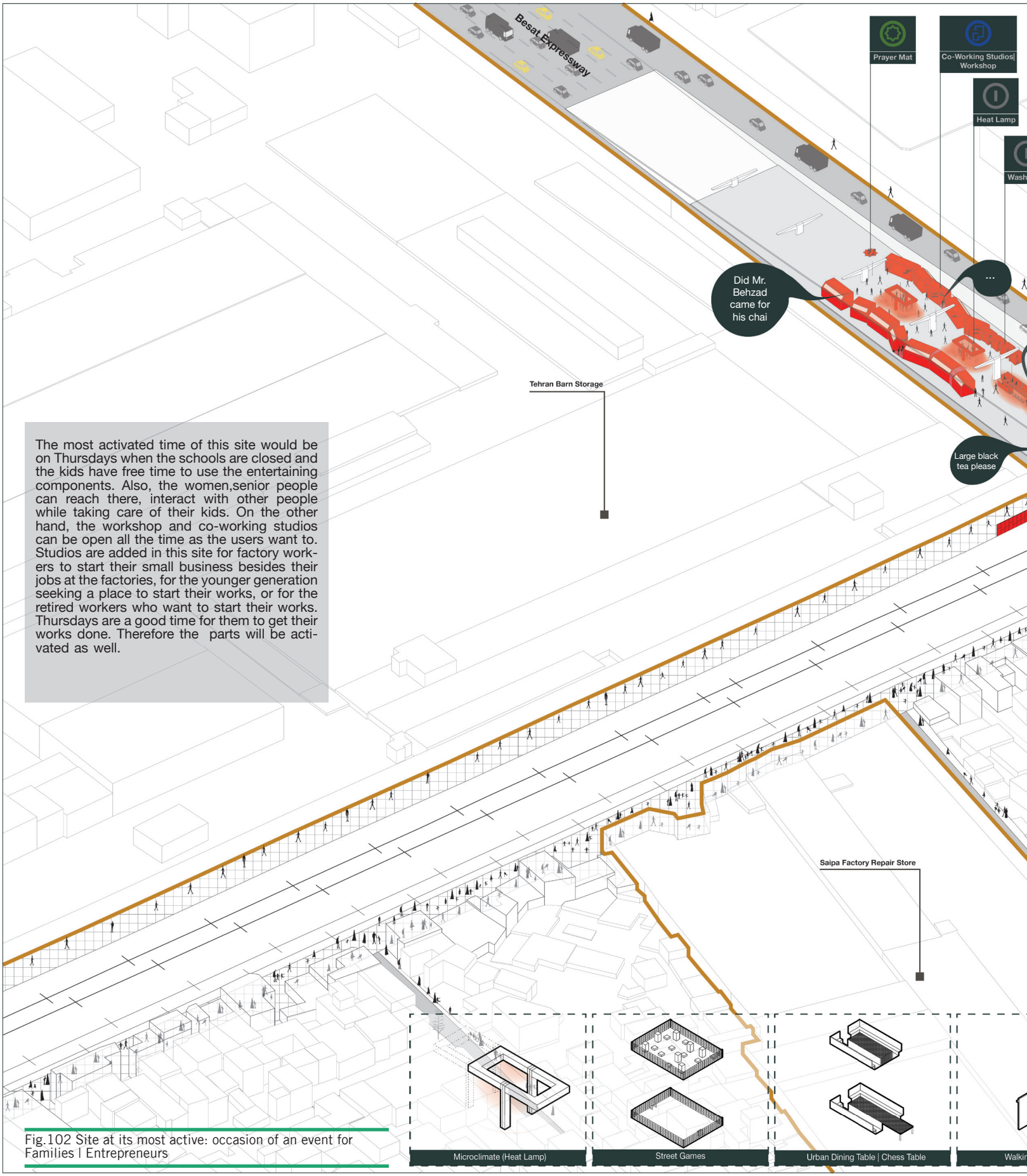
12pm-6pm

Public Schools close at 12pm, therefore a lot of children will spread around the area to play after school. The family gathering spot for kids to play and for women to watch their kids and also the elderly people to socialize will be activated in the eastern site, also in the western site the workshops will still be open and the cafe will serve them.

Fig.101 Components added to the site and their daily changes


6pm-12am
This is the time when the whole family wants to go out and entertain till around 9pm. From the mother of the house to children. The family events will be activated in the eastern part and serving families, kids and elderly people. The western part will still be serving the users of the workshops and co-working studios while they do not have a specific time for their work.
Besat Expressway
Cotton Mill of Tehran
Tehran - Esfehan Railroad
Subway Line 9
Tehran Barn Storage
South Bus Terminal of Tehran
Saipa Factory Repair Store
Besat Expressway


12am-6am
From around 10pm the region starts to empty, and very few people will be out in public. Only the interventions for socializing such as benches and urban dining table are open(as all the other times) for people to use. Maybe a homeless person can use it to rest until morning.
Besat Expressway
Cotton Mill of Tehran
Tehran - Esfehan Railroad
Subway Line 9
Tehran Barn Storage
South Bus Terminal of Tehran
Saipa Factory Repair Store
Besat Expressway



The most activated time of this site would be on Thursdays when the schools are closed and the kids have free time to use the entertaining components. Also, the women,senior people can reach there, interact with other people while taking care of their kids. On the other hand, the workshop and co-working studios can be open all the time as the users want to. Studios are added in this site for factory workers to start their small business besides their jobs at the factories, for the younger generation seeking a place to start their works, or for the retired workers who want to start their works. Thursdays are a good time for them to get their works done. Therefore the parts will be activated as well.

Fig.102 Site at its most active: occasion of an event for Families | Entrepreneurs

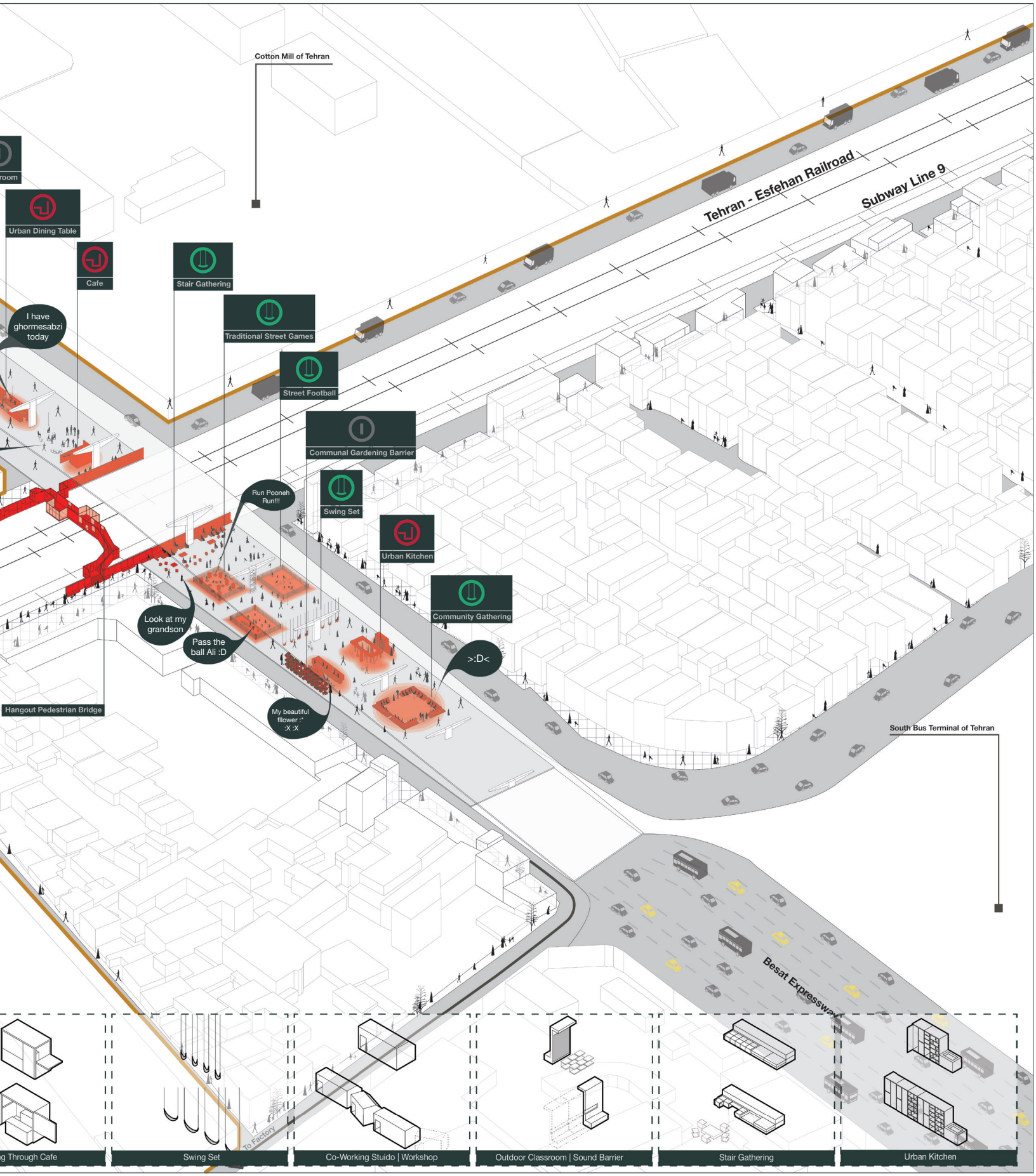

Cotton Mill of Tehran
Tehran - Esfehan Railroad
Subway Line 9
Urban Dining Table
Cafe
Stair Gathering
Traditional Street Games
Street Football
Communal Gardening Barrier
Swing Set
Urban Kitchen
Community Gathering
I have ghormesabzi today
Run Pooneh Run!!!
Look at my grandson
Pass the ball Ali :D
>:D<
My beautiful fllower :* :X :X
Hangout Pedestrian Bridge
South Bus Terminal of Tehran
Besat Expressway
To Factory
g Through Cafe
Swing Set
Co-Working Stuido | Workshop
Outdoor Classroom | Sound Barrier
Stair Gathering
Urban Kitchen

Fig.103 Before

Fig.104 After- Co-working and Studio Workshops
Adding Suspended ceiling as the general proceeding for hanging the lightnings

Fig.105 Before

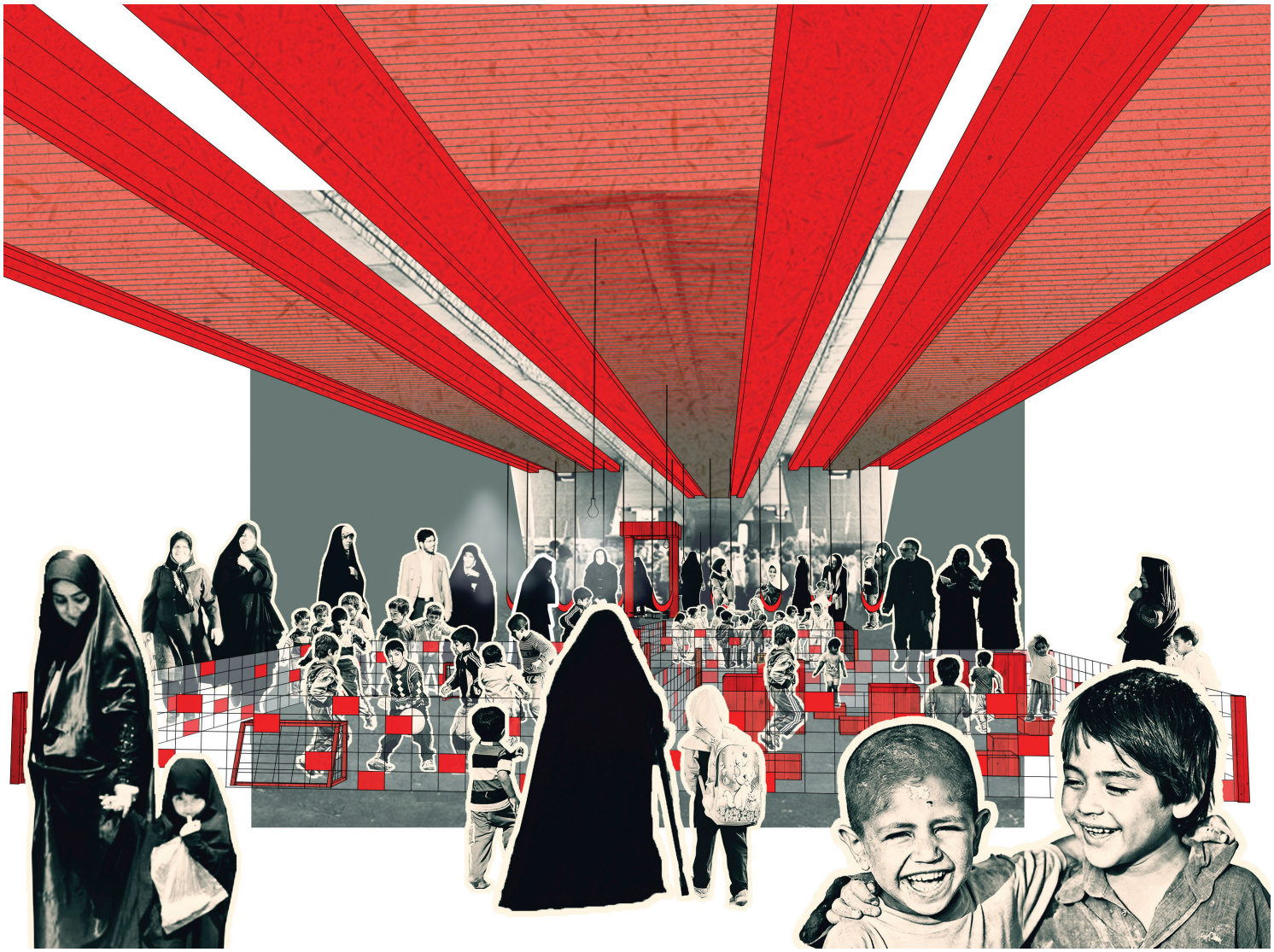


Fig.106 After- Kids playgrounds
Adding Suspended ceiling as the general proceeding for hanging the lightnings

Fig.107 Before

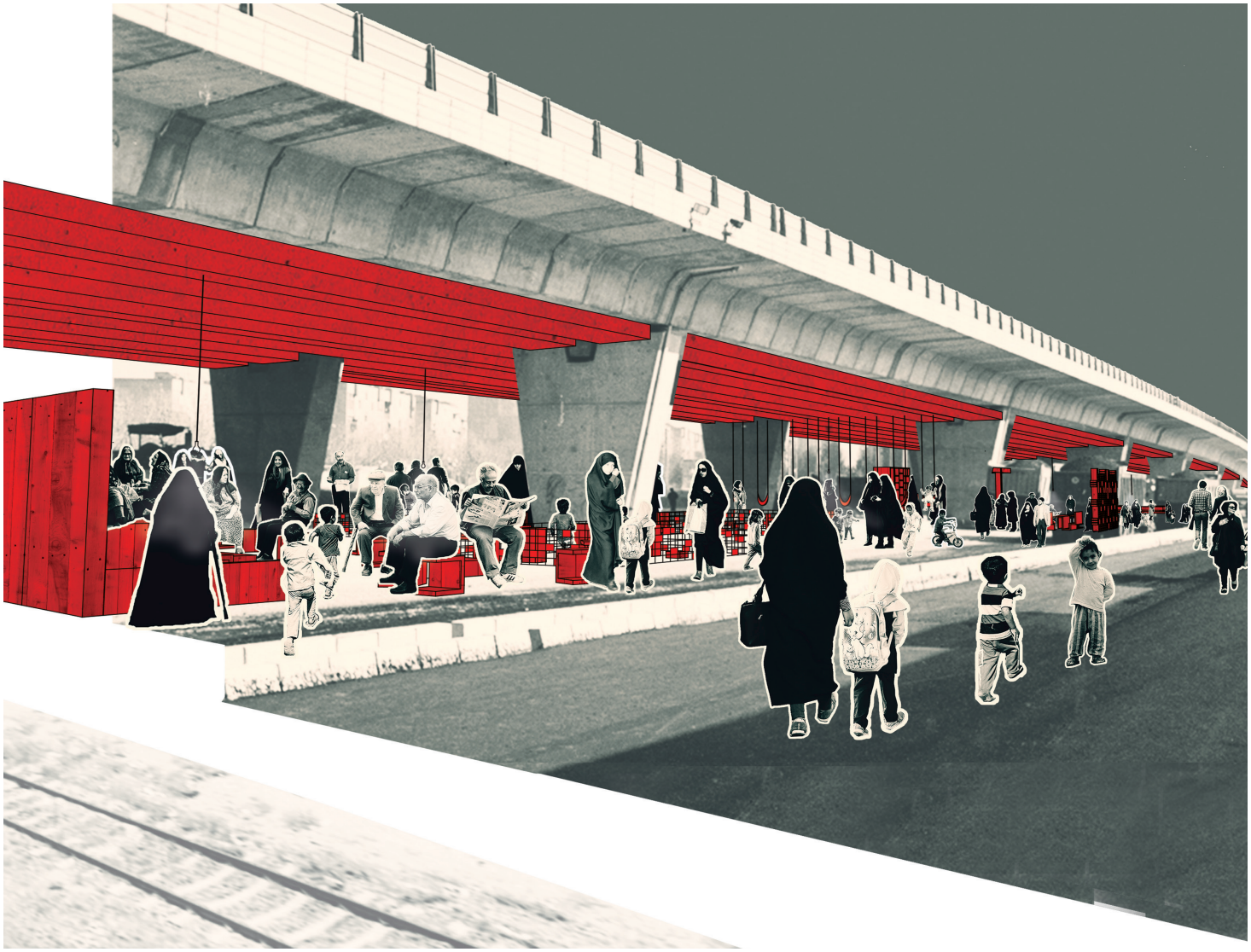


Fig.108 After- Family gathering spot
Adding Suspended ceiling as the general proceeding for hanging the lightnings
Infrastructural connectivity, for connecting the two leftover zones

Fig.109 Networked alternate public spaces

6.0
Networked alternate public spaces

6.1 Conclusion

In conclusion, these alternate public spaces can have local and regional impacts in Tehran:

1- They will transform the residual spaces of the city into places that people can enjoy in their daily lives, creating vivid, open public spaces that will operate at any time of day in the compact city of Tehran. These new public spaces will be scattered throughout neighbourhoods all around the city and will be designed based on the locals' wishes, in contrast to the super-large public spaces provided by the municipality. (Figure 110)

2- These new public spaces are, on the one hand, citizen-based spaces designed, installed, and made with the help of the citizens and, on the other, located in leftover spaces underneath bridges, which cannot otherwise be used. Therefore, they could not be occupied by the municipality as private property and could not be shut down, in contrast to other public spaces. (Figure 111)

3- These public spaces will be a platform for both new public activities that are not currently happening in the city, such as street music stages, open cinemas, public workshops, and resting places for taxi drivers, and to bring out public activities that are happening underground (such as underground music, art, or political activities) and represent this hidden layer of the city in the public realm. (Figure 112) I am aware of the possibility that these spaces could be shut down because of the activities taking place in them, but because of the partly hidden nature of the spaces under bridges and also the flexibility of these components, these spaces can resist being shut down. Even if the municipality or government eliminates them, they can change and regenerate themselves in other places and continue their life in the city. (Figure 113)

4- And beyond the spatial changes these spaces bring to Tehran, these public spaces can bring a new way for the public to contribute in public spaces. In Tehran, it is not common for citizens to contribute in designing and building spaces for themselves; therefore, this process can be the new mode of coordination between the citizens and the designers and builders of their city. This is also a top-down/bottom-up coordination, a kind of public-private partnership that introduces a new political engagement for making public spaces in Tehran. The government can provide the legality and the private sector (local partner, designer group and the citizens) can help in actually building these spaces.

These new spaces may also have some unintended limitations and affects. They might cause gentrification in the city. Tehran is already facing gentrification in some areas, while the northern parts, with the major parks and open public spaces, are already gentrified. However, those areas are becoming more expensive nowadays, forcing people to move to the central and southern part of Tehran. Eventually, those areas

would gentrify as well. However, by actively programing the sites of interventions, not only with bars and cinemas but also taxi stand amenities, chess tables for older men, and prayer mats, as well as including actors from the elderly to the religious fanatics to the youth in the conversation, these spaces try to mitigate the negative effects of gentrification.

While these spaces might bring some of the underground activities out into public, they may also make other kinds of underground activities already happening in those areas to become more visible, possibly causing them to be shut down.

At the end, it is important to look back into the main question that transcend the site of Tehran: What is the role of public space and its design, and the role of the architect in this process? In this thesis, the architect was challenged to be the identifier of the spatial and programmatic potentials rather than the designer of the specific form and static objects in the city. Architects in our era can have the role of managing the strategies for public spaces, paying more attention to the citizens' desires rather than just designing the spaces. The design of public spaces, in contrast to the singular top-down or bottom-up processes, can be a collaboration of both of them. This will help the urban projects to _happen while they address the needs and grant the wishes of the locals with the help of themselves. At last, it was shown that public spaces, legitimised or not, can act as stages for people and events. As Margaret Crawford said in her book "Everyday Urbanism", the people and their lives are the definition of the reality of the cities, and not the static and permanent urban conditions. Therefore, public spaces could become a real platform for all of the citizens of thr city to use them as freely as they want, not just a platform for the architect to showcase his/her designs.

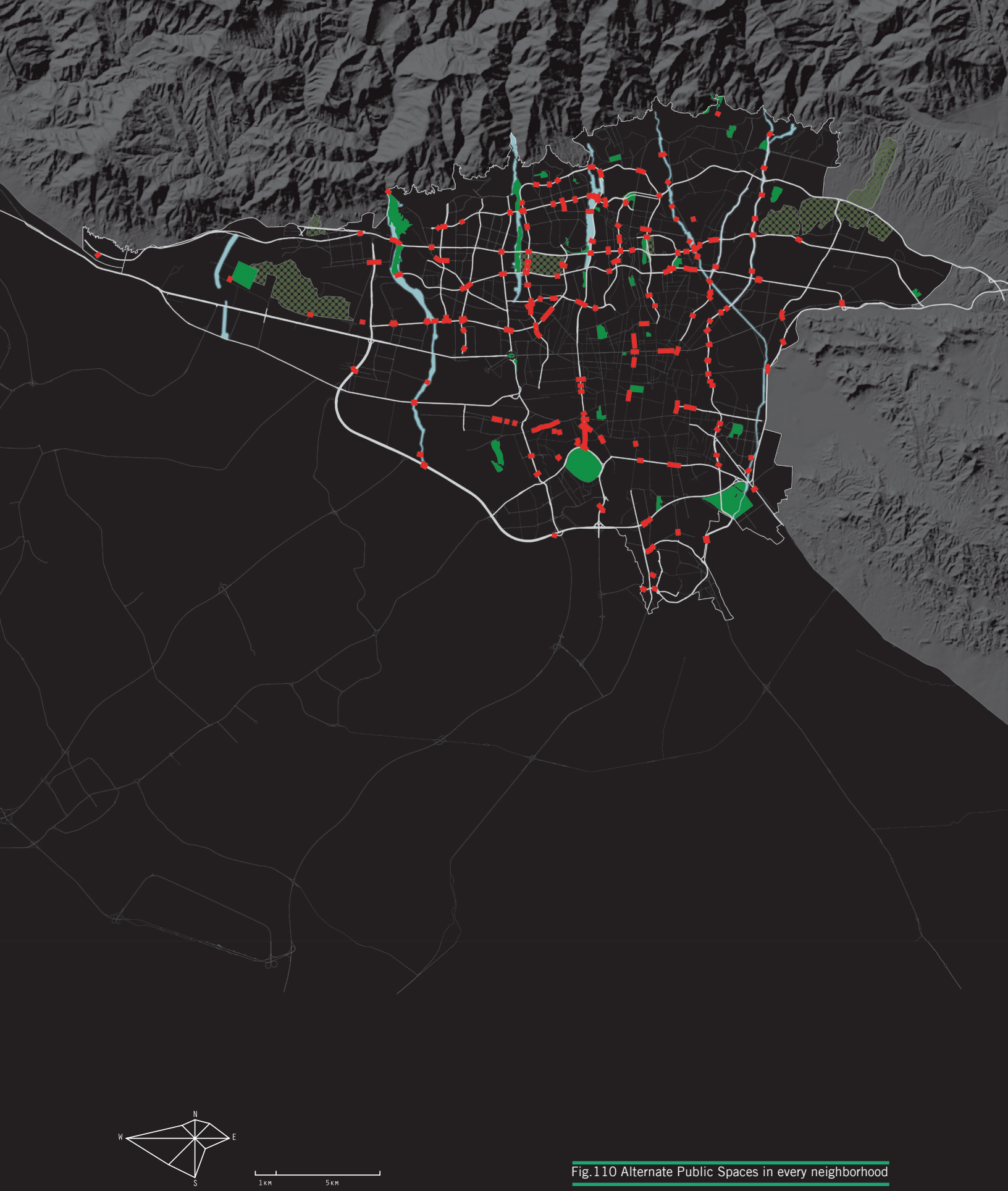


Fig.110 Alternate Public Spaces in every neighborhood

Fig.111 Under the Bridge New Public Spot

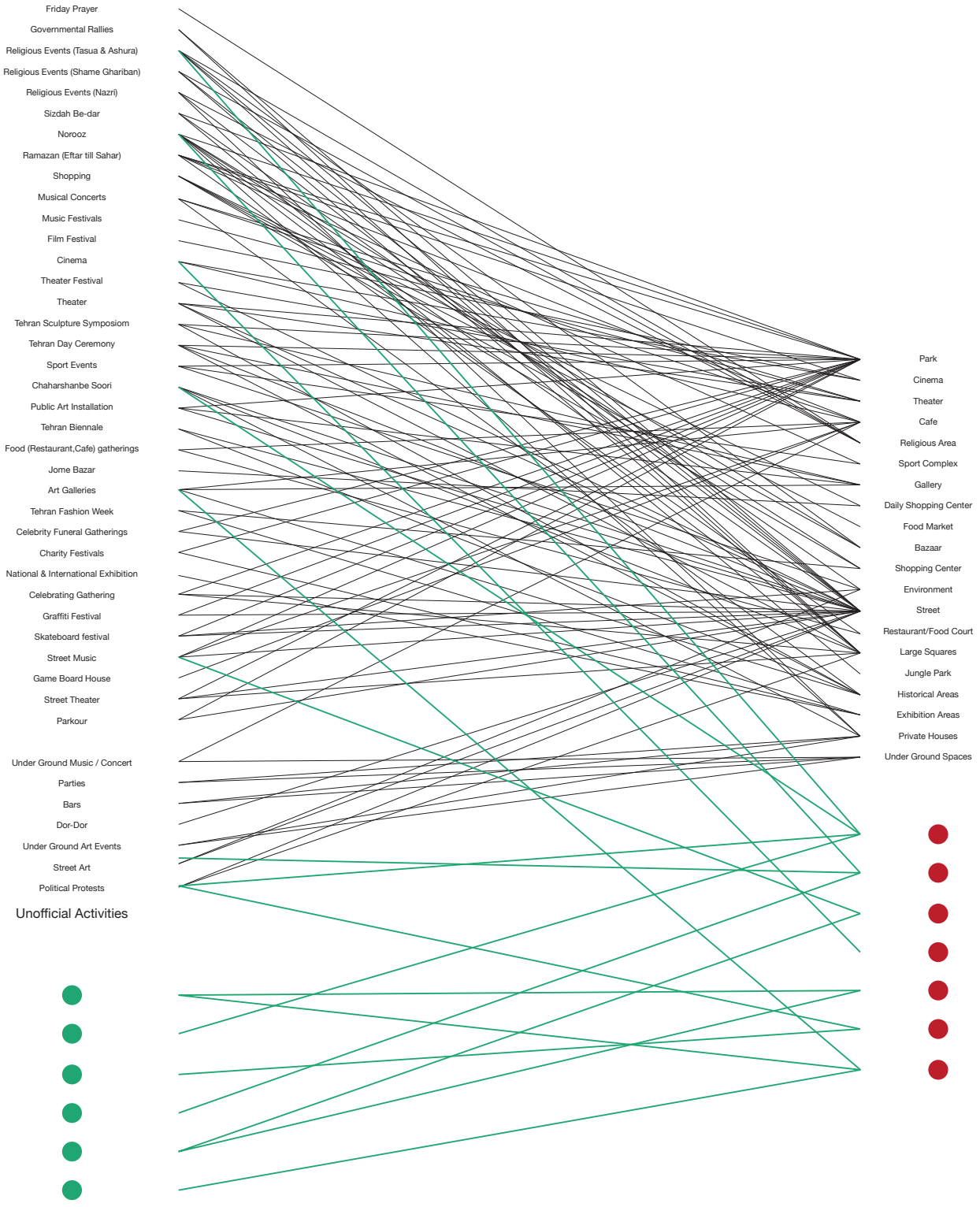


Fig.112 Adding new Public Platform for Public activities

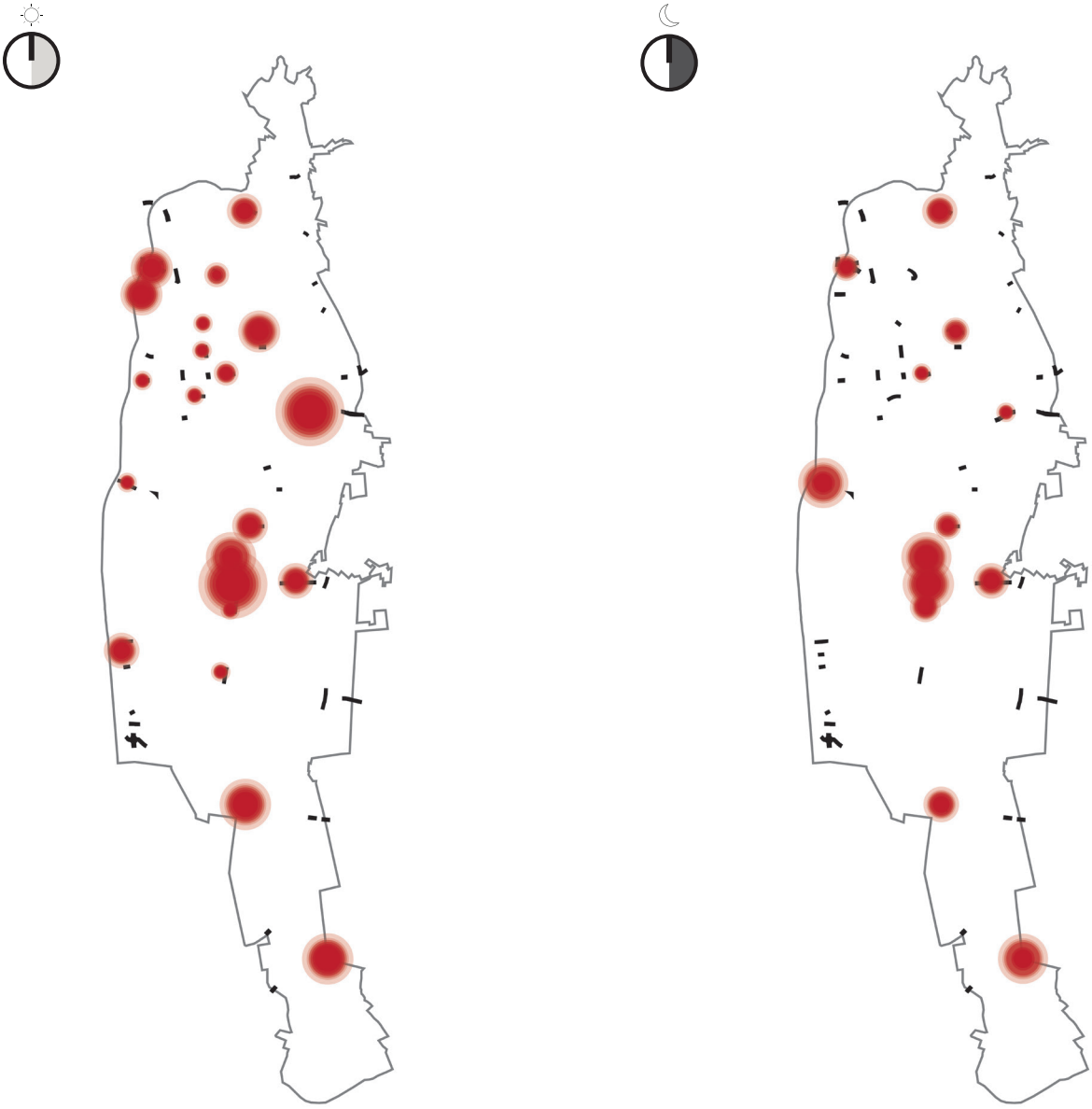


Fig.113 Changes of public usage of these interventions in various sites of intervention during different times of the day

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Appendix I:

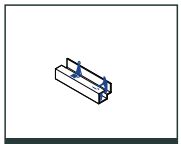
Toolkit for Alternate Public Spaces

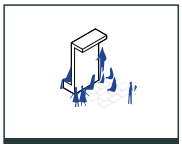
Micro Public Spaces

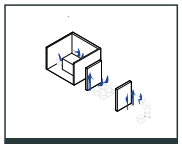
Alternate

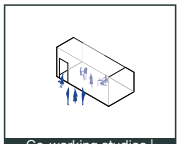
Typology of Interventions

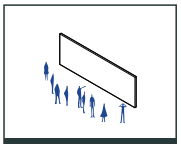
Academic


Urban Bench


Outdoor Classroom

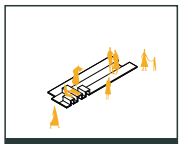

Group Project Box

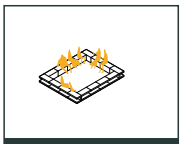

Co-working studios | Workshops

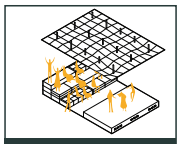

Public Digital Magazine

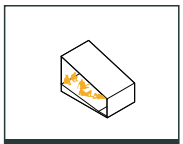
Cultural Centers Ticketing | Info Wall

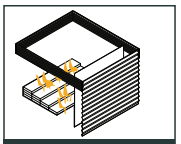
Cultural


Under the Bridge Musician

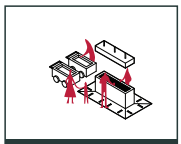

Group Gathering Singing

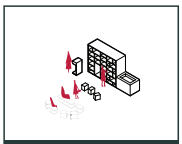

Public Stage

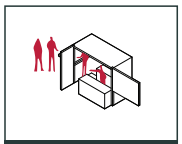

Movie Night Box

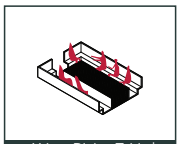

Outdoor Cinema

Commercial

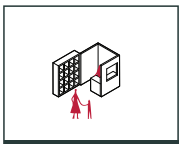

Food Vendor Gathering

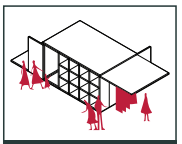

Urban Kitchen


To-Go Tea Box

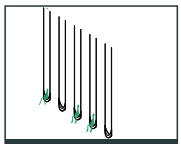

Urban Dining Table | Chess Table

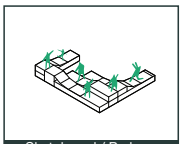
Street Vendor Platform

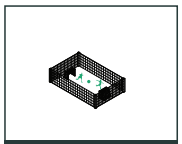

Advertisement Shop Kiosk

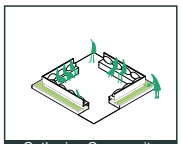

Group Shop

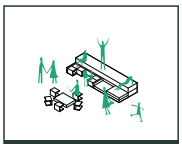
Entertainment


Swing Sets

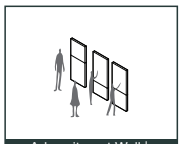

Skateboard / Parkour Elements

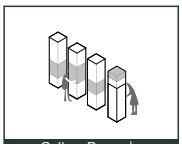

Street Game Cage

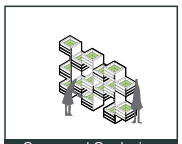

Gathering Community Garden

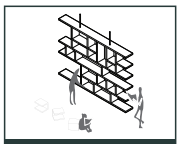

Stair Gathering

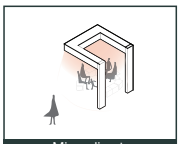
Utility

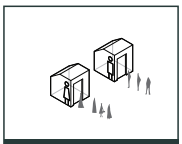

Adversitment Wall | Sound Barrier


Gallery Boxes | Sound Barrier


Communal Gardening Barrier


Open Library


Microclimate (Heat/Cool Lamp)


Washroom | Ablution

Religious

Praying Mat for Men | Comfortable Ground

Prayer Room for Women | Comfortable Ground

Intervention Process & User involvement for Alternate Micro Public Places in Tehran

1 Alternate Micro Public Places are designed based on the needs of the citizens of Tehran. These are context-based design solutions that consider all aspects of the public's needs. This booklet of toolkits can be presented to a local partner to help link the designer group with the local community, private local organizations, and the public sector for contributing to the project. This local partner can be an NGO (such as Tehran Urban Innovation Center [TUIC], a new, innovative centre for urban proposals in Tehran), a private or public institution, or a design practice with similar concerns about public spaces and leftover spaces in Tehran.

2 The local partner and the designer group will collaborate to get the required permissions from the municipality of Tehran to set up the various components at the sites of intervention.

3 Each of these components can be used at each of the sites of intervention that has been categorized. Based on the features of each of the typologies of the sites of intervention, the appropriate components form the catalogue of interventions that can be picked, made, and installed on the site.

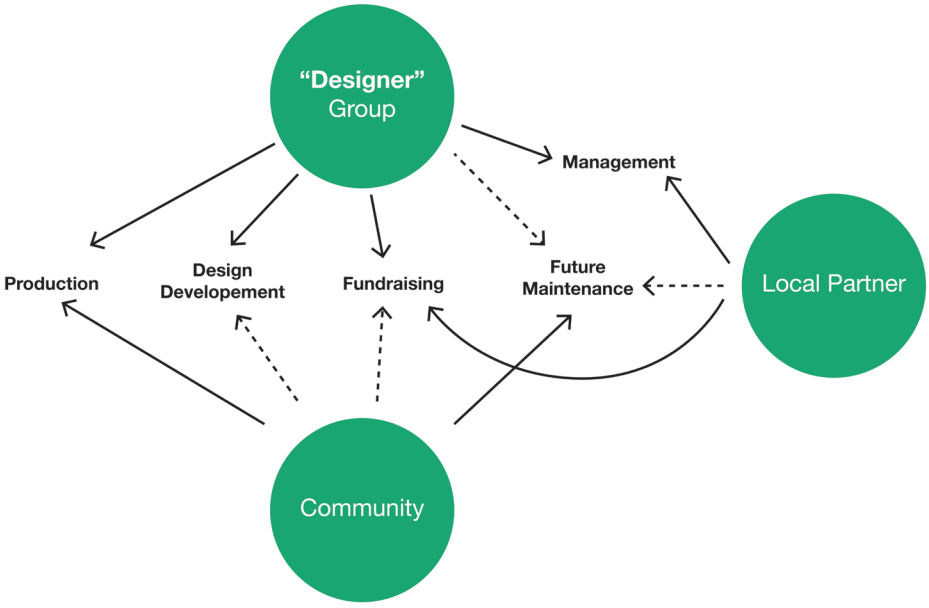
4 Even though these components are generic, typological, and will be chosen based on the categories of the sites of intervention, they are also very site specific. Selecting any of them for use on a particular site is based on the history, programs, needs, stakeholders, actors using the site, communities, and local interventions. Therefore, analyzing each site individually is very important.

5 To understand every detail of the community's activities, their needs, and the nuance of the local community, surveys and group discussion sessions can be arranged. Based on these discussions, the group can derive which of the toolkit components are needed at each specific site. In these group meetings, citizens can propose design ideas. Each of the components can be affected and transformed in shape based on the local community's ideas. Therefore, the basic genes of these components will remain the same, but their design can change at each specific site.

6 After the design in completed, the local institution can, with the help of the citizens, start the fundraising phase of the project to actually build it.

7 Because this toolkit is designed based on the ideas of Light | Quick | Fast, the components can be easily built and changed based on the users' needs. Therefore, with the help of the local community and citizens, the construction phase can be a fun, new event in Tehran. When the components are made by citizens, they will have a sense of connection to the project and can help in its maintenance.

8 These components are temporary elements that allow for experimentation. If an intervention does not work, the community can experiment and try again by changing or even using another component altogether to fit the specific site. If the components are effective for the community, they can be maintained and expanded in Tehran as broadly as the citizens want. Responsibility for maintaining them is held by the citizens, with supervision from the designer group. There have not been a culture of citizen participatory design in Iran, this project can be the start of this act in Tehran. The younger generation will probably become interested and from there all the citizens will start to participate.



General Actions in Sites of Intervention Before Adding Components

1- ***Adding a suspended ceiling*** with a distinctive color to draw attention to these sites of intervention. These suspended ceilings will become a specifying element for these spaces as well as a place for people to hang design elements, such as lighting components or moving walls. (Figure 1) Also some quartz piezoelectric tiles, could be added on the bridges, that can gain energy (Figure 2) Regarding the speed limit of 80km/h and the approximate weight of different vehicles that pass the bridge and the traffic in Tehran, we could expect a great amount of energy harvested from the vibrations of the bridge by quartz piezoelectric tiles. This energy is enough electrical energy for Lightning elements, Heating and Cooling System and Wifi hubs.

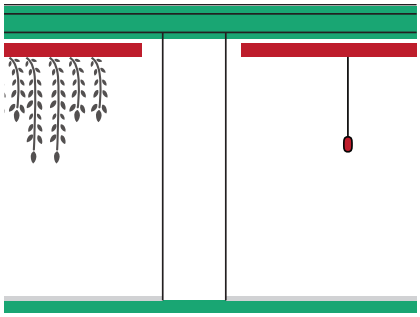


Figure 1

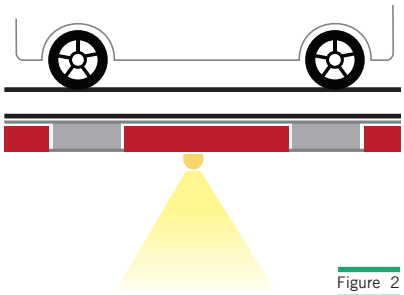


Figure 2

2- ***Plug-in elements*** designed and installed at each site of intervention that will develop a platform for further components to be added on.

3- ***Infrastructural connectivity***, at some of the sites of intervention that are themselves disconnected by a second infrastructure, such as a railroad or river, a pedestrian bridge will be installed for connecting the two separated zones. The bridge is not only a connector but also a place to stay, gather and interact. (Figure 3)

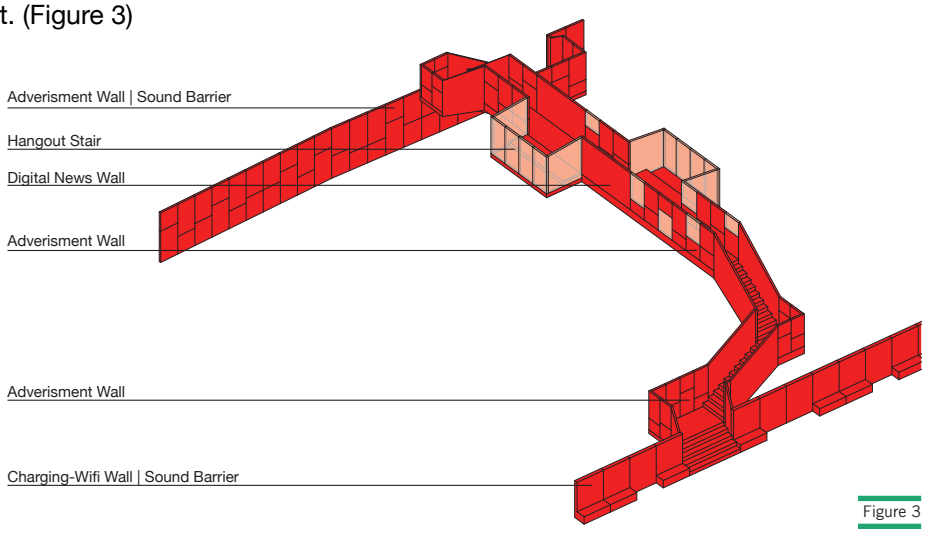


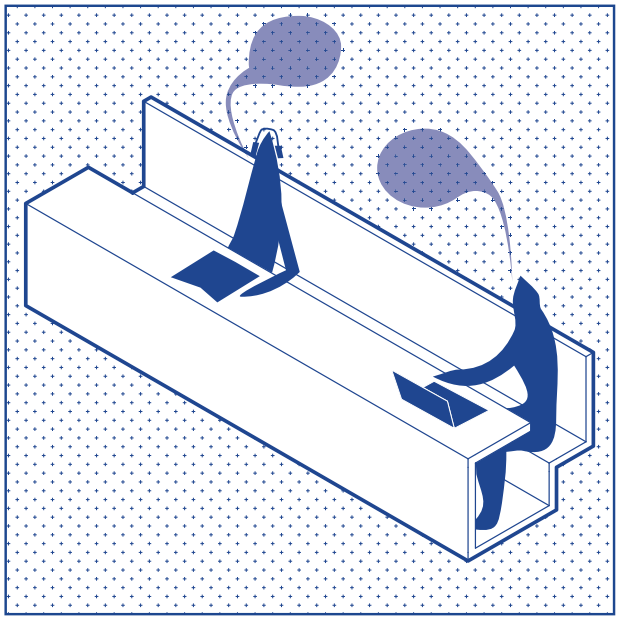
Figure 3

Components

Urban Bench

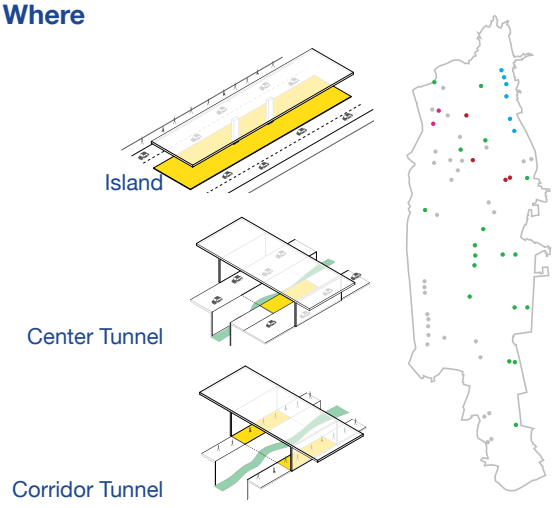
Information

Although Internet speed in Iran is very low and people do not have access to high speed Wi-Fi everywhere, using the social networks are very popular among Iranians. Thus, this can be a place for people to sit and do their works, use the Wi-Fi and surf the internet, allowing short and long term staying for them.

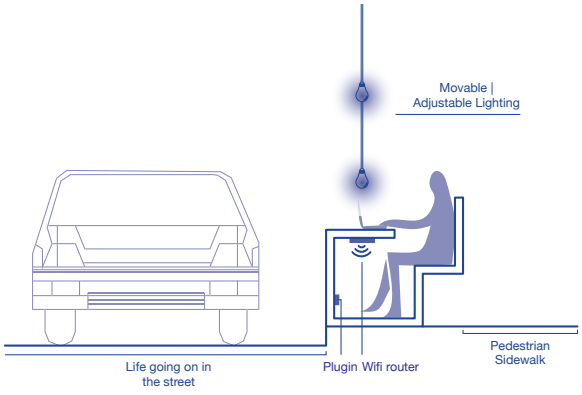


Daily Usage / Special Events

Where

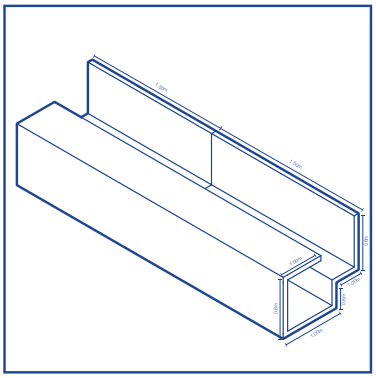


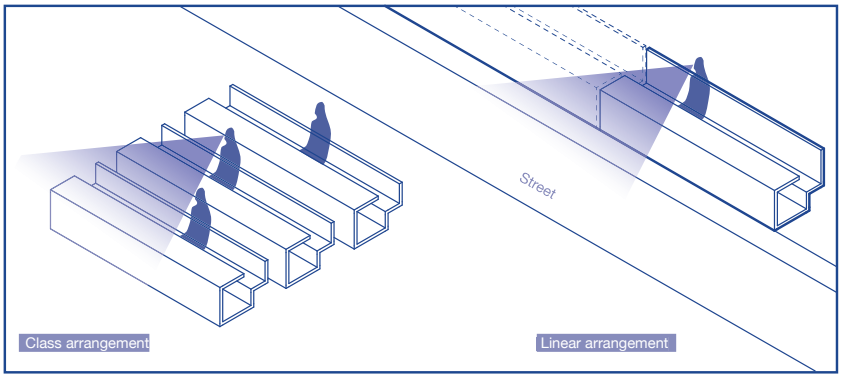
Essentials Elements



How to Use

These benches can be used in any sites of intervention. Their design somehow that they can face the outside of the site for facing the street or the river. The benches can be paired with the outdoor classroom components and used as desk-chairs for users when there are teaching session or having group discussion meetings.





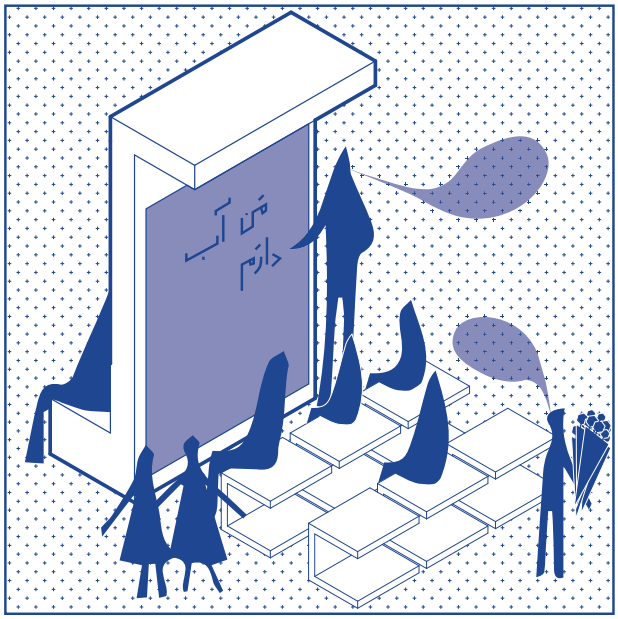
Who

All of the various range of the citizens of Tehran can use this component as they want.

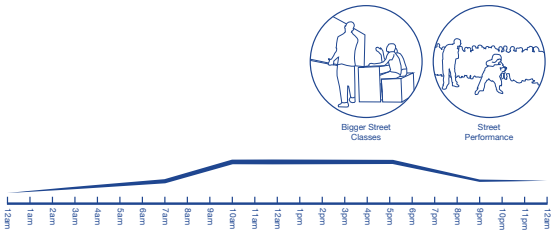
Outdoor Classroom | Wifi + Plugin Hotspot

Information

This components is a multi-functional wall. In Tehran, the amount of poor work kids is high. As they are forced to work, they do not have time to study and go to school. A proper way of helping them would be educating them rather than collecting them or giving them money. These spaces can be spread around the city so that these kids study with the help of young generation whenever and wherever they want.



Daily Usage / Special Events



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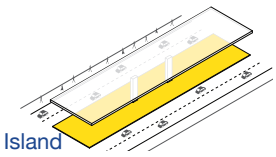
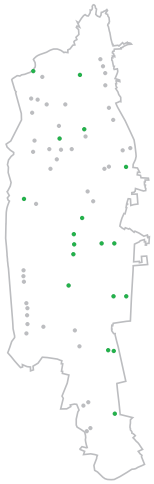
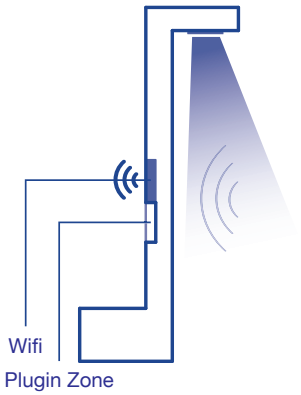


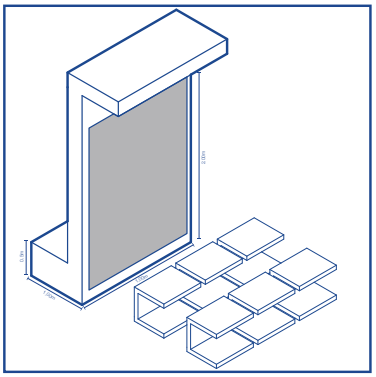


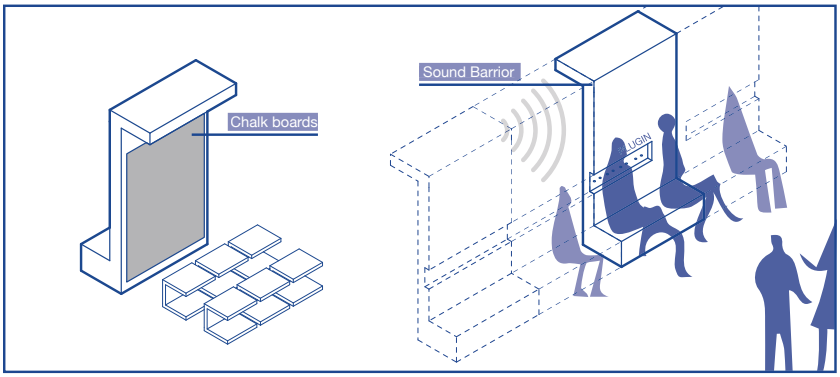
Essentials Elements



How to Use

On one side of this wall is a chalk and on the other side is a sitting bench with a plugin outlet for people to sit and hangout while they have access to electricity. This wall can also be used as sound barrier in more noisy sites of interventions and a place for people to sit and gather for some performance events, either regular theater performances or even the underground theaters to come on the ground where these walls can act as sound and view barrier for the performers.





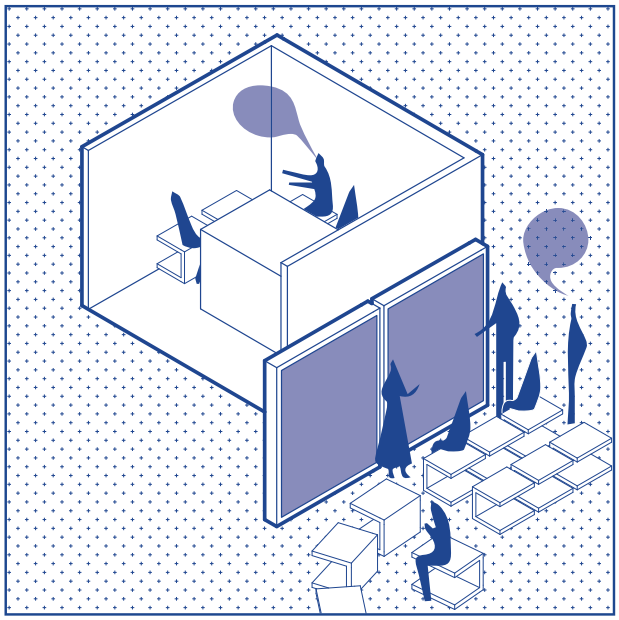
Who

This bench is mainly designed based on the needs of the students the work kids who seek education.

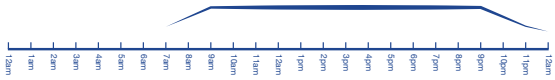
Group Project Box

Information

As relationships between opposite genders in Iran is not much accepted, doing group projects with boys and girls in a team is hard. Also, universities close at 8pm and they don't accept students from other university to enter, thus there are no places for students to meet and work rather than cafes or their private homes. These other opportunities are not available for all of the students. Therefore, group project box can be a public place for all of the students to meet and do group works together.



Daily Usage / Special Events



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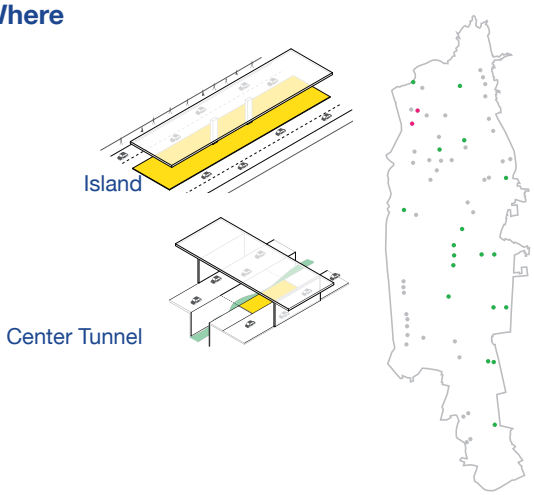

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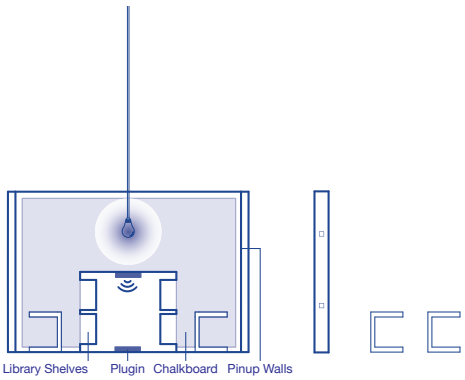
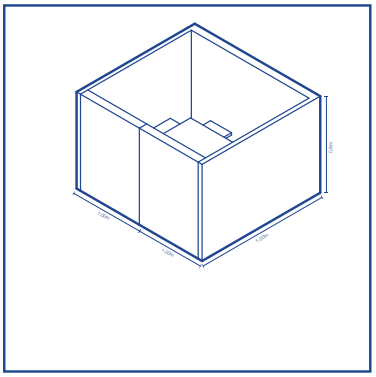
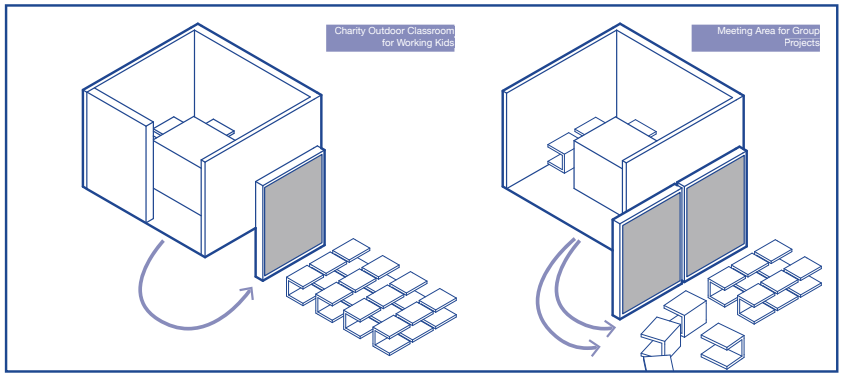


How to Use

The walls of the box are flexible and easy to move. For times that more focused discussions is required, the box can be used in a very private stage where it is completely closed.. The doors of the box are flexible and easy to move to allow the usage of the chalkboard area of the wall for discussion or small teaching sessions.





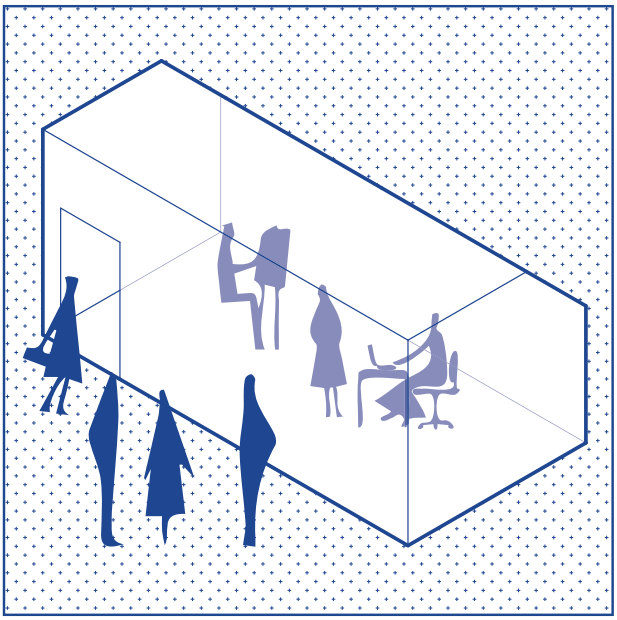
Who

The target group for this component are the university students and any mixed gender groups seeking to work as a team.

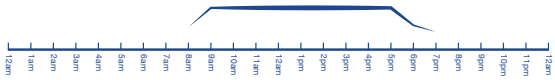
Co-working Studios | Workshops

Information

These cubes, can be platforms for graduated students seeking a space to start their business, i.e., a studio or a workshop. These spaces can also be a space for workers to build up their own small business. People can rent these cubes from the municipality for different periods of time.



Daily Usage / Special Events



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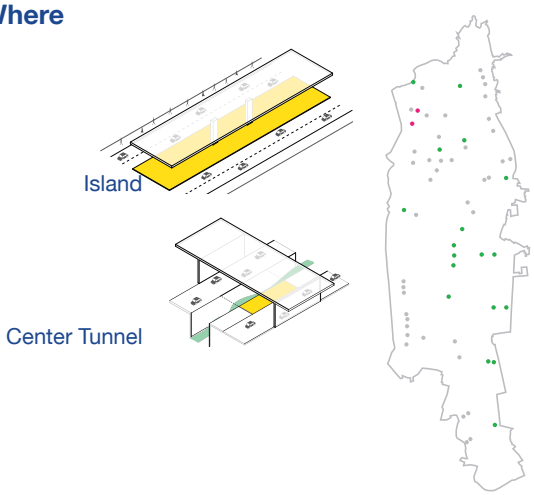
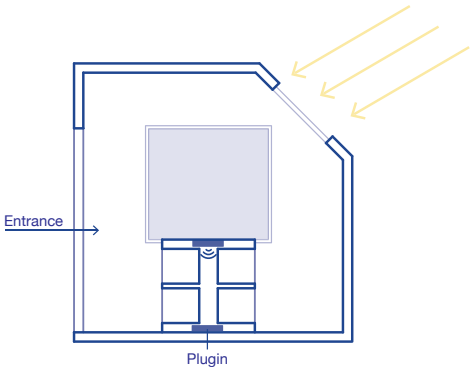
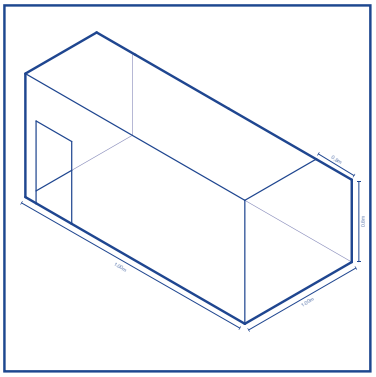


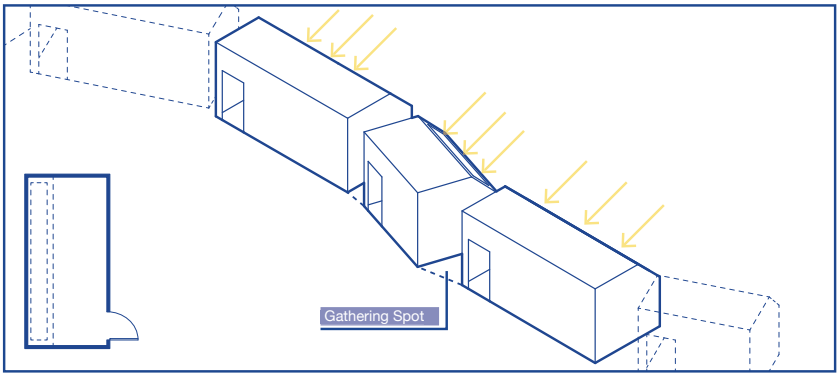
Essentials Elements



How to Use

These studios can be used in a site of intervention as much as needed. Studios will sit with some distance and angles relative to each other which enables people to pass through and also provides spaces for the users of these cluster of studios to socialize. They all have beveled cut edge to bring in natural light as there is not sufficient light under the bridges. They also have open plans that allows the users to use them in any way they want. Users can use it as an architecture studio or a wood workshop.





Who

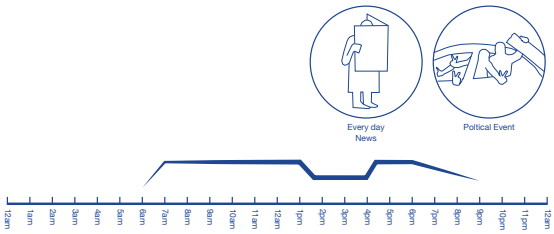
Workers, retired uneducated workers and new graduated students are the main users of these spaces.

Public Digital Magazine

Information

News and specifically political news are very popular among Iranians. All of the people, with any age or background, educated or not, at any time of day, talk about the political and social news happening in Iran and in the World. However, the national news channels are mostly censored and most of the international broadcasting news are filtered in Iran. Before the digital mobile spread this much among the people, magazines were an important part of peoples' daily life. Therefore. This news wall can become a daily public magazine which projects the true news to people.

Daily Usage / Special Events



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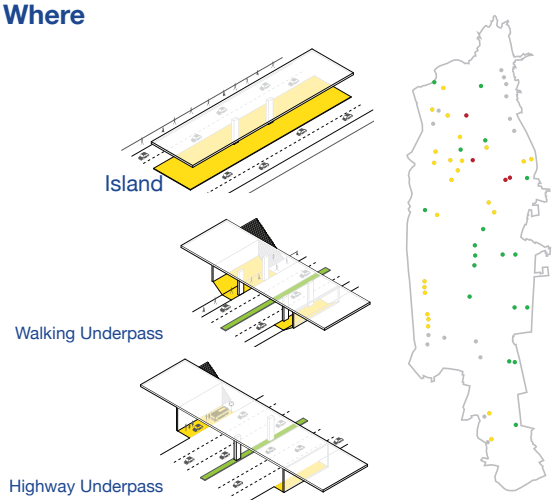
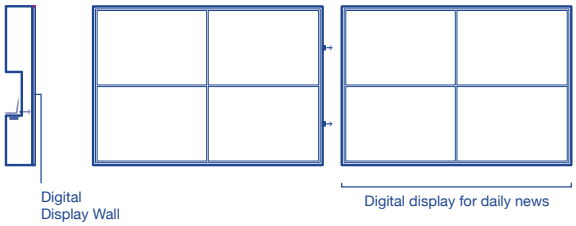
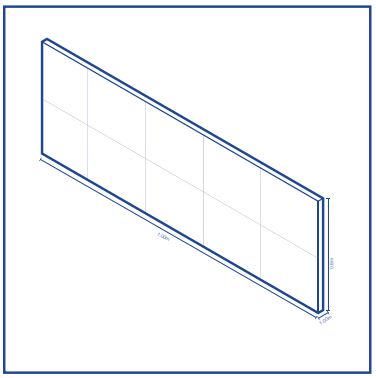


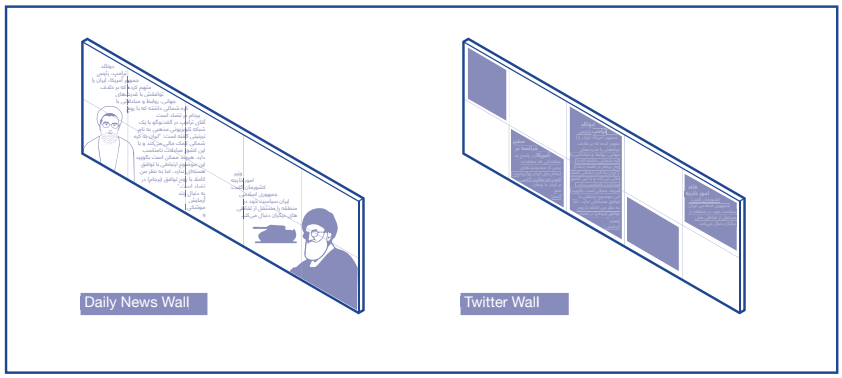
Essential Elements



How to Use

This is a digital wall and can be managed by reliable people. It can display daily on the wall. In some special occasions, it can manage to be a battlefield for citizens to talk and react to their daily life in the city. Also, at the time of the election, which is an important political event in country, it can be a wall for different groups to advertise.





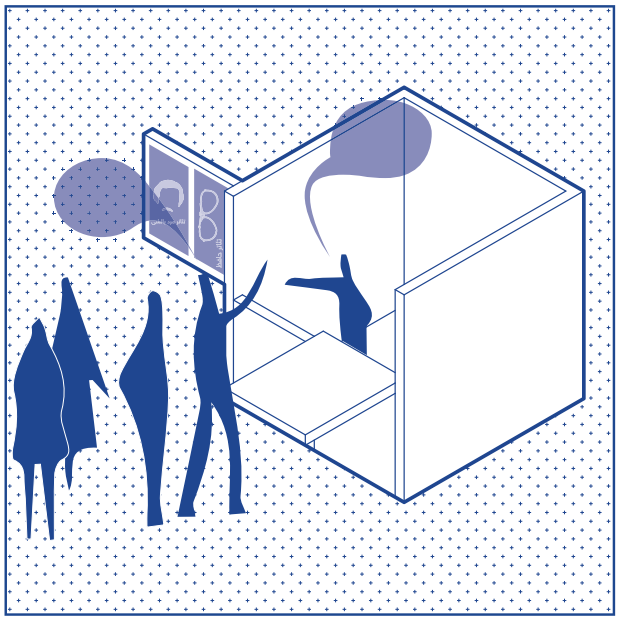
Who

All of the citizens of any age and background are the main users of this wall.

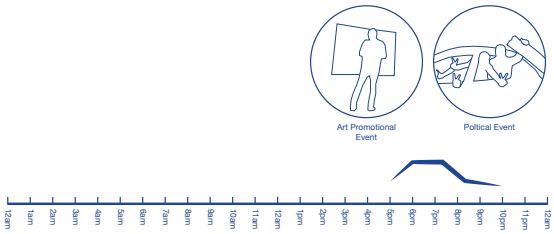
Cultural Centers Ticketing | Info Wall

Information

This stand is a ticketing booth at the time of art performances and also an info-stand for the universities. Performing spaces in Tehran sell their ticket only at their entrances or online on their official websites only. This stand can be a new ticketing booth in other places around the city. Universities in Iran are not open to public, although a lot of public events happen inside them without any advertisement. This stand can also be an info-stand for university events.



Daily Usage / Special Events



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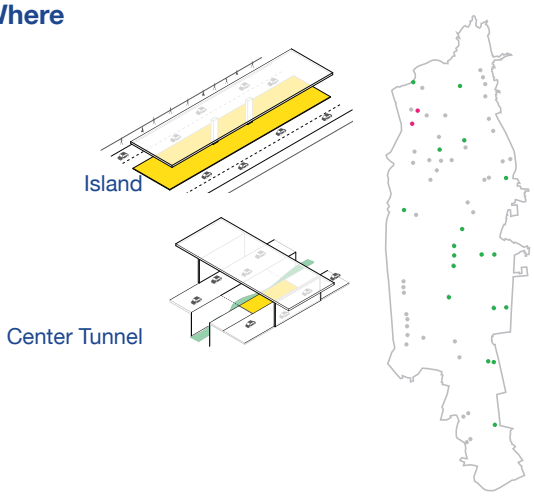
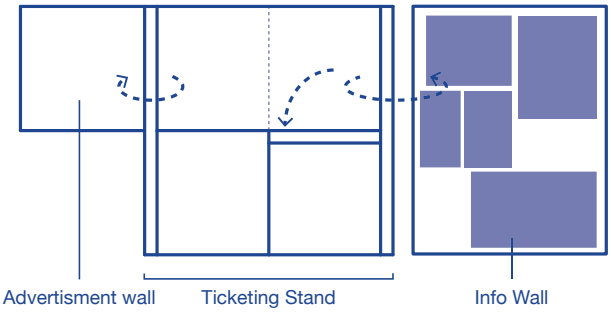
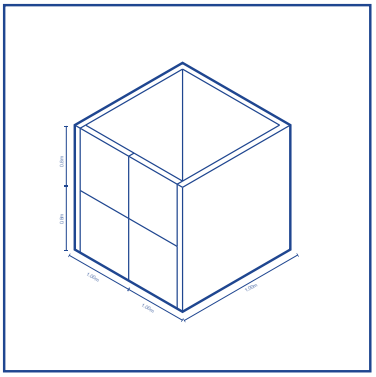


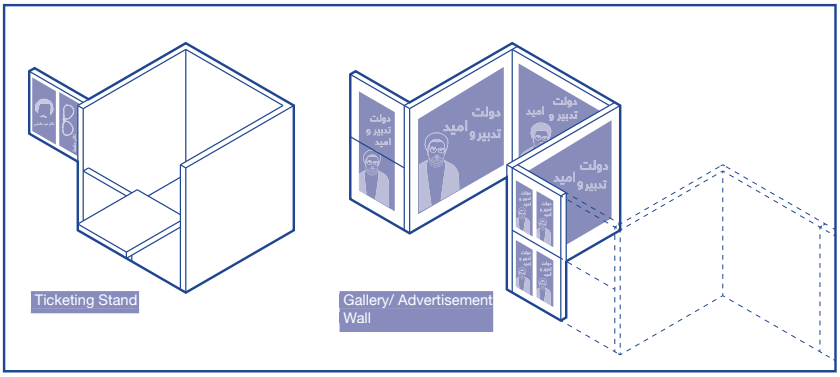
Essential Elements



How to Use

The walls of this stand are all flexible and able to move in different directions. Therefore, they can have various shapes. At their most extreme version, they can be a gallery wall for art display or for the political elections advertisements.





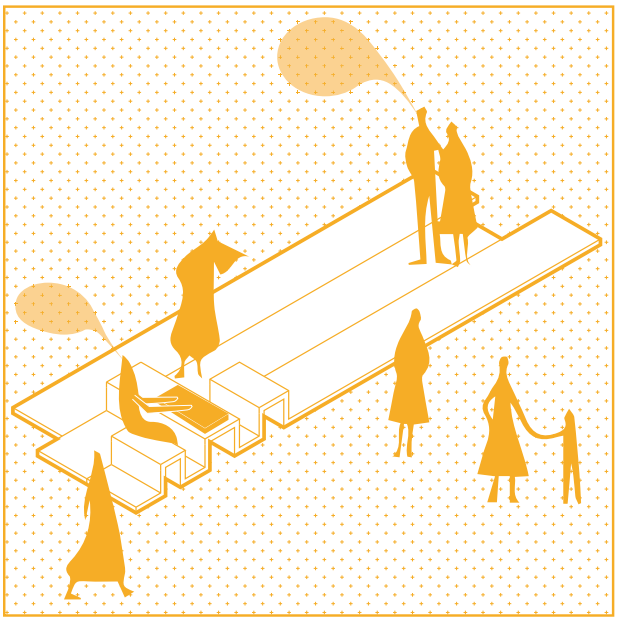
Who

The main users of this stand are the university students and the audiences of art performances.

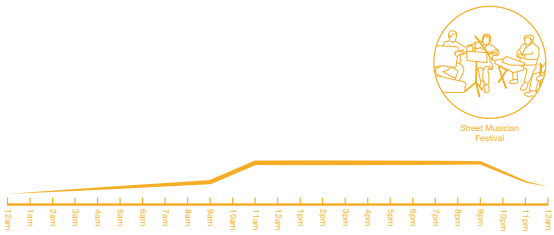
Under the Bridge Musician

Information

In Iran, and specifically in Tehran, you can hear the sound of street music a lot! There are many professional street musicians who are emerging in Tehran. Many poor play music for money. Their music is not always even sound good, and it rather is their job. However, they can change the mood of the streets. As the municipality is not happy with these street activities and sometimes react to them, this component can be a platform for the players to use it and not be dismissed.



Daily Usage / Special Event



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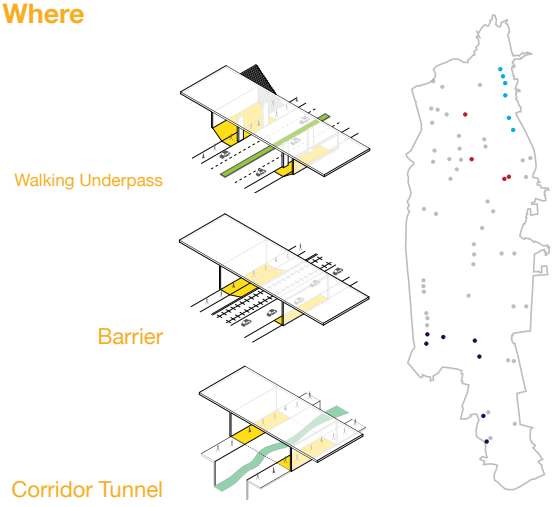
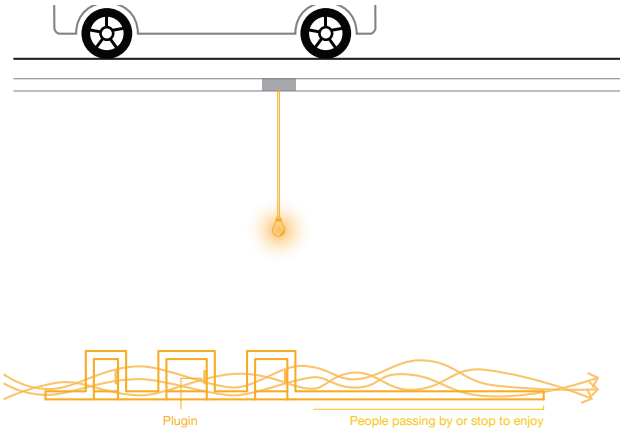
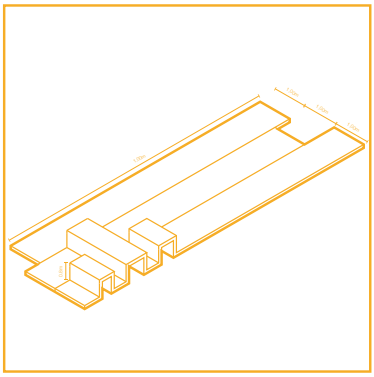


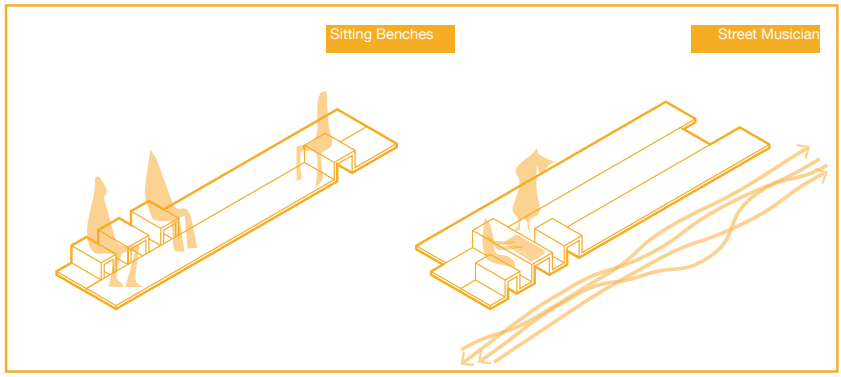
Essential Elements



How to Use

This street music platform is designed in a way that musician can put their instruments on tables if necessary, such as Santoor, a Persian instrument which is popular among them and requires a table to be comfortably played. It also is a place for people to stand and listen without blocking the pedestrian sidewalk. At the times the musicians are not using this platform, it can be used by the public to wait buses in the sites that have a bus station near them.





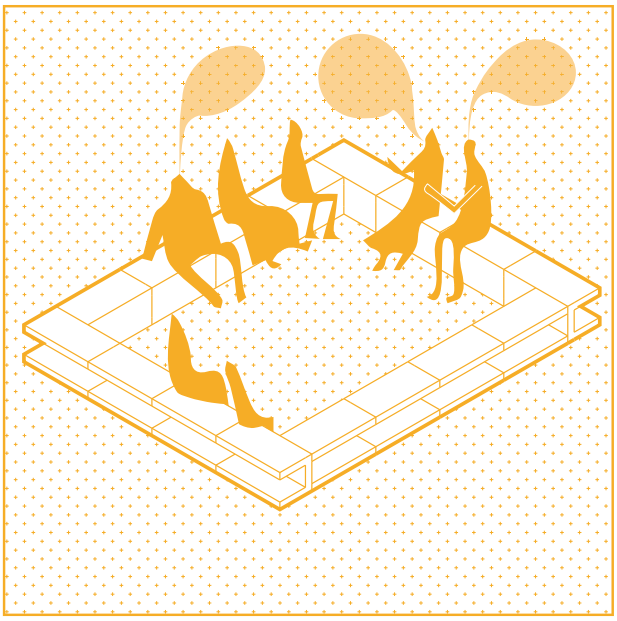
Who

The target actors of this component are the street musicians, professional or not.

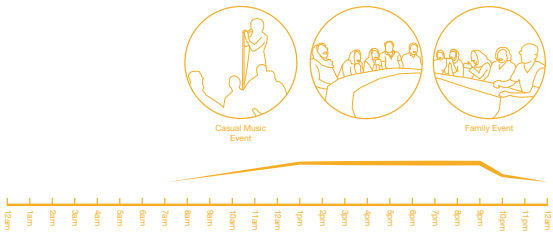
Group Gathering Singing

Information

There is a tradition of group singing among Iranians. Wherever they gather, in a family gathering or even while mountain climbing, there are a lot of popular songs that people know by heart and sing them together. The singing of women in front of any public that include men is forbidden by Islamic law. Therefore, this can be a platform for women to sing along men in public. A casual place to sit and chat and sing.



Daily Usage / Special Event



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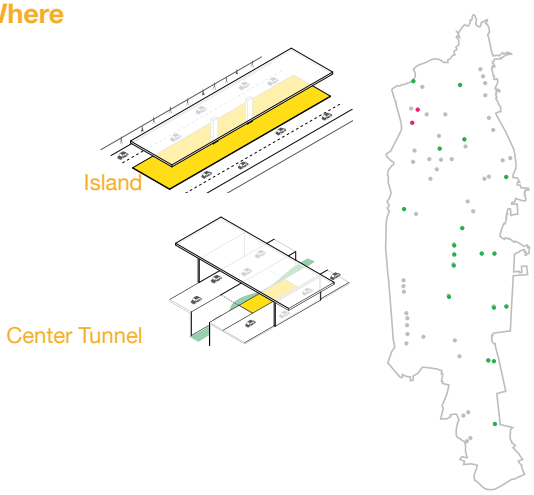
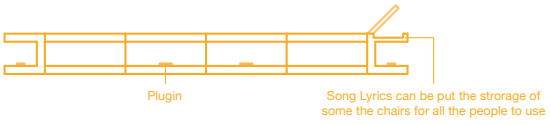
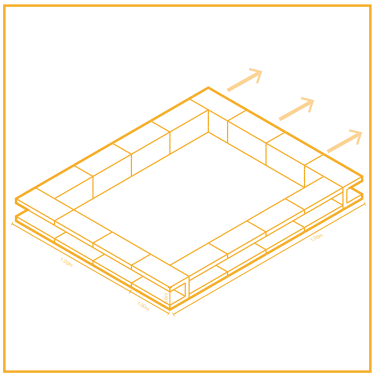


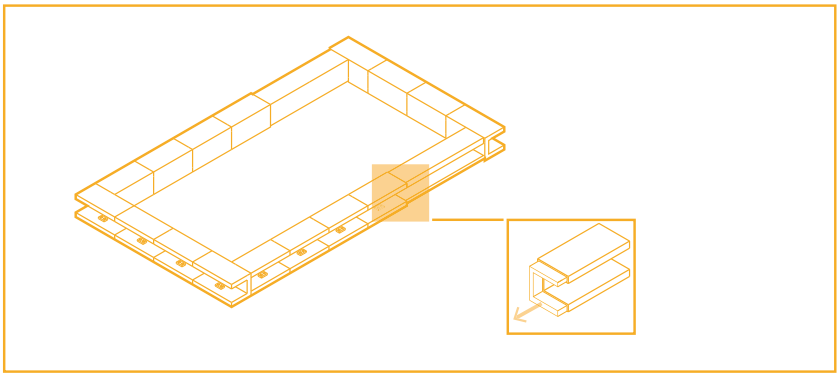
Essential Elements



How to Use

Depending on the people who use this gathering chair, it can expand to allow more people to sit and enjoy the informal gathering. This gathering chair is not just for singing, it can also be a place for people to debate about issues, such as, political or social. There is also plugins available under the seats.





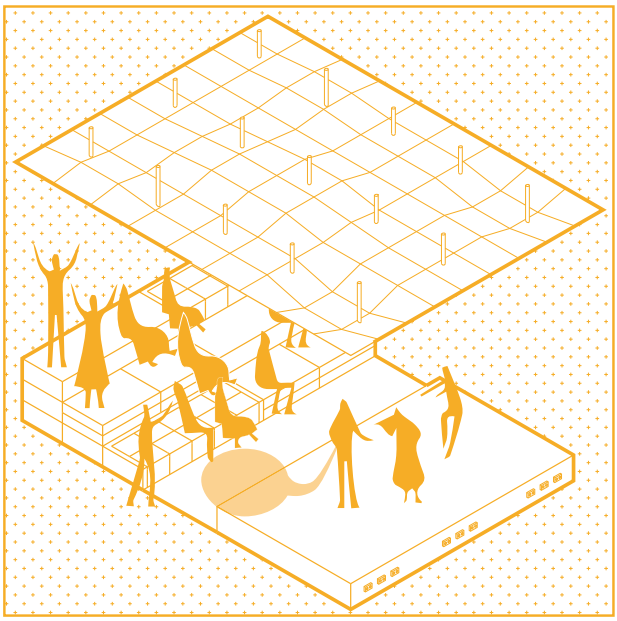
Who

This component is designed for all of the residents of the city, who want to gather together.

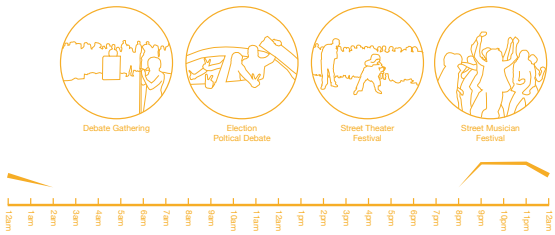
Public Stage

Information

Street musicians are always seeking audience and audience require space to sit and enjoy the performance. This stage can be used for public concerts, performances for the public, religious events and gatherings, and even political debates. There will be no tickets and attendance is free of charge. Professional musicians, street musicians, theater performers and even underground performers can perform on this stage.



Daily Usage / Special Event



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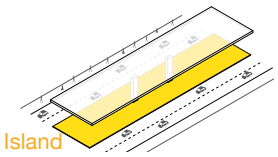
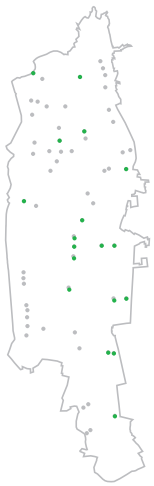
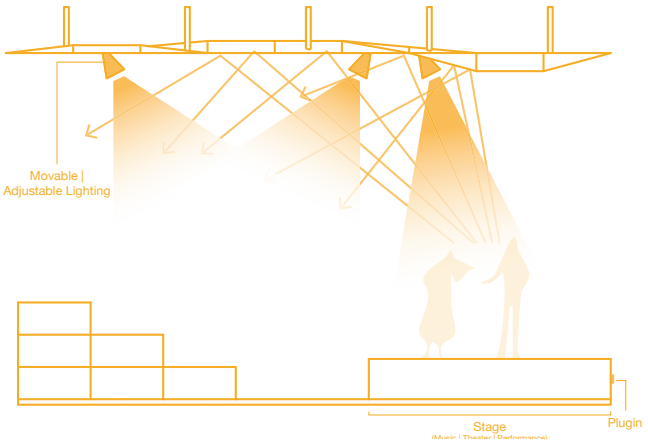


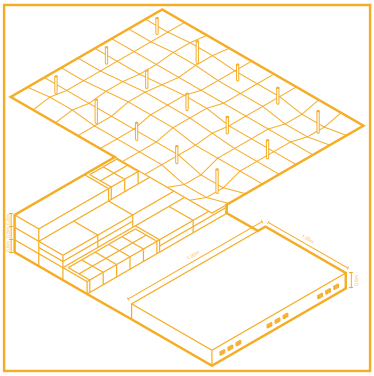


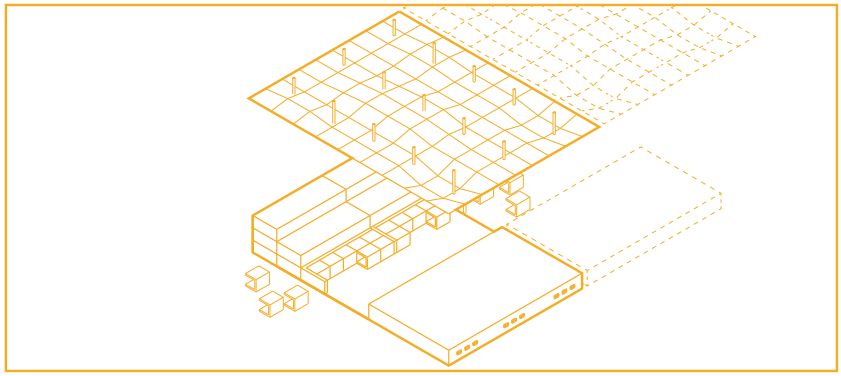
Essential Elements



How to Use

Because of the nature of artistic performances, they need a performing stage in which sound is distributed evenly to the audience. Also, stage lighting is an important factor for performances, even in the open ones. Therefore, an acoustic ceiling with adjustable lighting will hang above this stage for improving the quality of performances. For bigger performances with more attending audience, more stages can be added together.





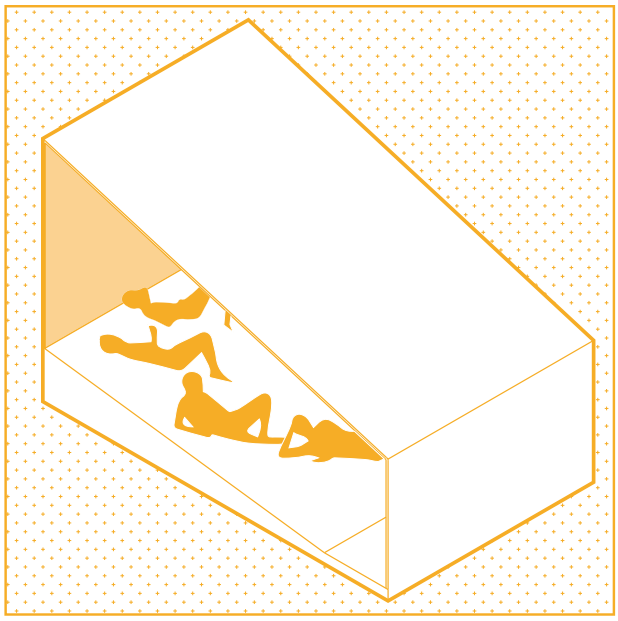
Who

This stage is designed somehow that all kinds of performers be able to use it.

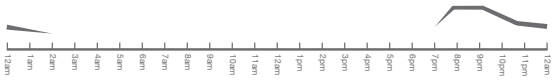
Movie Night Box

Information

This open box, which can present art installation on the ceiling, can be used as an interactive artistic corridor for people that are walking and passing by in the morning. At night, when the number of passing people is less, it can be used as a film displaying surface on the ceiling and a slope for people to lay and enjoy the film screening on top.



Daily Usage / Special Event



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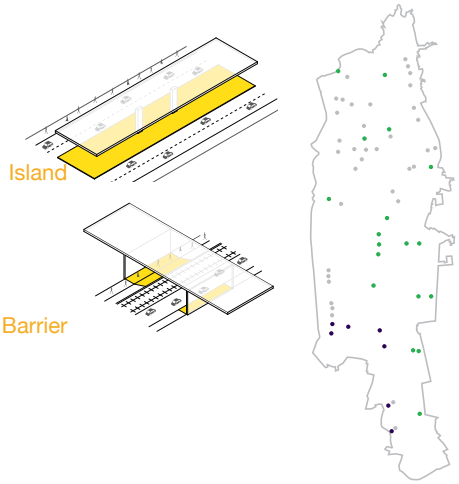
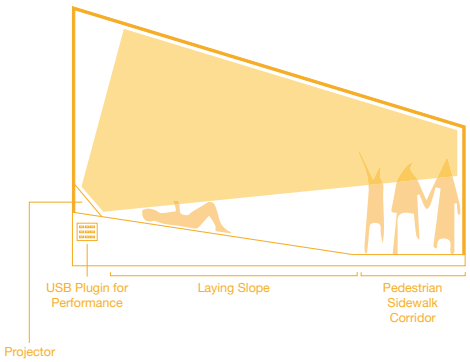
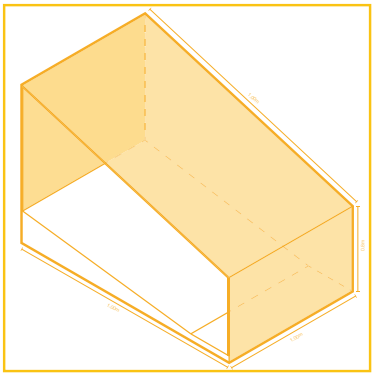


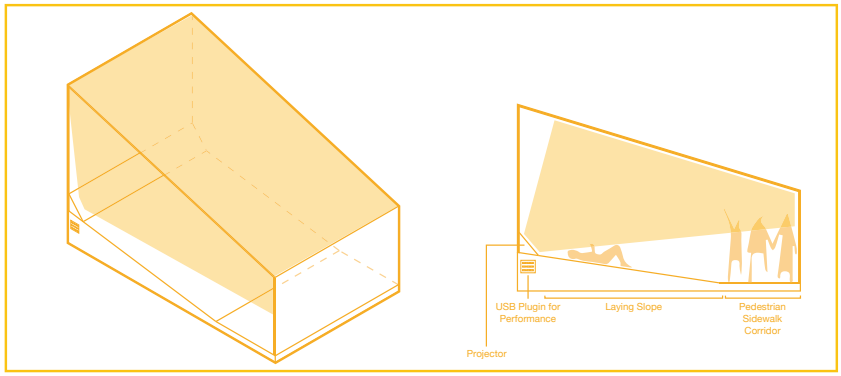
Essential Elements



How to Use

The slope will be made of soft material, which can provide a comfortable surface and encourage people to lay and enjoy. On the other hand, it can be a pause and enjoying moment for the people passing this corridor and can be a different moment for them in the city.





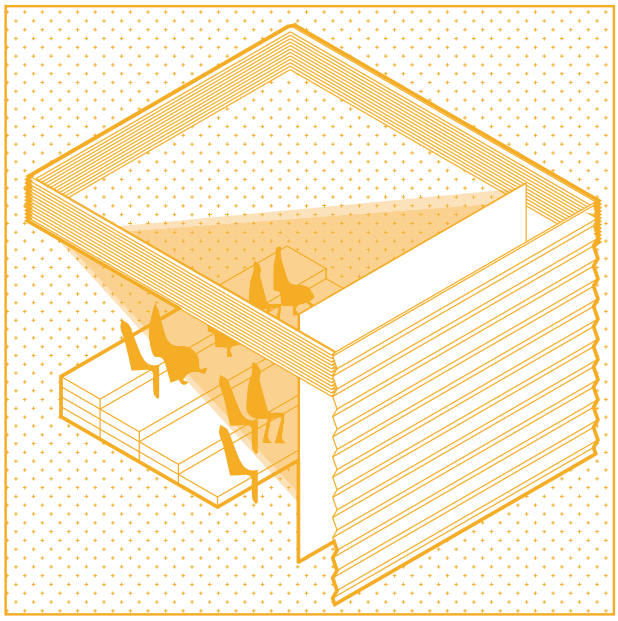
Who

All of the people can be the users of this components.

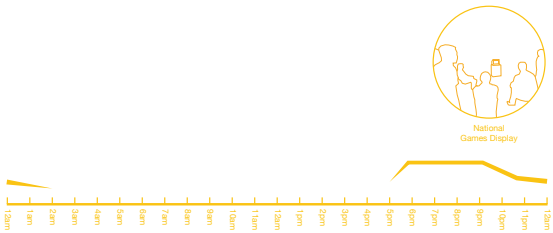
Outdoor Cinema

Information

In comparison to other regular cinemas and cinema complexes, this outdoor cinema can be a place for the less seen films, student made films, films that do not get the permission to display in the cinemas, or underground films that are distributed illegally.



Daily Usage / Special Event



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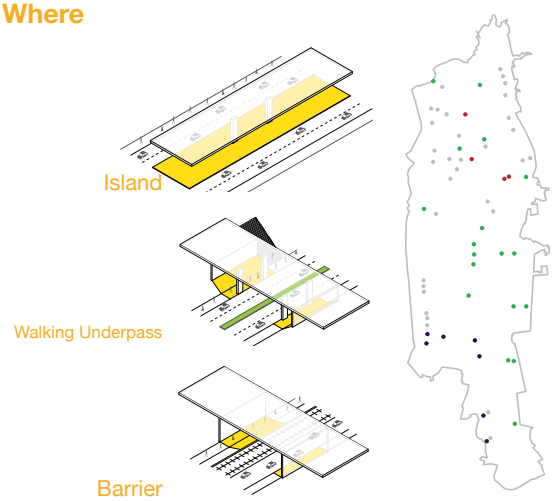
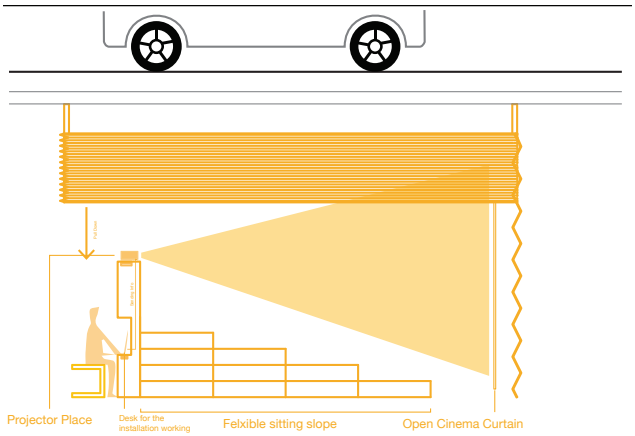
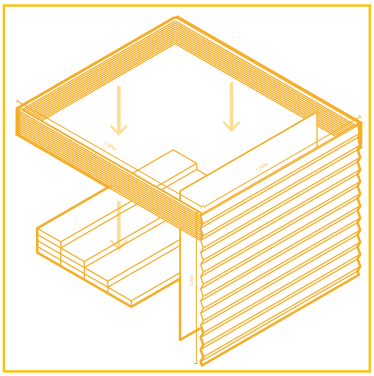


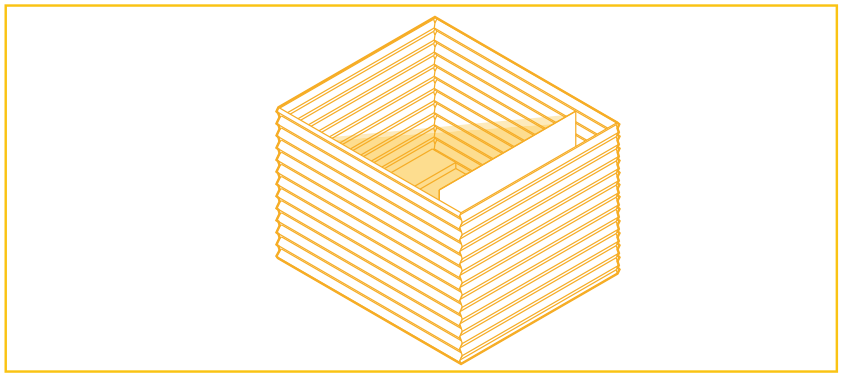
Essential Elements



How to Use

The cinema stage has a curtain that can be pulled down for more private film displaying. Also, there are electrical plug-ins and people can project their own movies by connecting their devices to the audio-visual interface of the cinema as well.





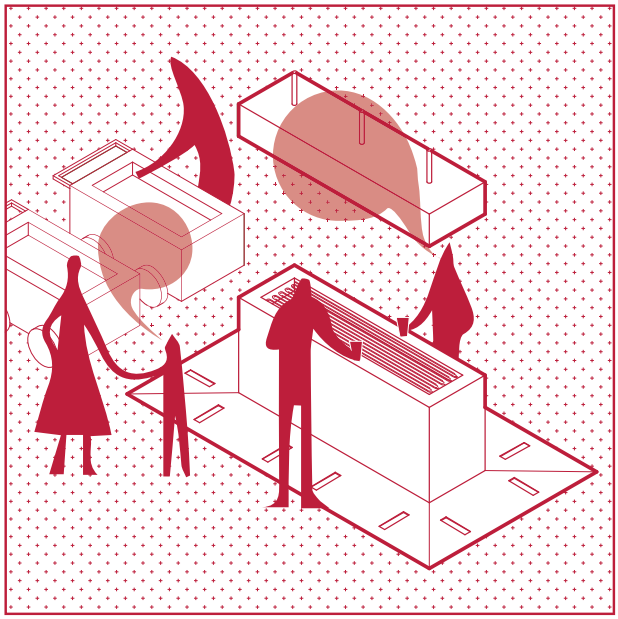
Who

All the citizens can come and enjoy the movies, but the film makers are the main actors and managers of these spaces.

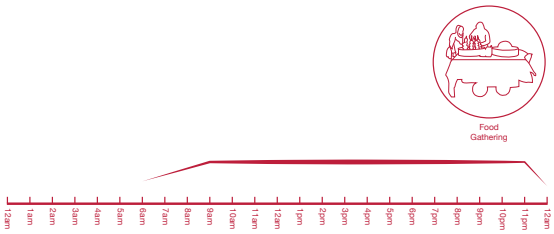
Food Vendor Gathering

Information

You can see food carts everywhere in Tehran. They sell hot foods and beverages or cold beverages. People can have food wherever they want. Anybody can rent or buy these carts and take them anywhere they want to sell their foods. Food cart vendors are active through the day and night. Thus, a stand is designed for people to gather around and get warm while they are having their food.



Daily Usage / Special Event



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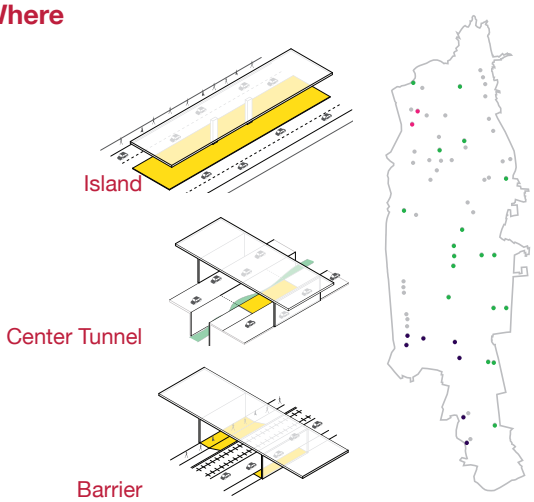
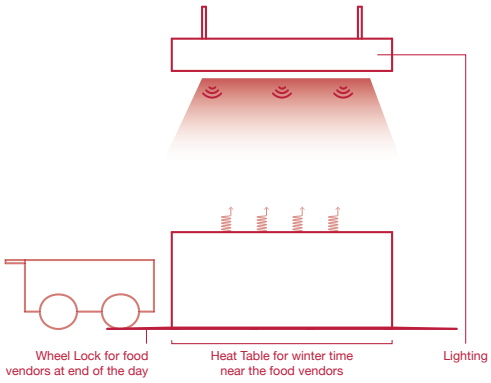
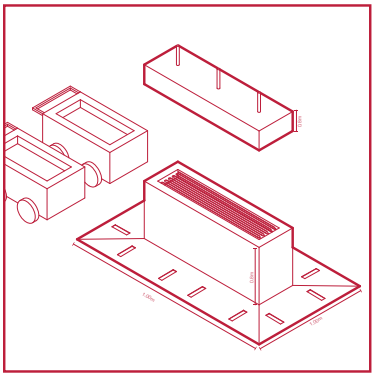


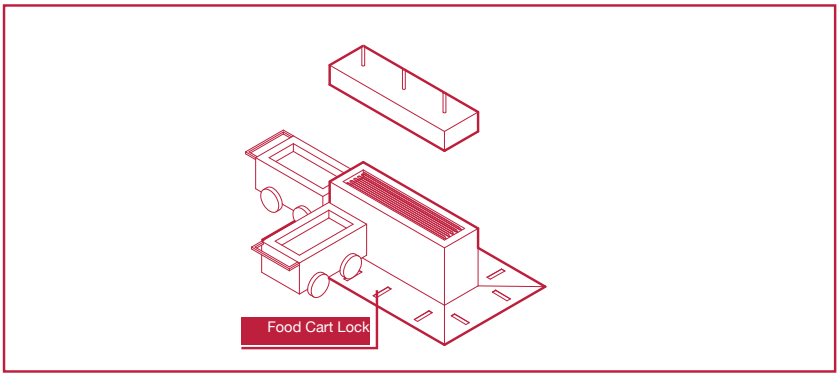
Essential Elements



How to Use

Food cart vendors, need to park their carts in a safe place after their working hour is over. The gathering stand offers a surface on the ground that while the vendors are selling food will be empty and becomes a place for standing on, and at night vendors can lock their carts to.





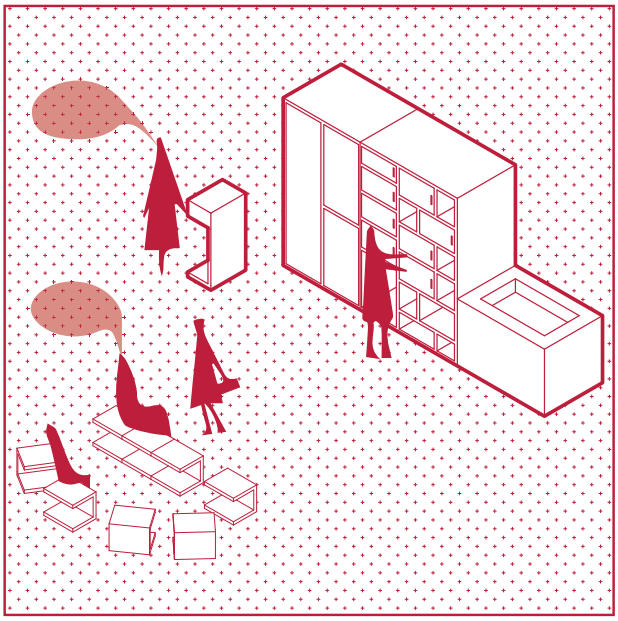
Who

People hanging around the food cart and the vendors are the main targets of this component.

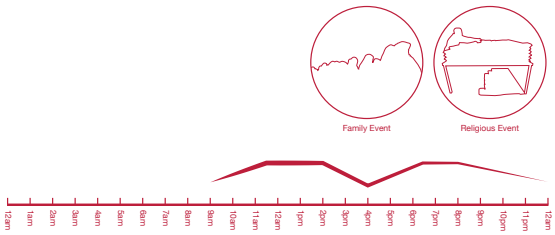
Urban Kitchen

Information

Urban kitchen is a wall that the local community, mainly housewives, single moms and old women can cook and sell their food on it. This open kitchen can be placed in educational or administrative districts of Tehran, where more people need and enjoy homemade food.. Also, these walls can expand and offer more food in the religious events that people give Nazri, which is free food for mainly poor people, and all of the citizens can have some.



Daily Usage / Special Event



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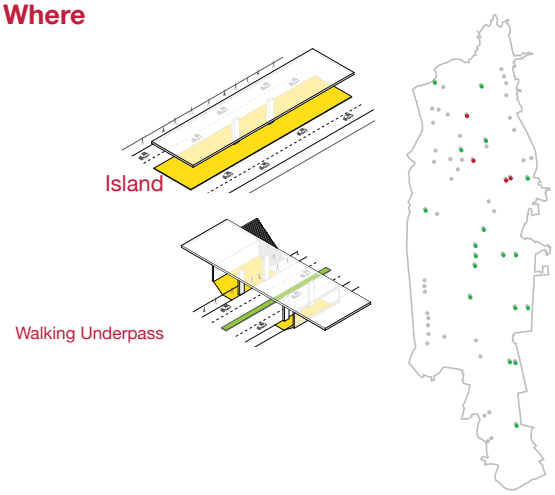
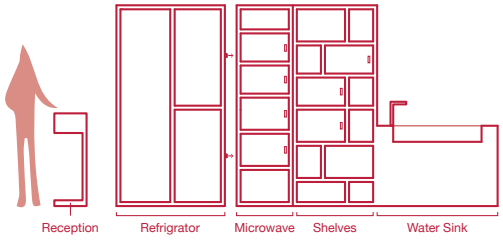
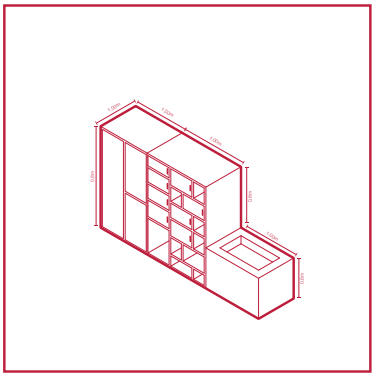


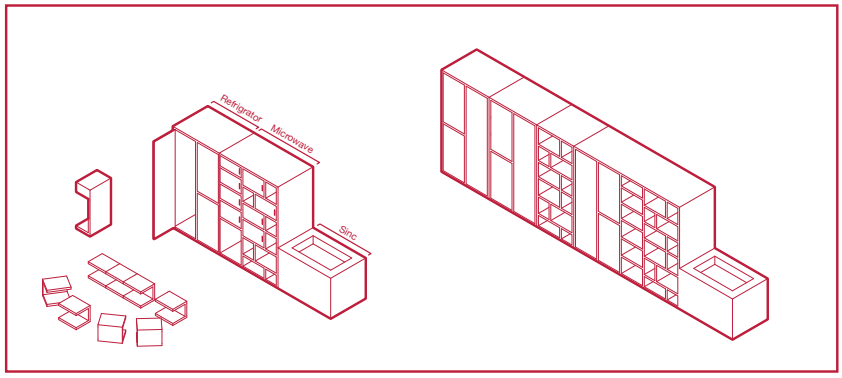
Essential Elements



How to Use

The urban kitchen wall consists of refrigerators, microwaves and a sink, People are allowed to warm their food, buy foods or wash their dishes. This open kitchen can be expanded and have more space for bigger events.





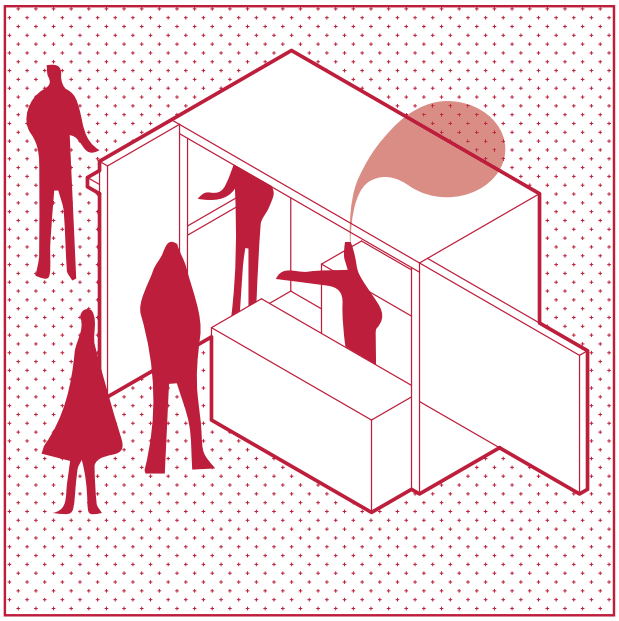
Who

Local community, mainly women who cook as a part time job are the main actors of the open kitchen.

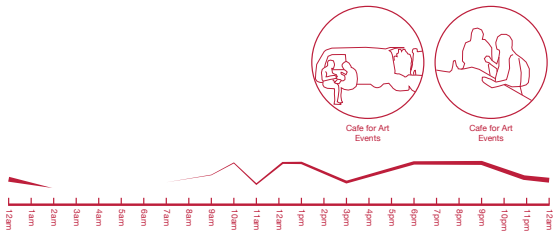
To-Go Tea Box

Information

The tradition of drinking tea in Iran is very old and there are many places for people to gather and drink tea. On the other hand, because of the modern life in cities like Tehran, people need to-go tea or coffee in disposable mugs, so that they can drink their beverage while transporting. Thus, this stand will be a to-go tea store for bringing these two needs together.



Daily Usage / Special Event



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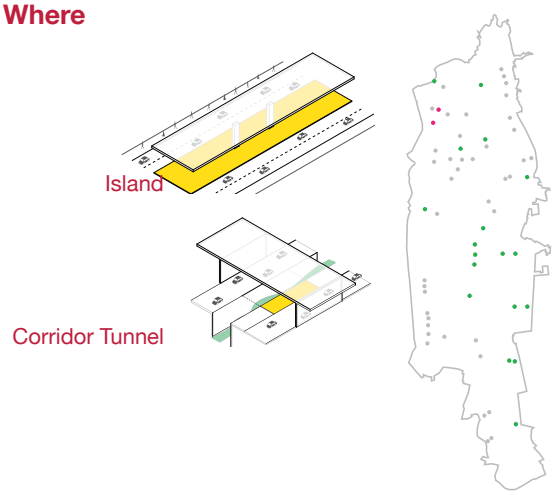
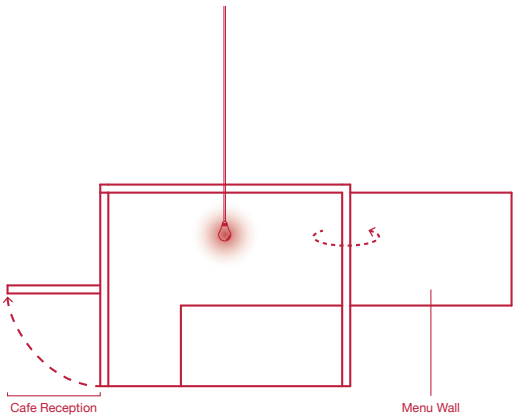
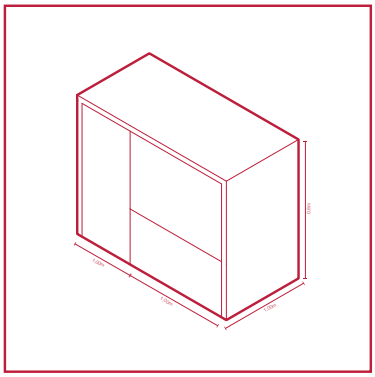


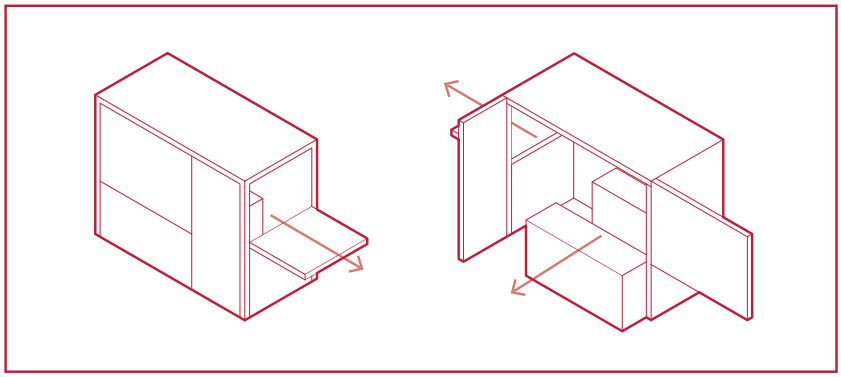
Essential Elements



How to Use

The boxes can expand based on the number of the customers. There are different openings designed that can be opened and serve more people in the crowded times. The tea box can be run by the elderly in the morning. If they do not tend to stay and work late, they can change their place with the youths to serve teas and coffees in the afternoon until midnight.





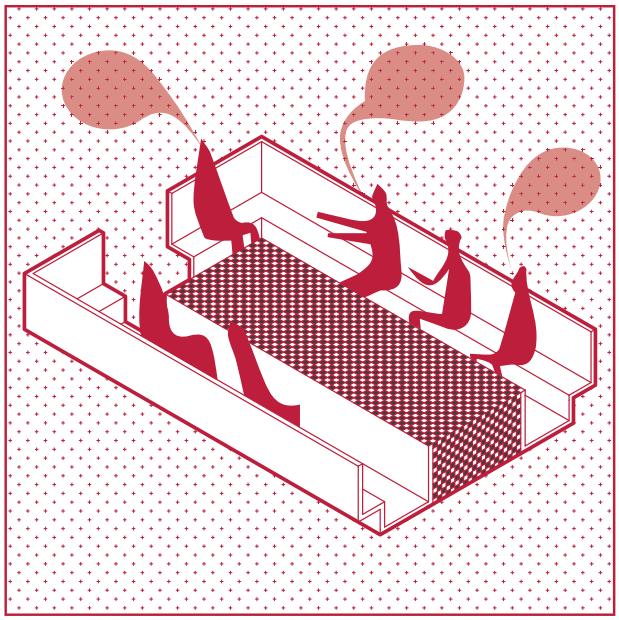
Who

The main group that run this tea box are the people who tend to sell and make beverages for people.

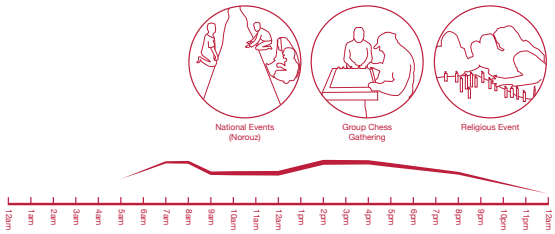
Urban Dining Table | Chess Table

Information

As taxi is one of the key public transportation systems in Tehran, there are taxis moving and parking everywhere. As there are no designated cafeterias or dining rooms for taxi drivers, they rest and eat in their cars. .. All aside, chess and backgammon are very popular among the elderlies, but there are no tables or platforms citywide so they can play together. Therefore, this table can be an answer to all these needs in the city: it can be a table for taxi drivers to eat, hangout and play chess.



Daily Usage / Special Event



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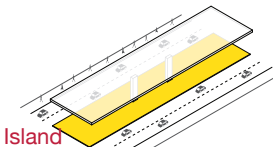
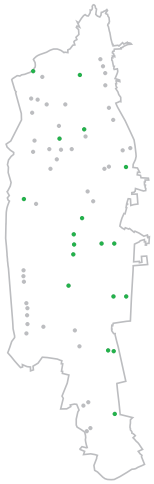
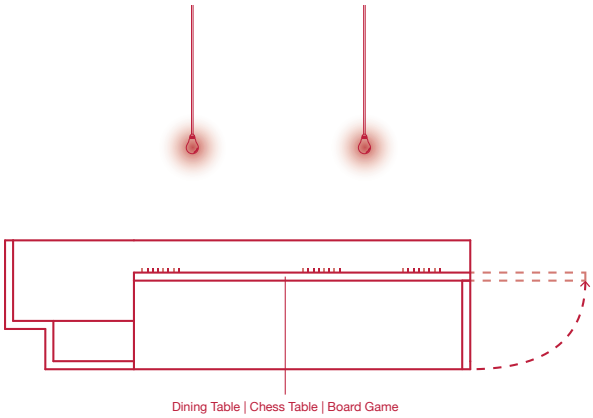


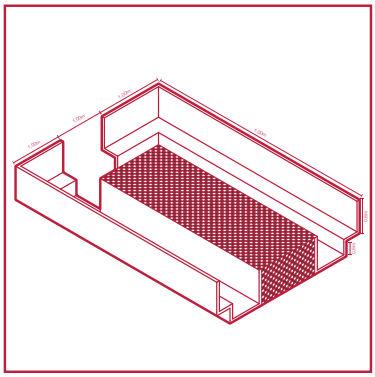


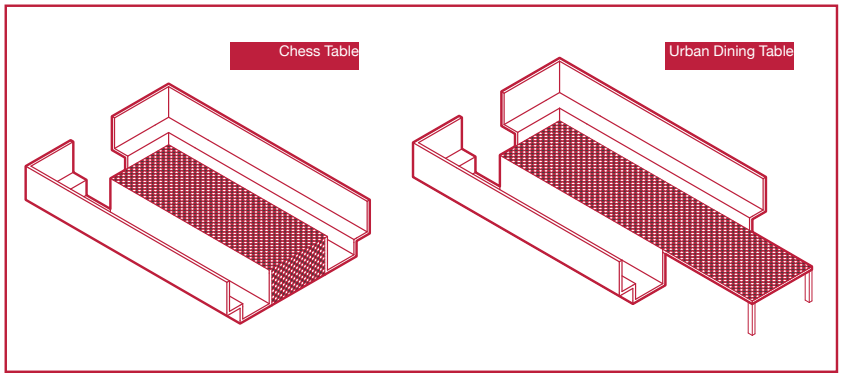
Essential Elements



How to Use

As the number of the users of this urban dining/chess table might increase, the table has the ability to expand for more people to gather around. The pattern on the table is actually a chess board that allows people to play on it at any time they want with their own chess pieces.





Who

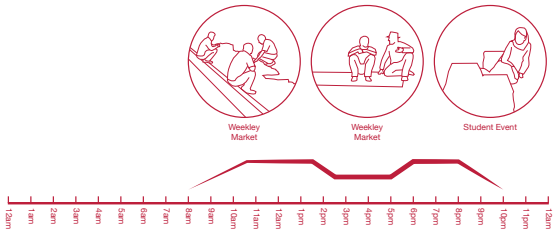
Taxi drivers and seniors are the main users but all the other citizens can use it as well.

Street Vendor Platform

Information

There are a lot of different types of street vendors sprawled around Tehran. They sell various products, such as, fruits and vegetables, shirts, jewelry, old books, paintings or their individual artifacts. But the municipality of Tehran is dispersing them from the street, even if this job be the only way to find bring money for their families. Therefore, this platform is designed to organize them under the bridges, where no one can ruin their goods.

Daily Usage / Special Event



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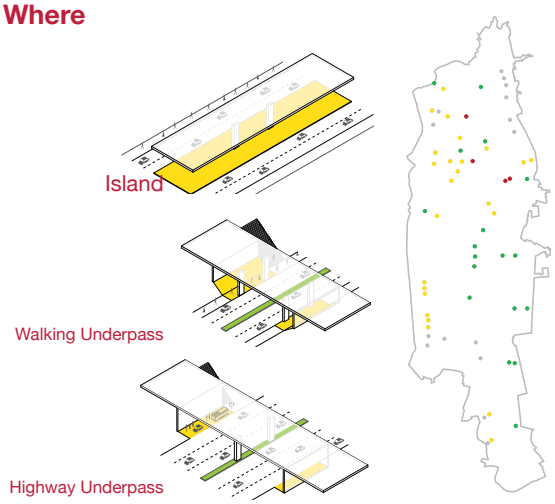

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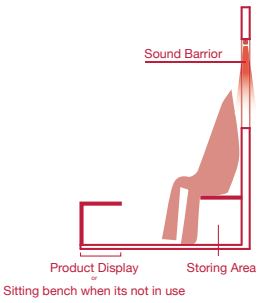
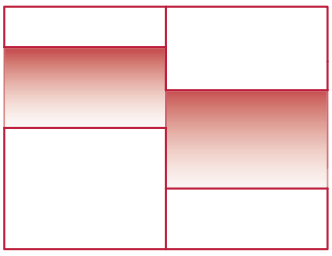
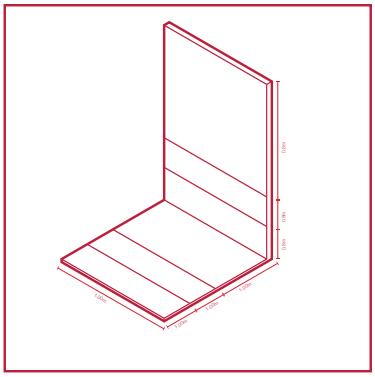
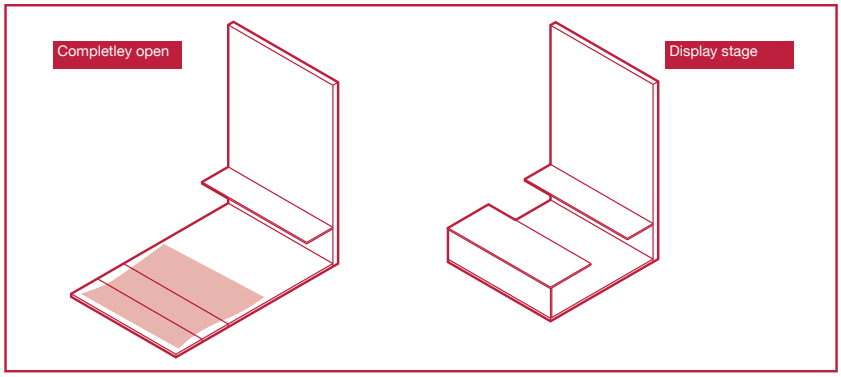




How to Use

The main similarity between all of the patterns of street vendors is that they all need a place to display their stuff. Thus, the vendor platform is designed to be expandable and adaptable to meet all of these various products to sell. As a result, this platform has the ability to open up for bigger products, or to roll up for a stage to present the products.





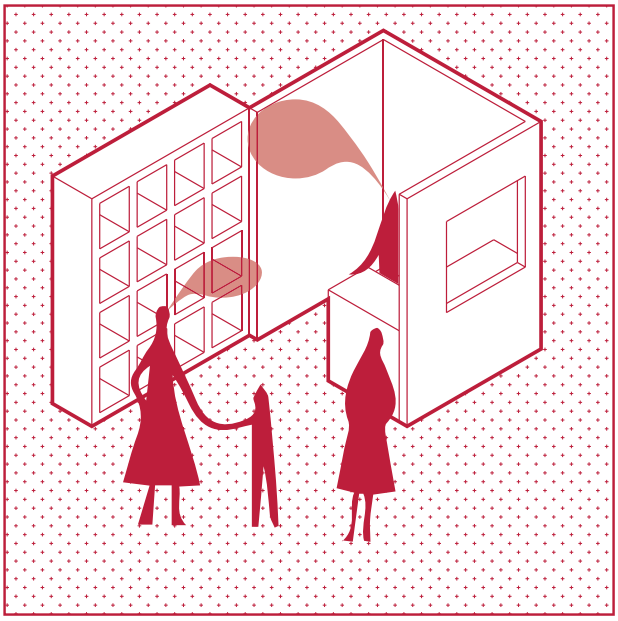
Who

All various street vendors are the main users of this platform.

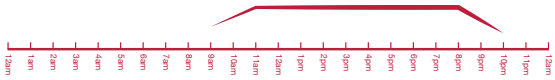
Advertisement Shop Kiosk

Information

This shop kiosk is an advertisement kiosk for the local shops in the area. This kiosk can become a showcase for the most representative product of the neighborhood shops. They will sell few showcased products on spot, but people should go to the main store for more products. This can help the local shops to attract more customers. It can be best used in the shopping zones of Tehran, , like Enghelab Street with various book stores along the street or Sepahsalar street which is also known as the shoe district of Tehran.



Daily Usage / Special Event



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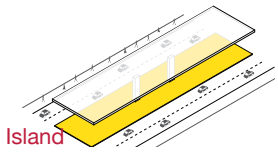
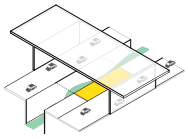
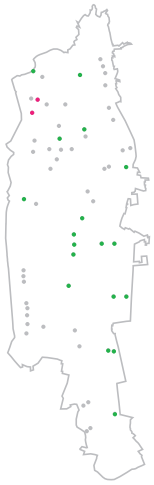
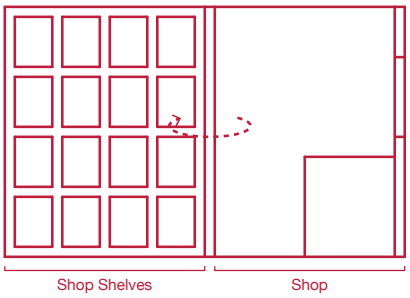




Corridor Tunnel

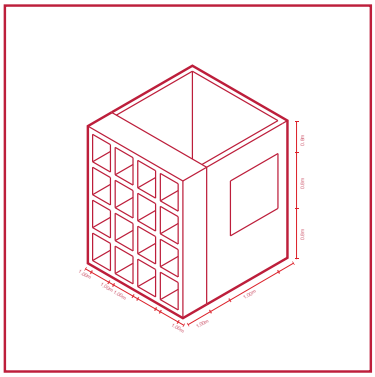


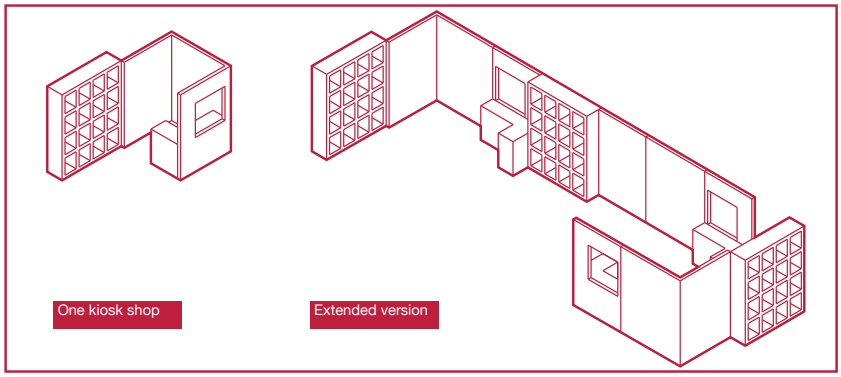
Essential Elements



How to Use

The walls of the kiosk are completely flexible and can be opened to make a bigger and a more open shop kiosk for more products to display and for people to walk through and buy more products.





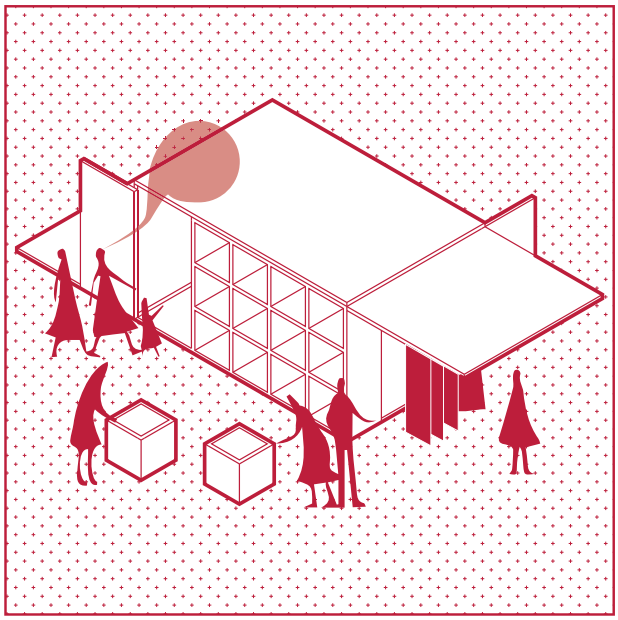
Who

Various groups of people who want to be a seller can be the users of this kiosk shop.

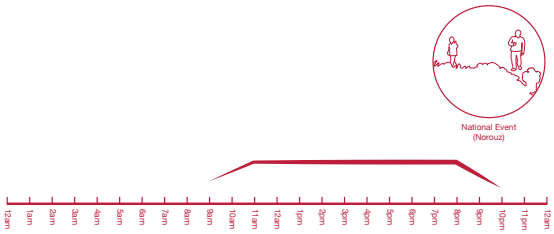
Group Shop

Information

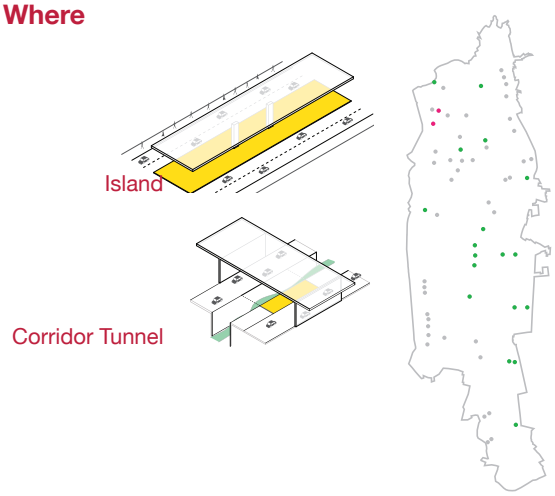
Youths seek a cheap place for selling their products, because not all of them have the ability to start their own firm or to buy or rent their own shop. Normally, they bring their products to the Friday market (in Parvaneh Parking, Jomhoori Street), where various products are being displayed every week. But this market operates only on Fridays. Therefore, this group shop can be a place for sellers to sell their product everyday. Also, this shop can be a shared space for more than one producer.



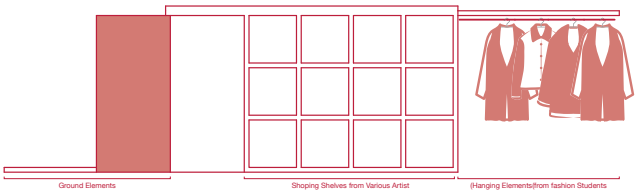
Daily Usage / Special Event



Where

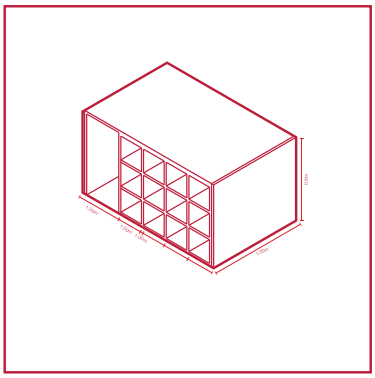


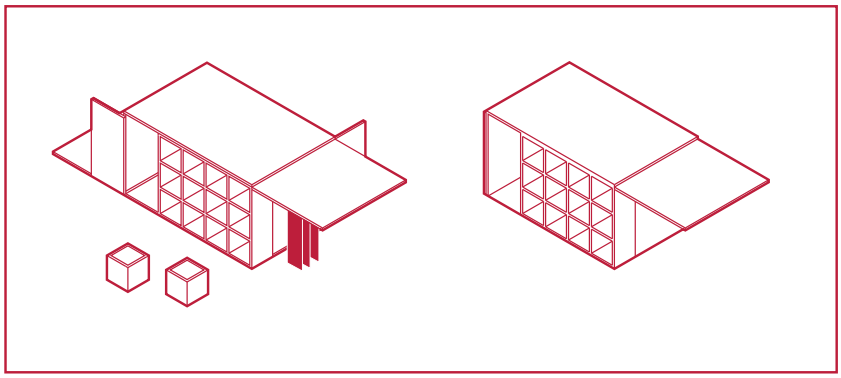
Essential Elements



How to Use

The walls of this box, can be opened from different places to extend the shop based on the product they sell. This expansion can be helpful for the most crowded times of year, like near Nowrooz, when it can host costumers.





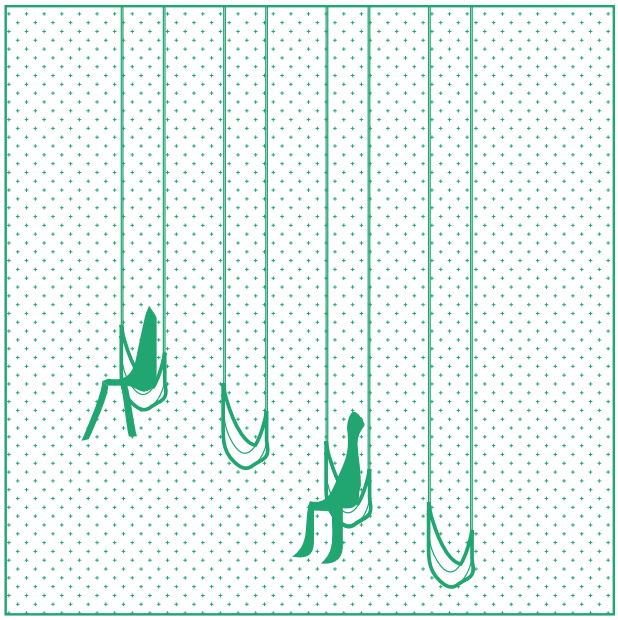
Who

All the younger generation seeking a place to display and sell their products are the main target of this group shop.

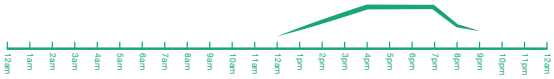
Swing Sets

Information

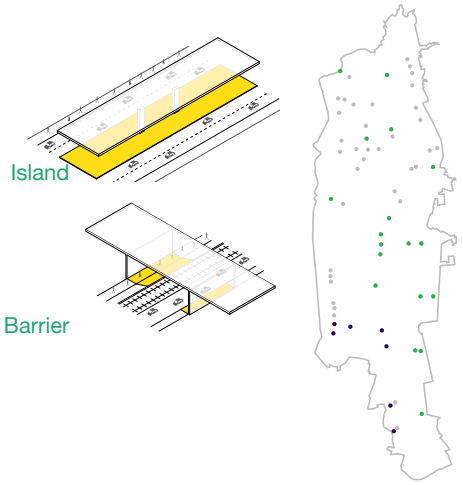
In the grey city of Tehran, set of colorful and entertaining elements can bring joy into citizens life. This set of colorful swings can be hanged from under the bridge, in any site of intervention. All of the citizens, will happily enjoy them.



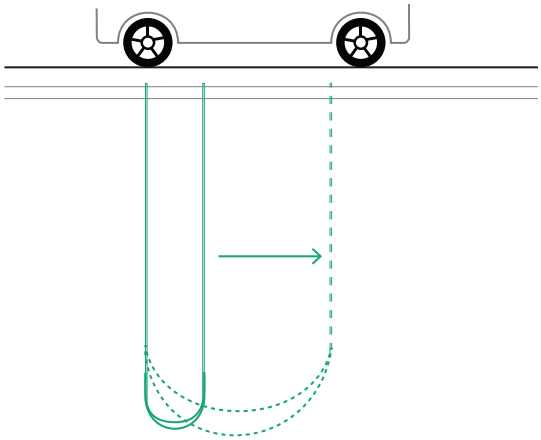
Daily Usage / Special Event



Where

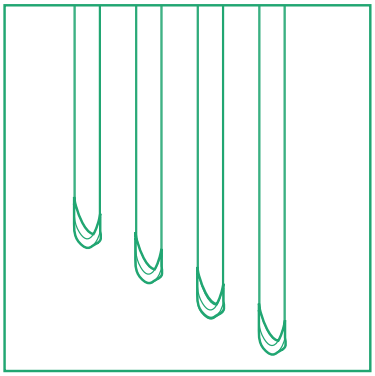


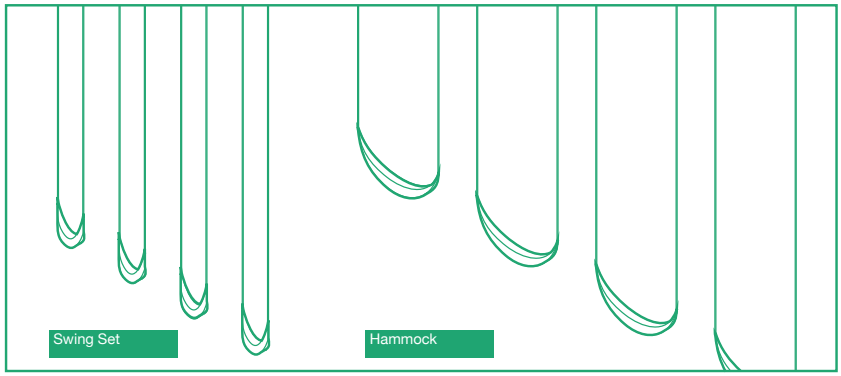
Essential Elements



How to Use

Swing have the possibility to move individually and be expanded to make a hammock, especially at night for the homeless people who seek a place to sleep and rest. The instruction of using them is easy and anybody can move and expand them.





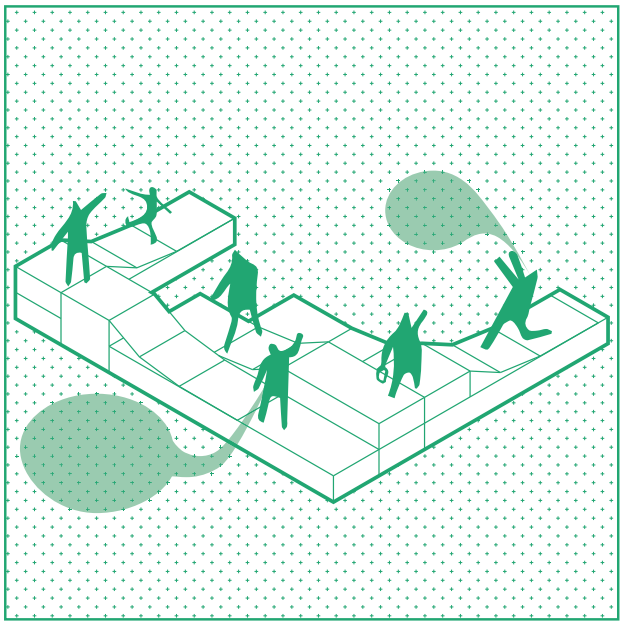
Who

All of the citizens can use these swings despite their age.

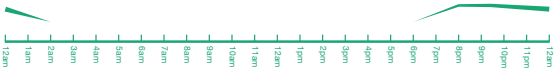
Skateboard / Parkour Elements

Information

As mentioned before, major group of citizens of Tehran are youths. One of the sports becoming popular among them is skateboarding and parkour. This component is consisted of small pieces that can be fit together to make playgrounds for skateboarders and parkourers.



Daily Usage / Special Event



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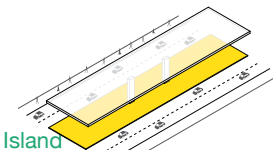
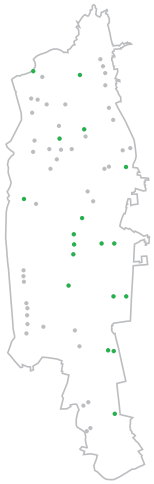
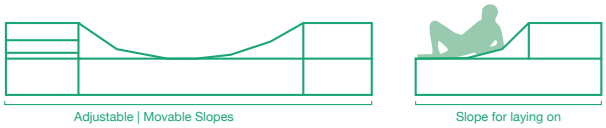


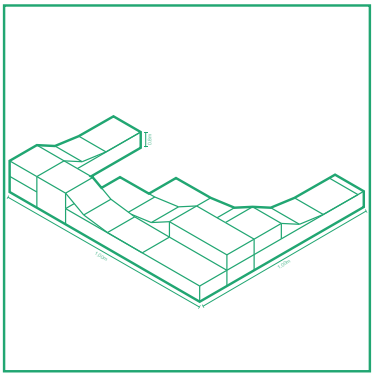


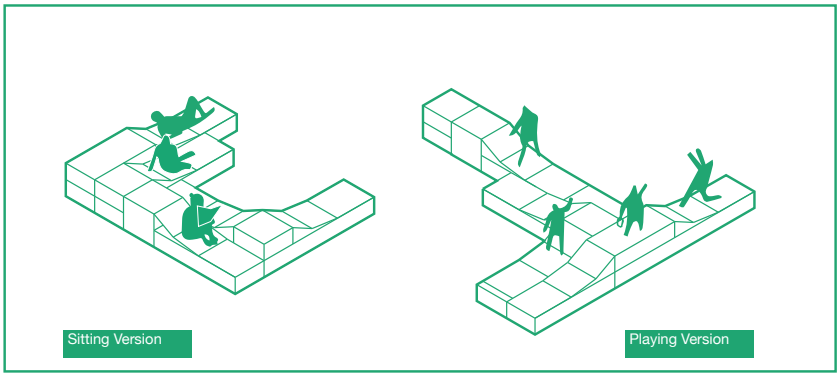
Essential Elements



How to Use

The pieces of the Skateboard/Parkour Element are lightweight and easy to move. They can also be used as sitting areas in the time that no one is playing on them.





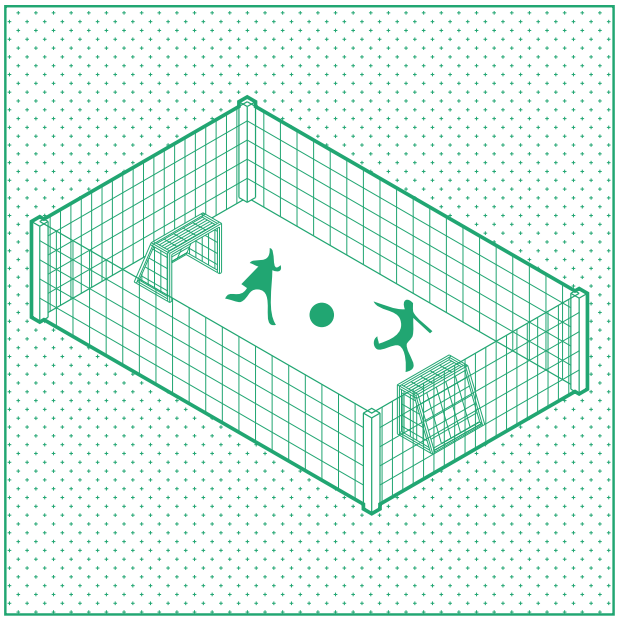
Who

Mainly youths are the users of this component.

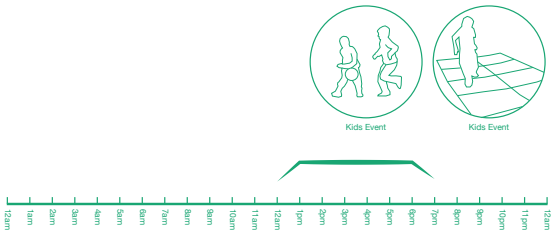
Street Game Cage

Information

Street games have always been very popular among the kids of Tehran. Formerly when the streets were narrow and with less cars, kids played in the streets with their peers. There were many different traditional games that kids play in Tehran. Most of them are being forgotten, but street football is the only game that is still popular among young boys. These street game cages are safe places to play these almost forgotten games, and not to look into mobile and compute for a while.



Daily Usage / Special Event



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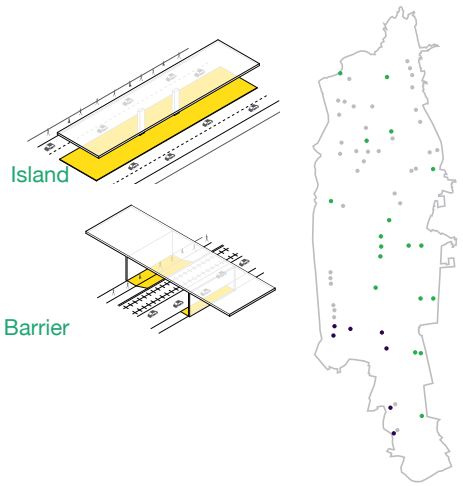
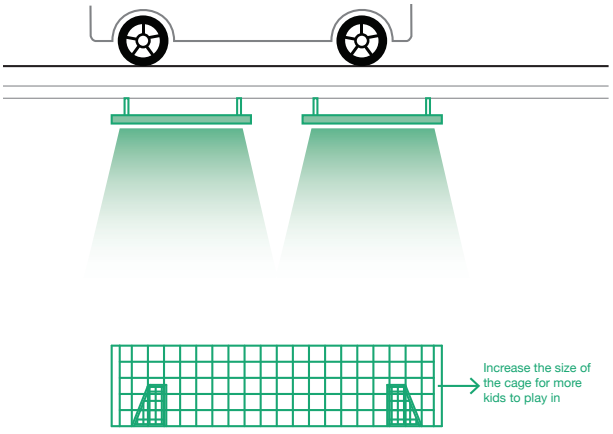
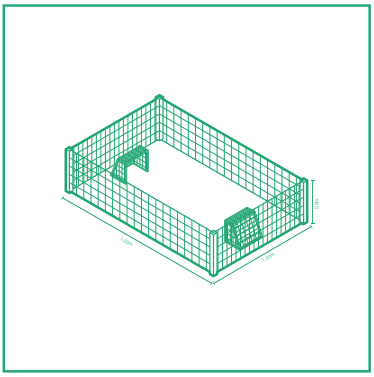


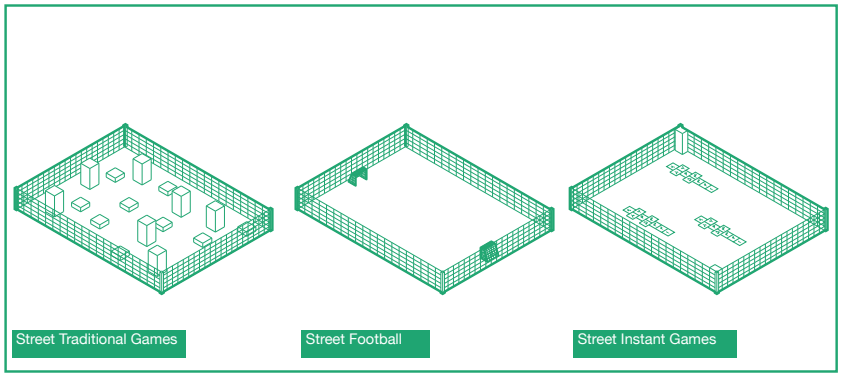
Essential Elements



How to Use

The most important issue for having street games are their safety standards. It is important to design them in a way that kids don't run into cars. Therefore, these game platforms have crash safe fences around them that can bring a safe place for kids to play in. They can also be expanded to make bigger areas for more kids to play in.





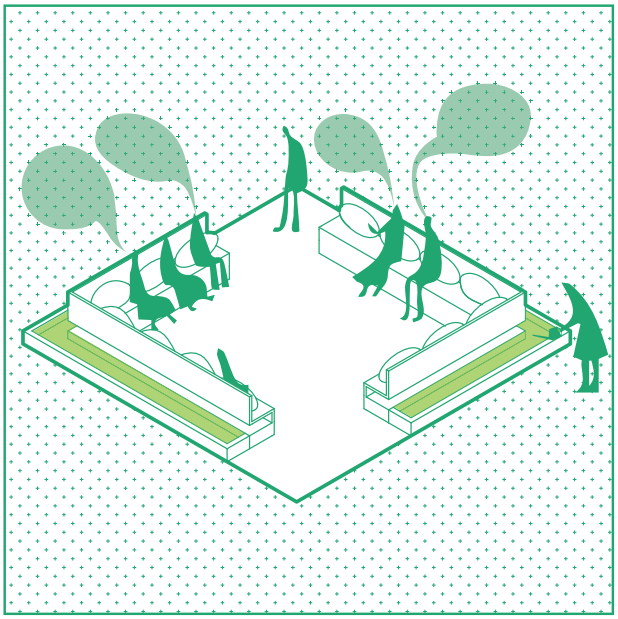
Who

All of the kids are the actors of these spaces.

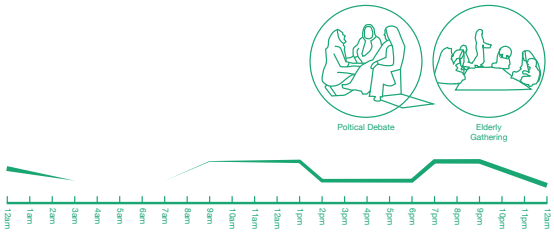
Gathering Community Garden

Information

Iranian elderly have the habit of sitting together in front of their houses ,talk and socialize.. Also, most of the seniors like to grow flower and greenery in their house. Therefore, this gathering space is a spot for them to hangout, while they can enjoy raising greenery and flowers in public.



Daily Usage / Special Event



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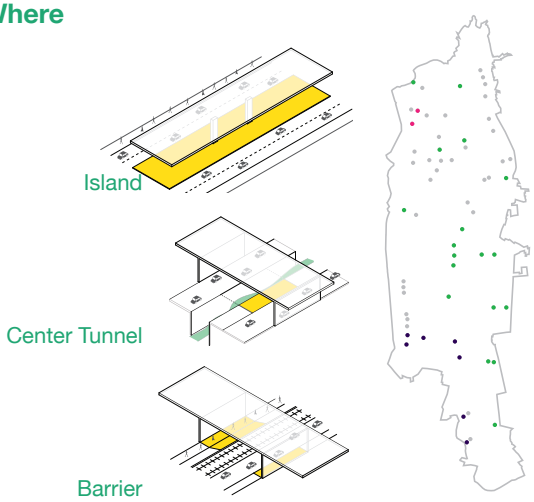
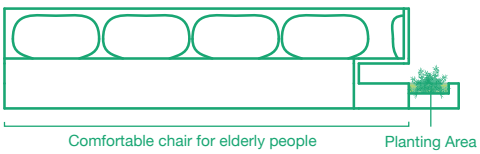
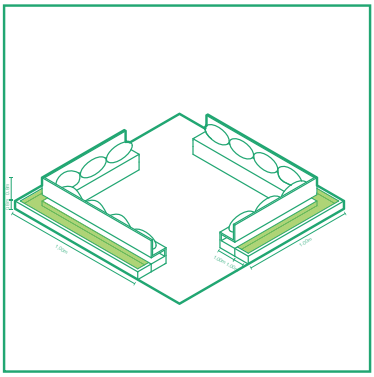


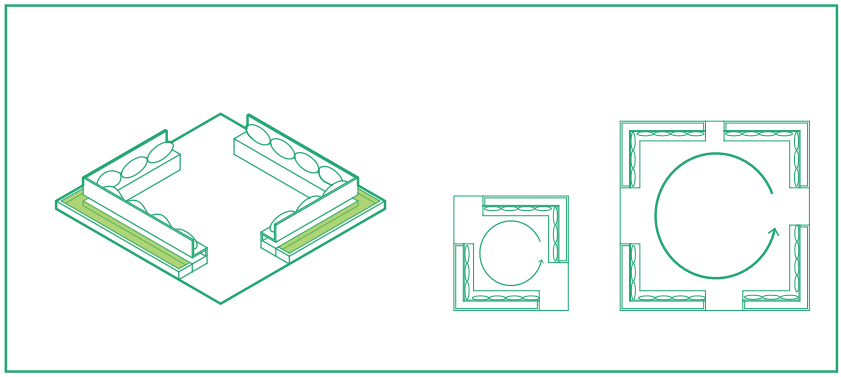
Essential Elements



How to Use

This component is actually two benches that make a circular connection between the users, with more comfortable seats. Also, they have a growing pot at the back of them for anyone who likes to contribute in beautification of their city, even with a small effect.





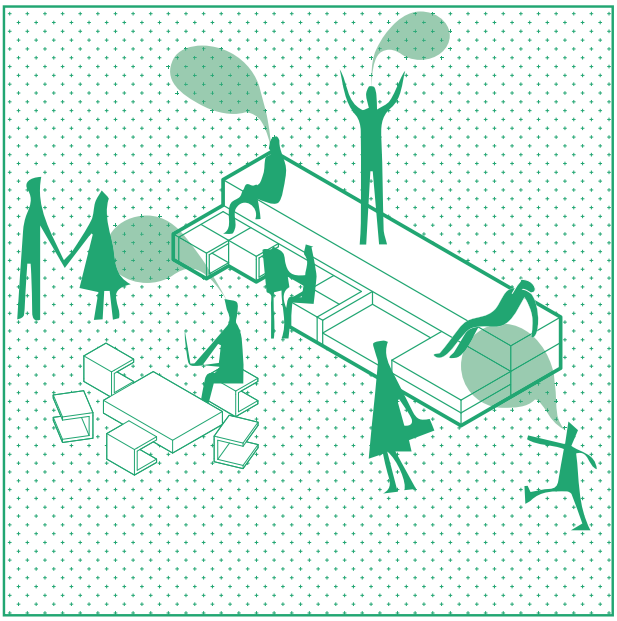
Who

All of the citizens can use these spaces, but the group that fortify this design are the seniors.

Stair Gathering

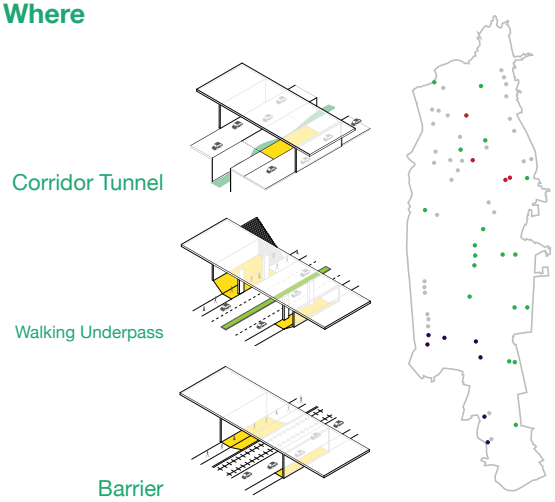
Information

This gathering stair is an interesting place for people to sit and interact with each other. This component is designed for the sites of intervention with slope. It is actually a stair and at the same time a hangout spot.

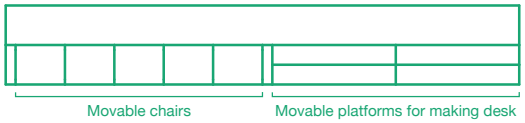


Daily Usage / Special Event

Where

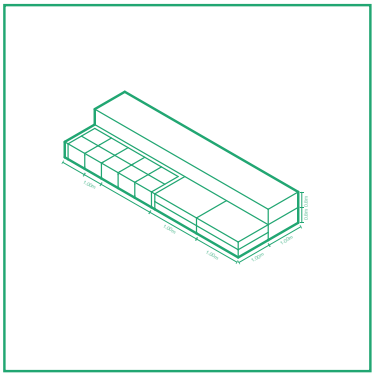


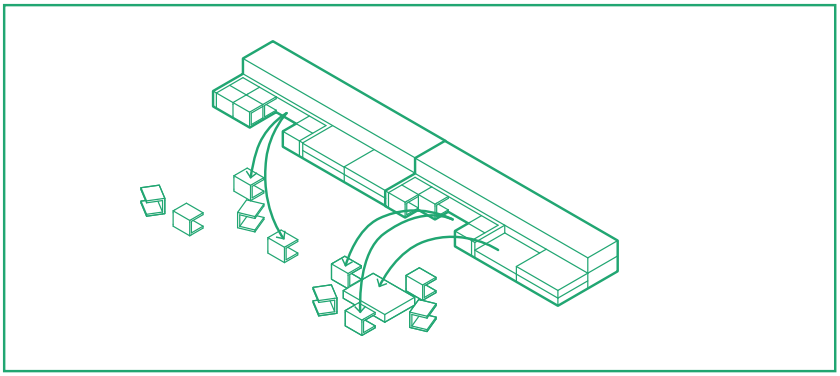
Essential Elements



How to Use

People can move any pieces of it and reassemble them anywhere they want and gather elsewhere. There is a range of these pieces, so they can be used as chairs or tables.





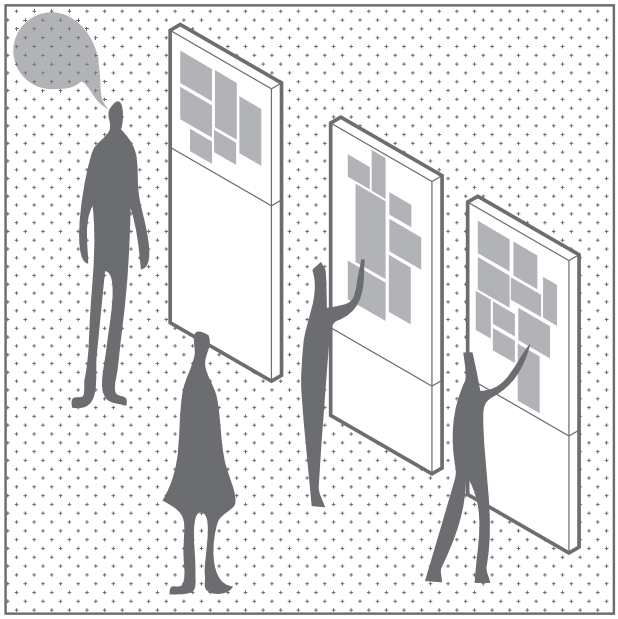
Who

All of the citizens can use it.

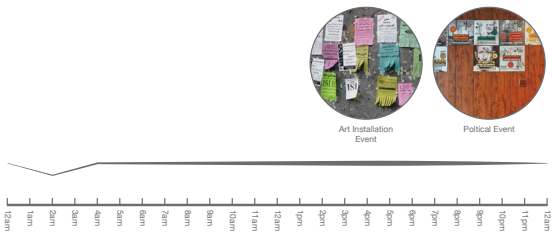
Adversitment Wall | Sound Barrier

Information

In Tehran, you can see flyers everywhere, on the walls, on the ground or on the doors of the houses. There is no regulation for sticking them. This wall can become a spot for various advertisement flyers without messing up the city. At the same time, they can act as a sound barrier. The wall can also become a place of advertisement in the time of elections.



Daily Usage / Special Event



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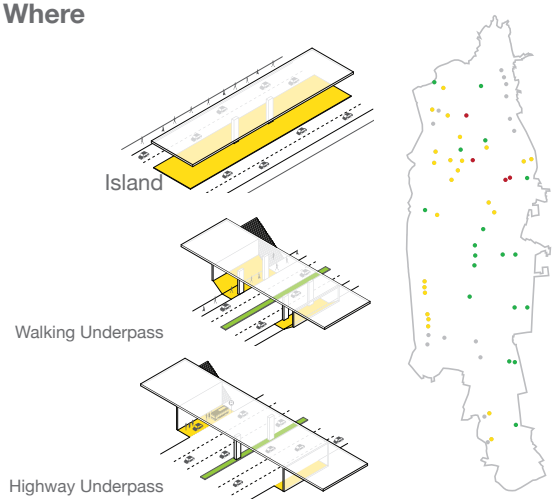
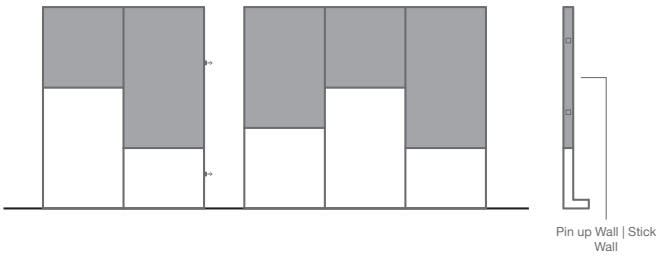
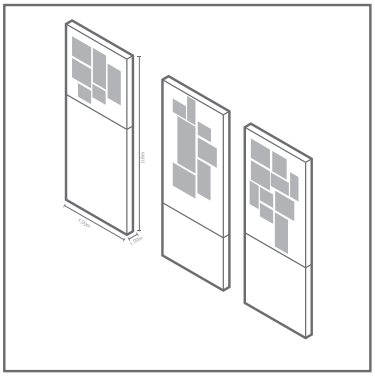


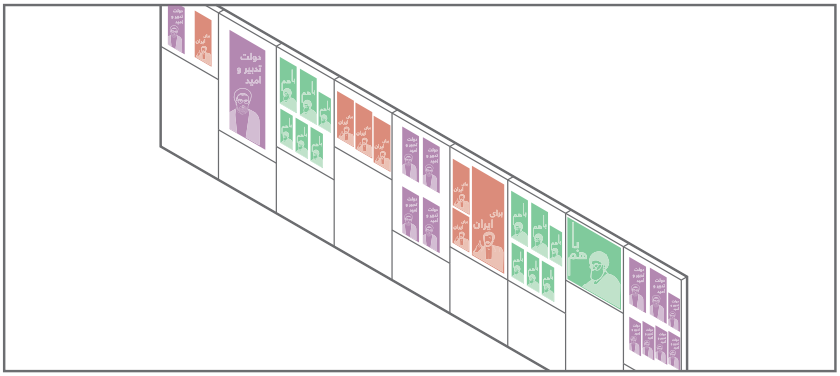
Essential Elements



How to Use

These walls can be expanded as much as the users want. They will easily assemble to each other to make a wider wall.





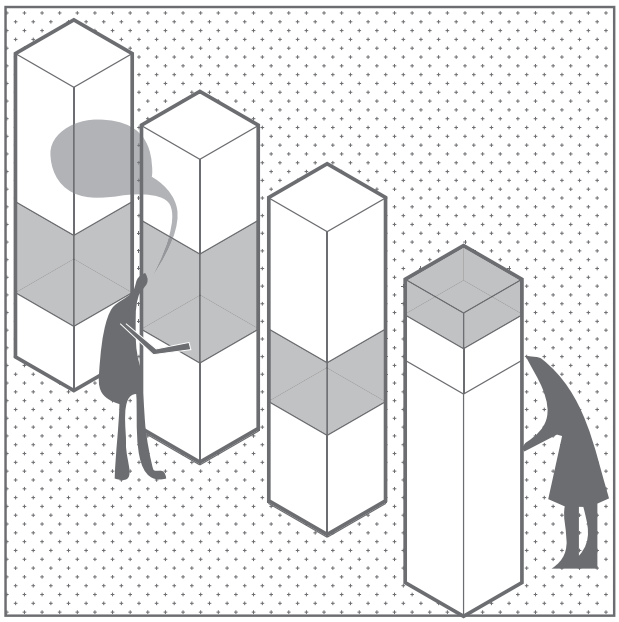
Who

This is a public wall so everybody can use it.

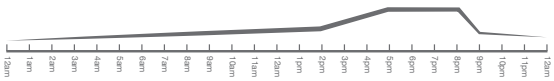
Gallery Boxes | Sound Barrier

Information

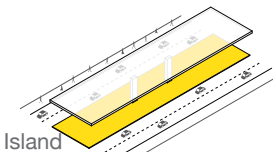
While in Iran the universities are private and not open to public, the student works, their artifacts and whatever they design are always kept in the school and there is no public feedback to them (specifically the art products that require feedback). These Gallery boxes can be a place that students can display their designs to get feedback from public and maybe find clients in that process.

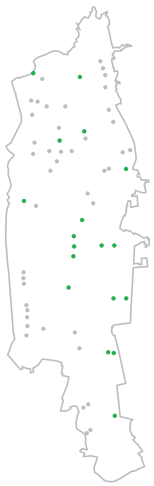


Daily Usage / Special Event

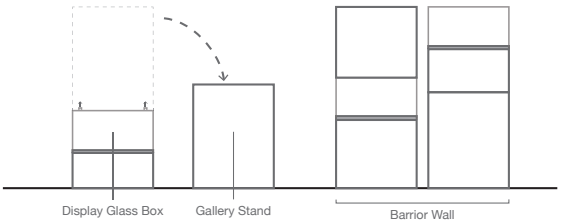


Where



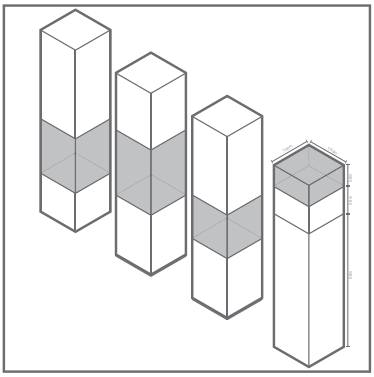


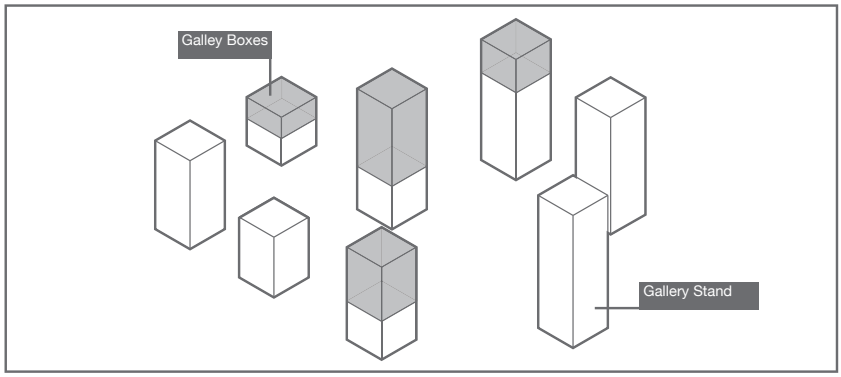
Essential Elements



How to Use

These gallery boxes can be spread in the site for displays or put on top of each other to make a sound barrier. The boxes have an opening that allows two ways of displaying of the artifacts: putting in the glass box for more fragile models and on the boxes without any protector for the less fragile ones.





Who

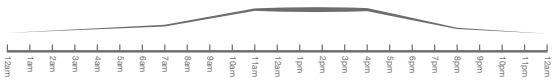
In the time of exhibition, art students are the main users of these components.

Communal Gardening Barrier

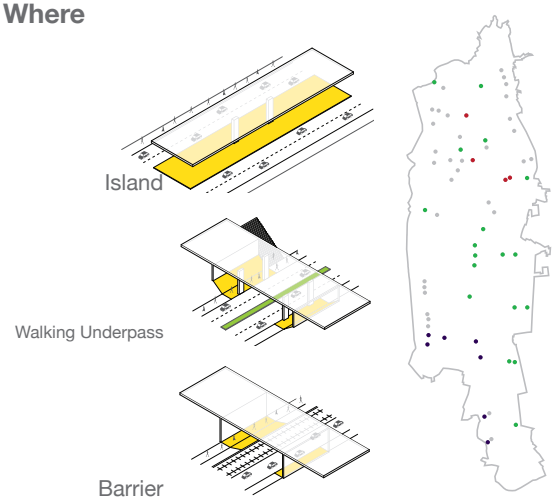
Information

Tehran is a polluted city, thus, the more greenery and flowers grown in the city, the more decrease of the pollution. Unfortunately, the private gardens are decreasing in Tehran due to the high construction demands. Therefore, these garden walls can become a platform for the whole community to enjoy growing their own plants and taking care of them. At the same time these garden walls can act as sound barrier as well.

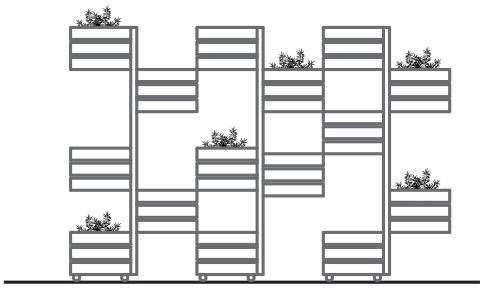
Daily Usage / Special Event



Where

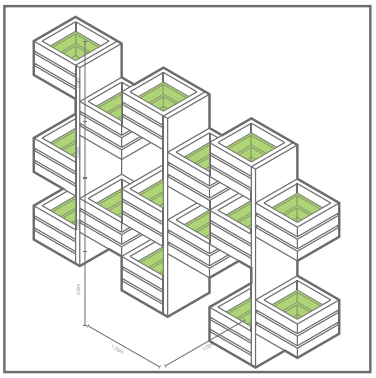


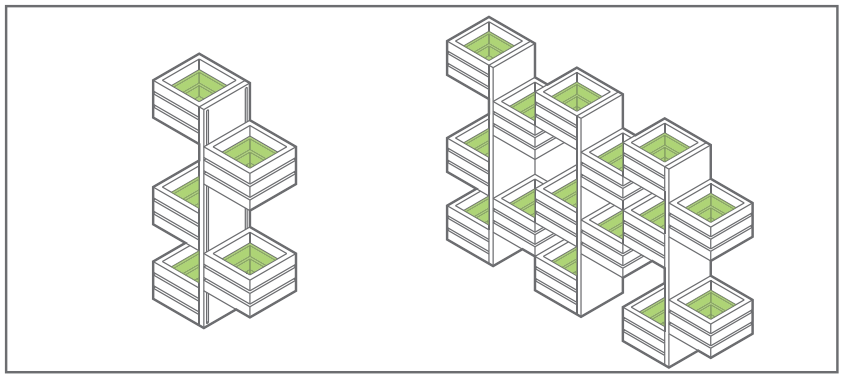
Essential Elements



How to Use

These walls can be added as much as needed. They are made of a wall with rails with small boxes attached to them, which can be moved and placed wherever the users wants.





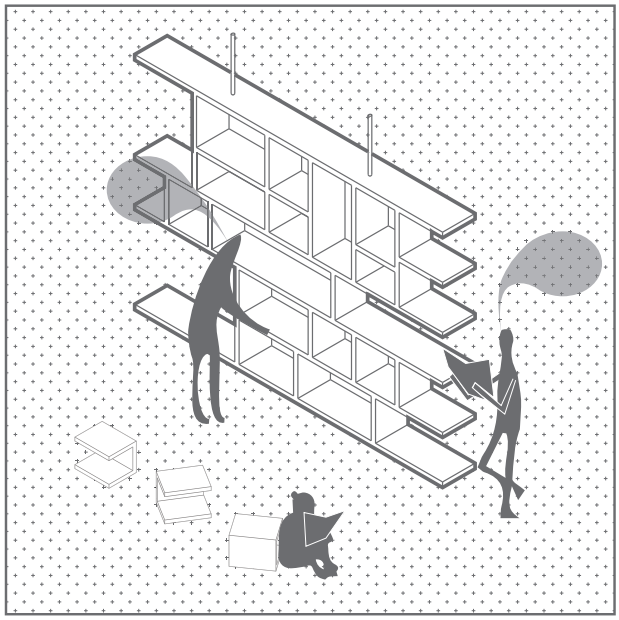
Who

All of the citizens are welcome to use them and grow their own plants.

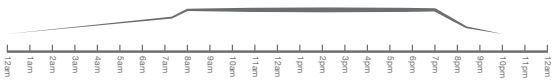
Open Library

Information

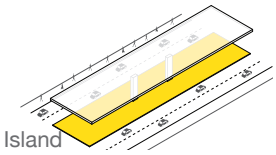
The rate of book reading among Iranians is very low. People prefer social media to books. Making libraries public and accessible can increase the reading ratio of people in Tehran. As an open library people can put and get any book without no trouble. This library can also operate as a sound barrier.

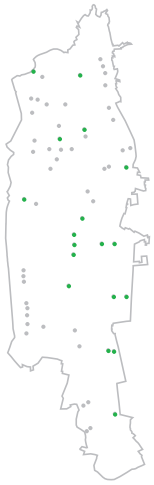


Daily Usage / Special Event

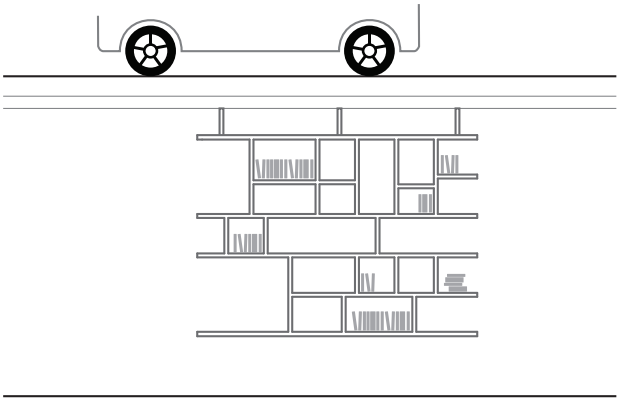


Where



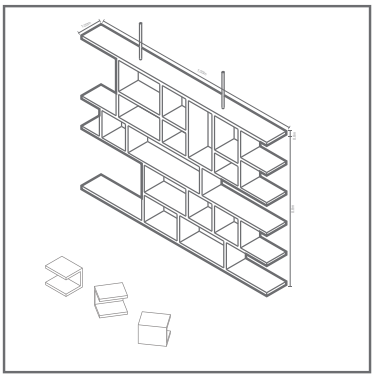


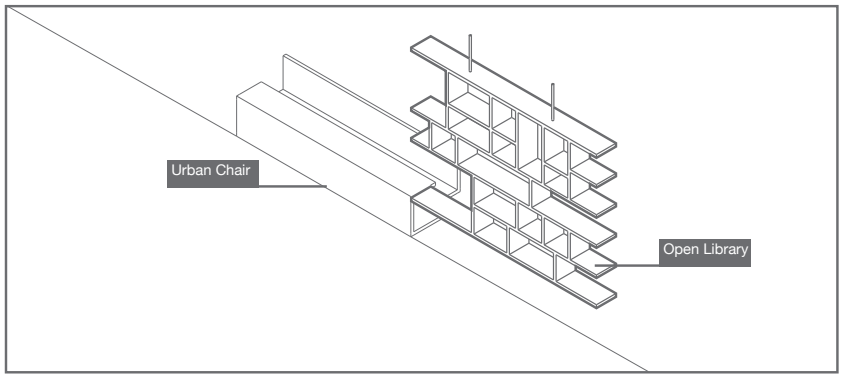
Essential Elements



How to Use

This library can be paired with the urban bench, and people can use the library easier.





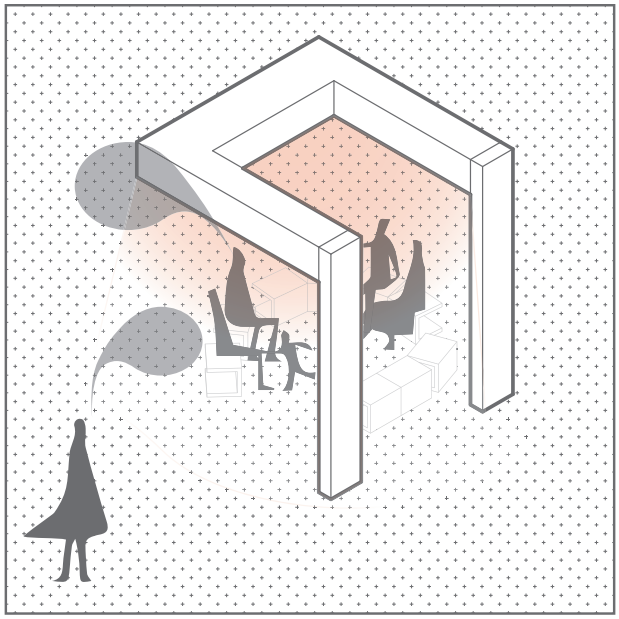
Who

All of the citizens from various range can use the library and find their desirable books.

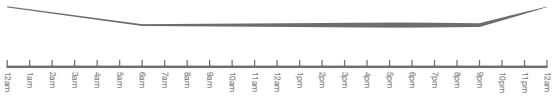
Microclimate (Heat/Cool Lamp)

Information

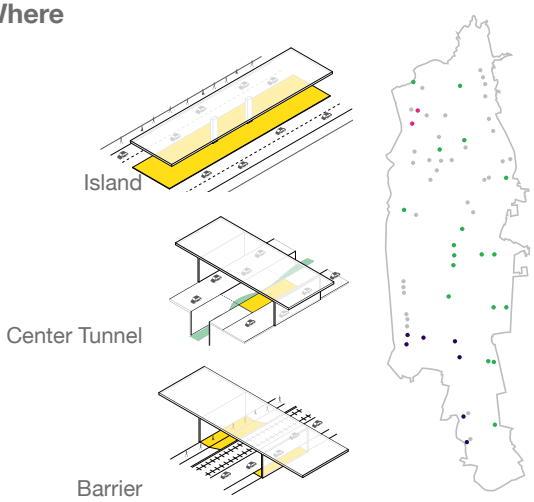
Geographically, Tehran is located in an area which results in cold winters and very hot summers. Providing a microclimate with a warm atmosphere in winters and cool atmosphere in summer would be desirable for people.



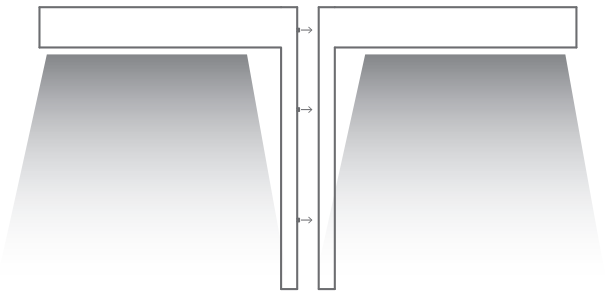
Daily Usage / Special Event



Where

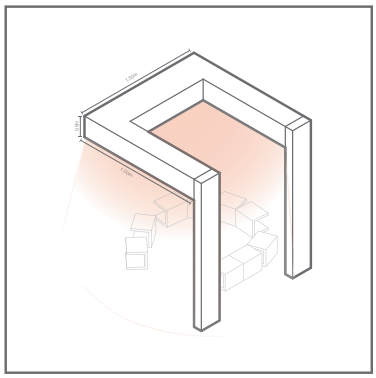


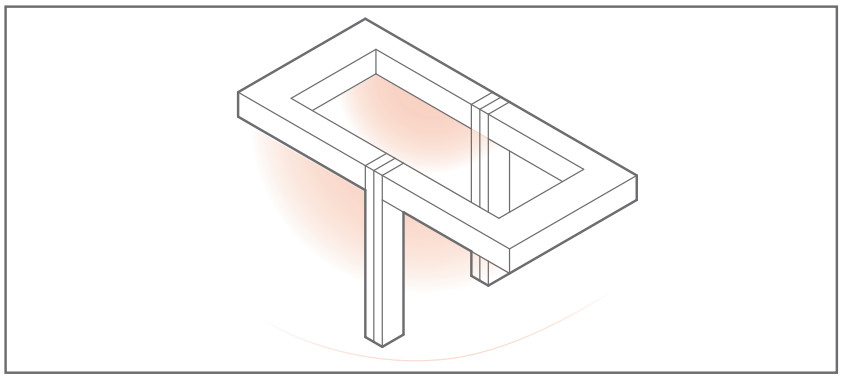
Essential Elements



How to Use

In the upper part of this component there is a heating/cooling system. Based on the weather, the system will provide a desirable microclimate underneath it. It is also lightweight so people can move them wherever they are needed and gather around it.





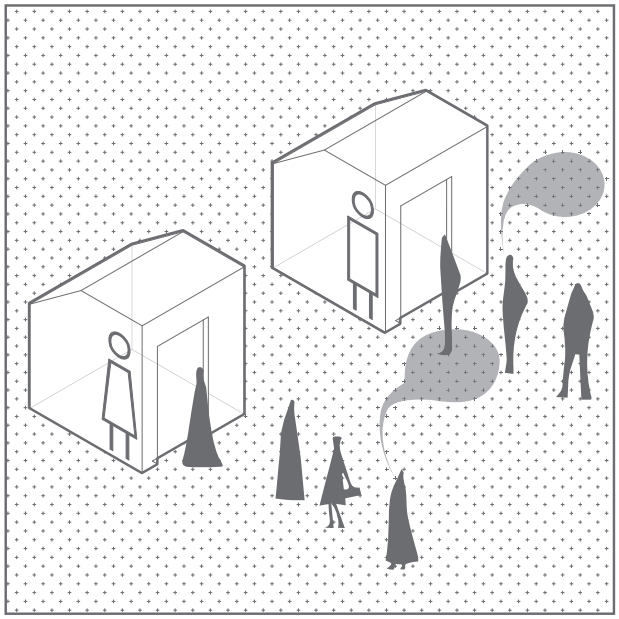
Who

Even though this is a place for everybody to hangout, the major users are the taxi drivers sprawled all over Tehran.

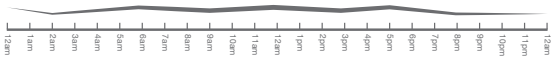
Washroom | Ablution

Information

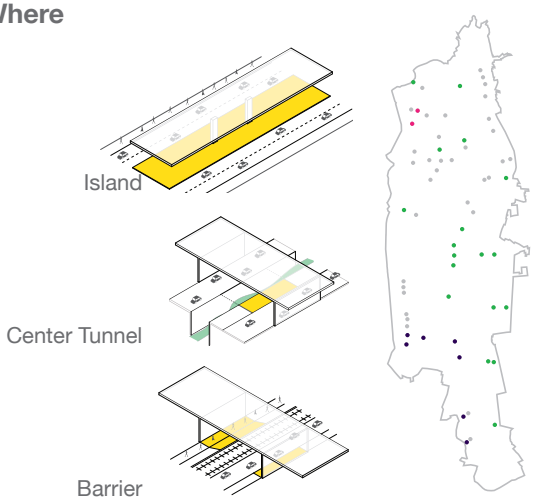
Public washrooms are small but important components in public spaces. Also, Muslim people need access to clean water for ablution before their prayers.



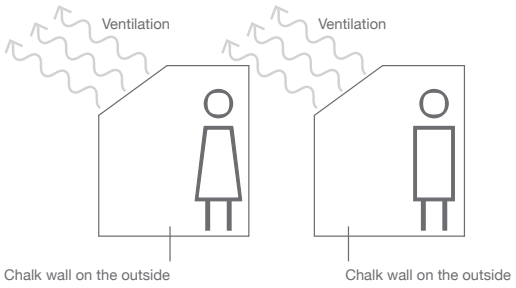
Daily Usage / Special Event



Where

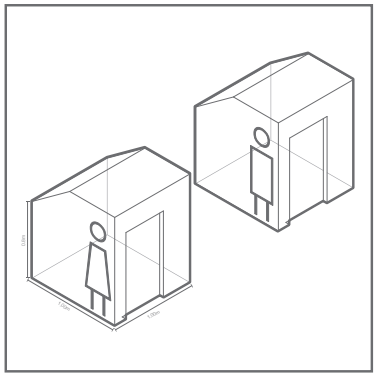


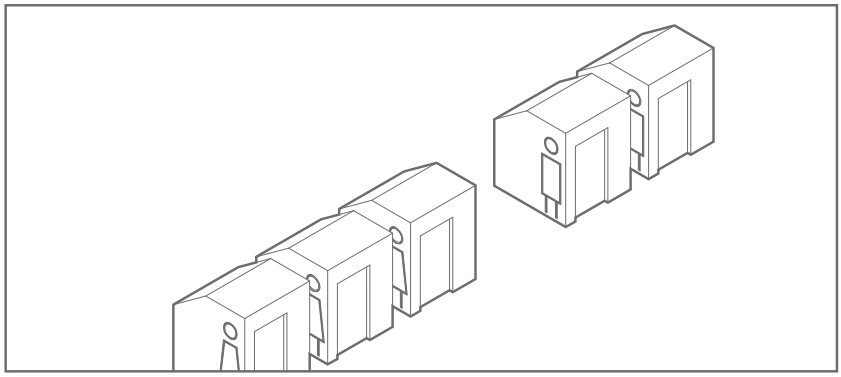
Essential Elements



How to Use

They can be added more based on the population in the neighborhood.





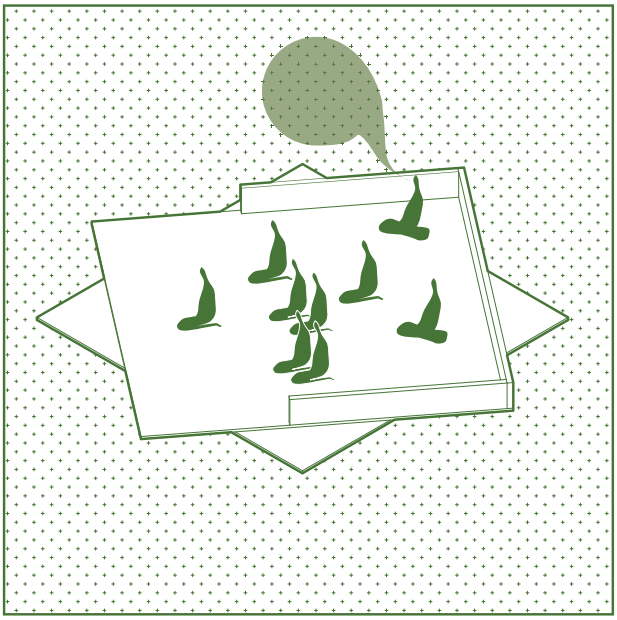
Who

Everybody can use these!

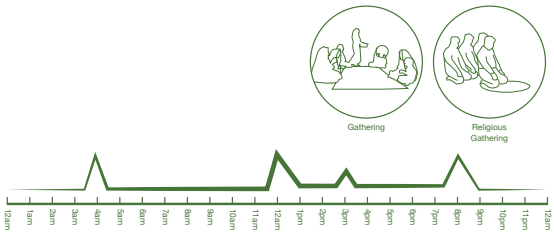
Praying Mat for Men | Comfy Ground

Information

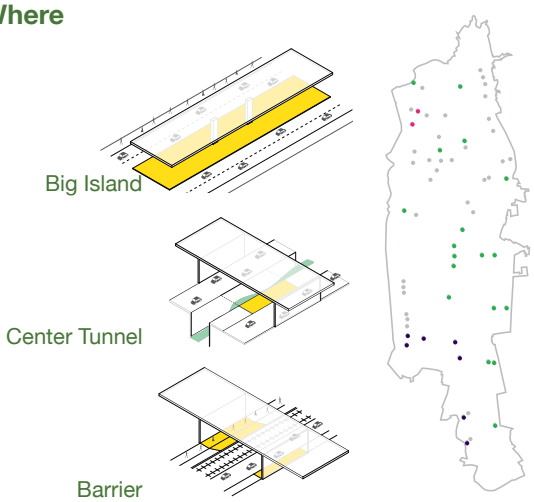
More than 40 percent of the citizens of Tehran have religious tendencies. The act of prayer is observed five times every day at a prescribed time.. So, people try to say their prayers wherever possible. Therefore, a praying mat that provide a comfortable place for people to pray can be beneficial in Tehran. Also, this can be a comfortable mat for people to rest on.



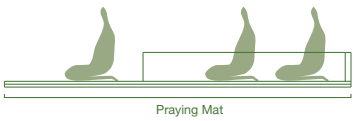
Daily Usage / Special Event



Where

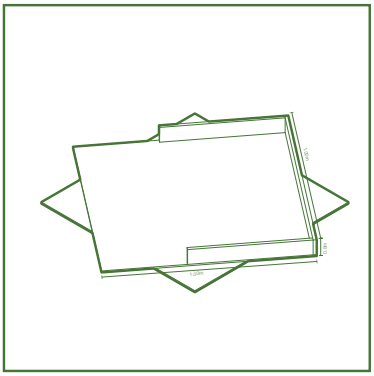


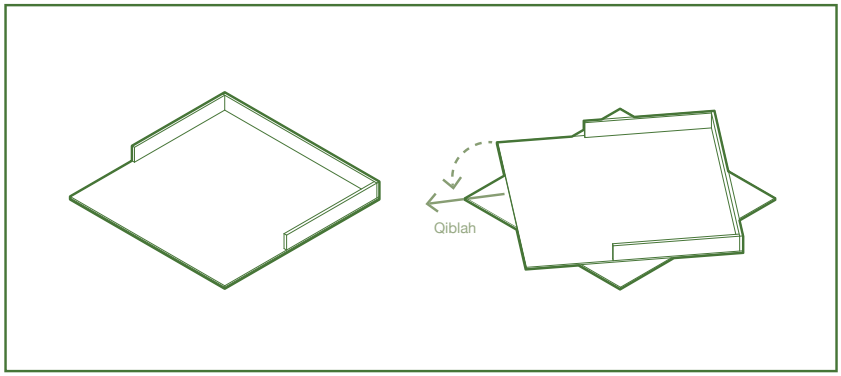
Essential Elements



How to Use

Muslims turn to Qibla at the time of their prayers. So, this praying mat consists of two layers. The upper layer can rotate to Qibla direction.





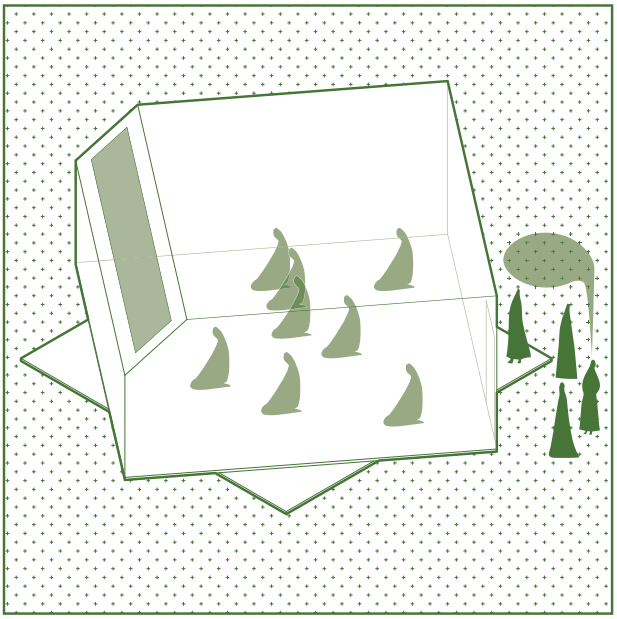
Who

Only men are allowed to pray in public. Therefore men are the main users of this component.

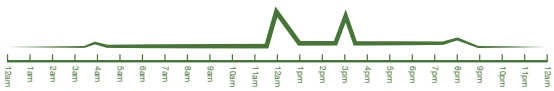
Praying Room for Women

Information

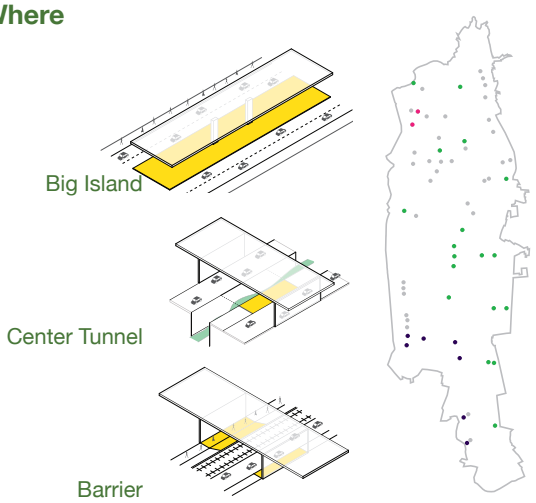
As in Islam women should pray separate from men, this component is almost the same as the praying mat, but closed and only for women.



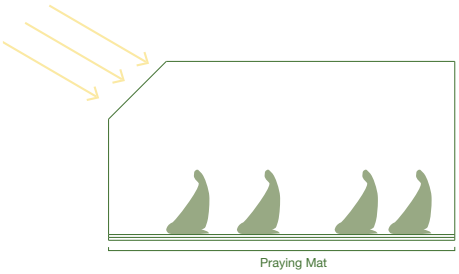
Daily Usage / Special Event



Where

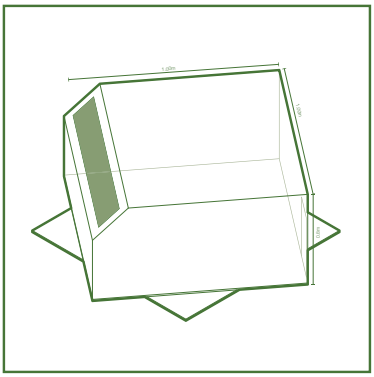


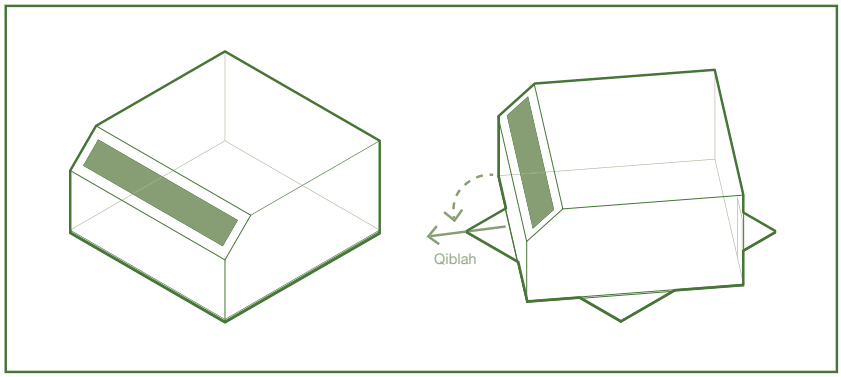
Essential Elements



How to Use

Muslims turn to Qibla at the time of their prayers. So, this praying room actually consists of a box on a layer, which can rotate to the direction of Qiblah at prayer time.





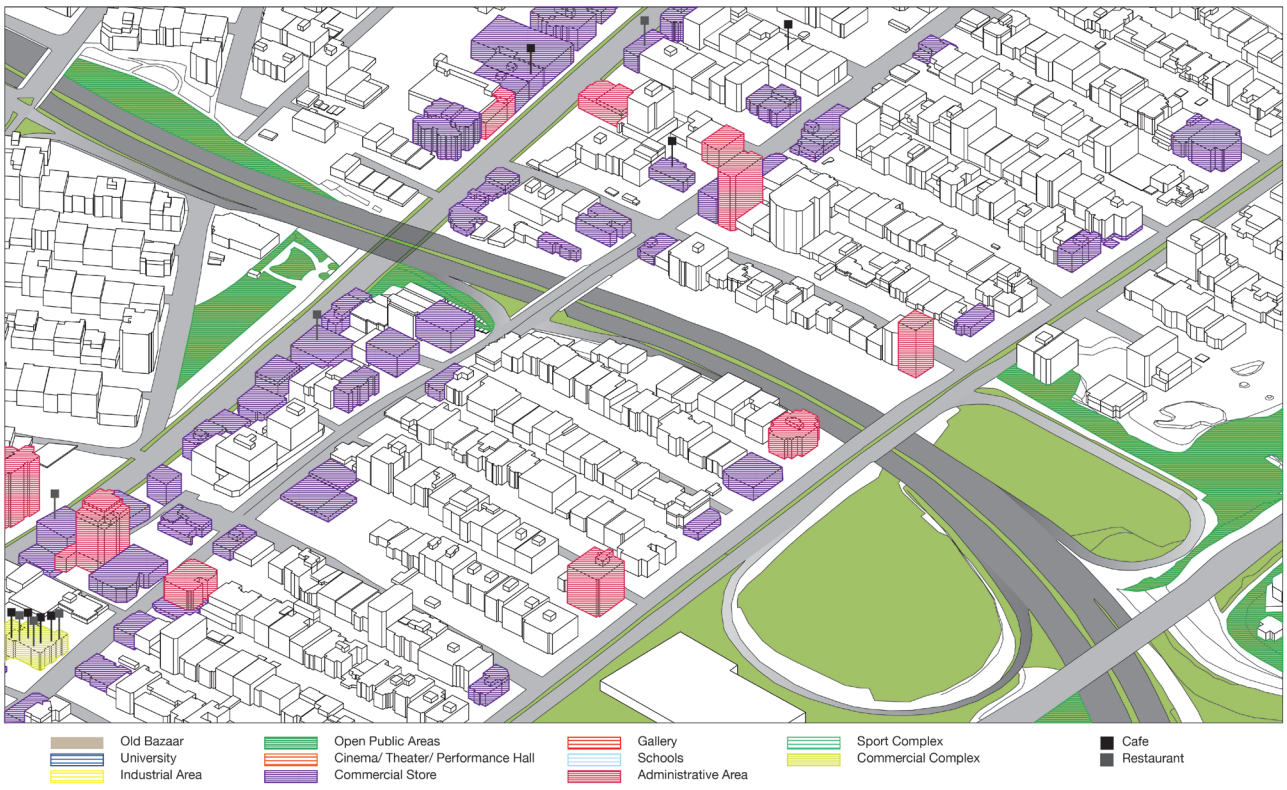
Who

Only women are able to use this component.

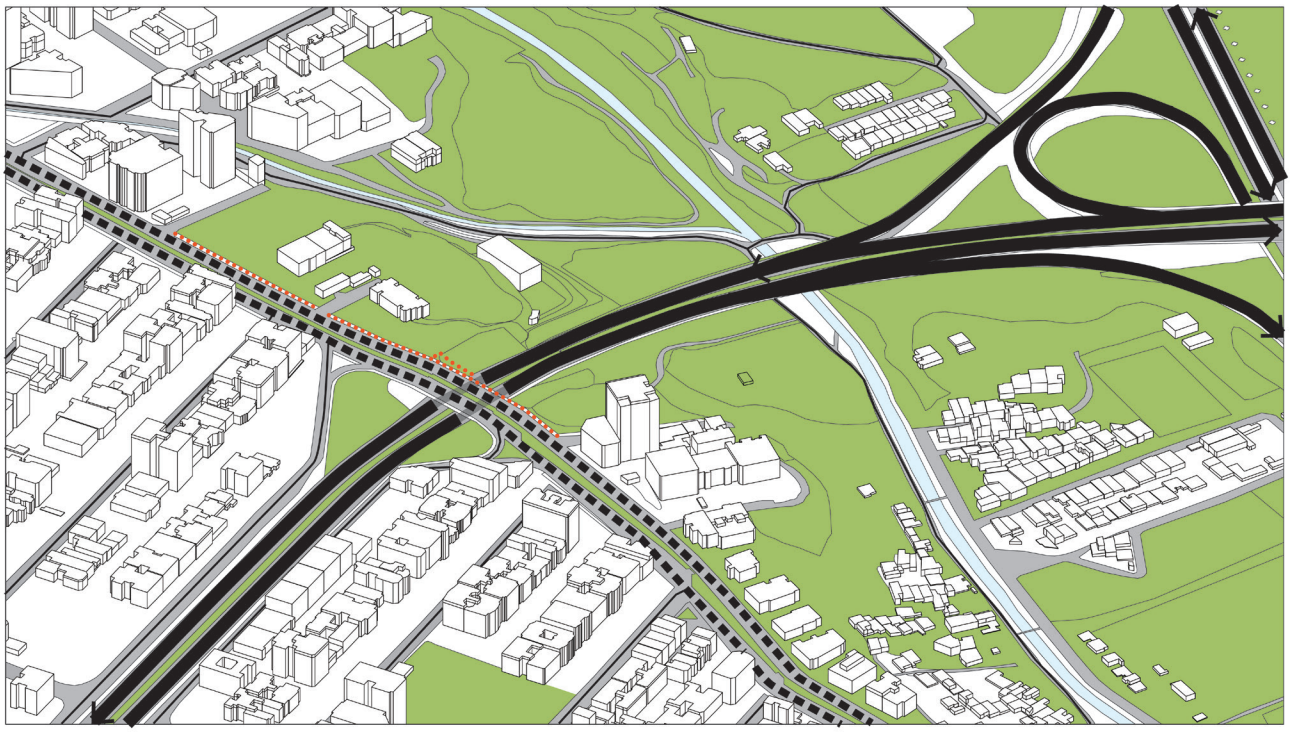
Appendix II:

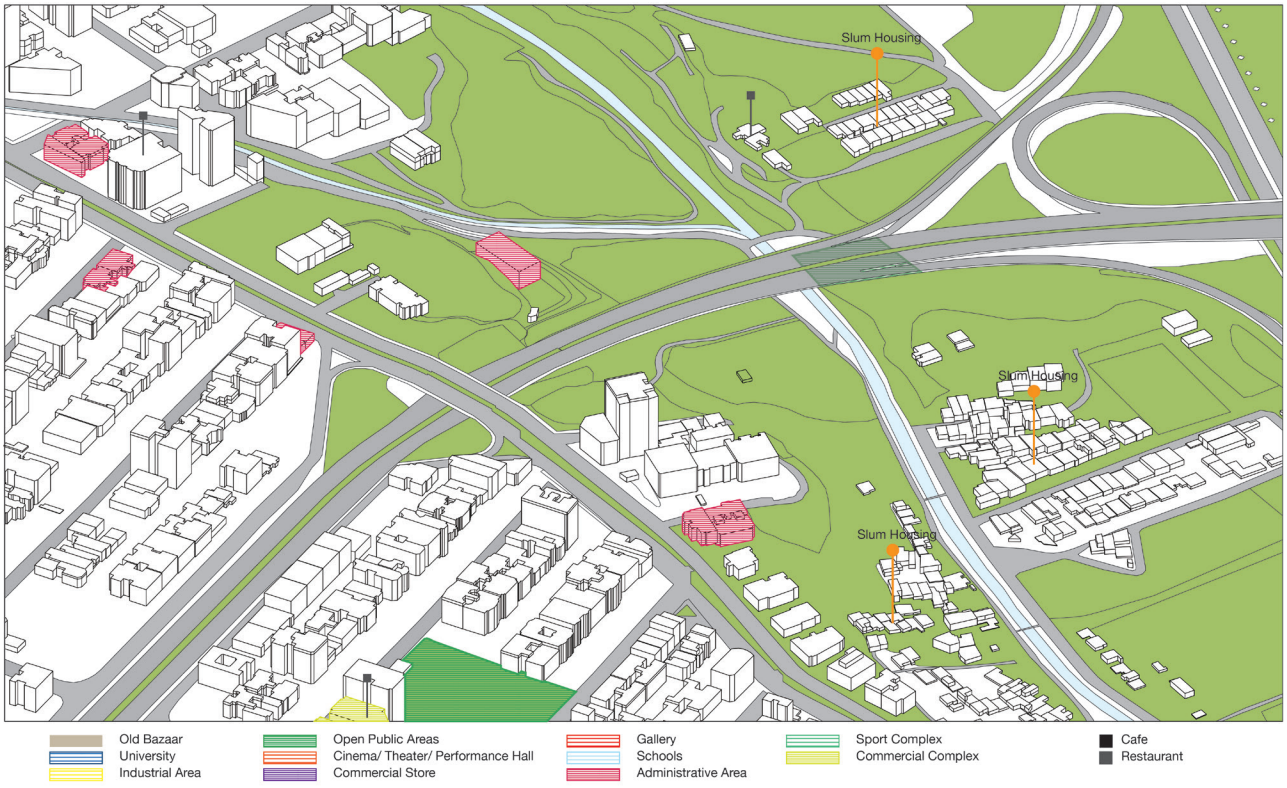
Further Sites of Interventions

Hemmat Expressway / Valiasr Street

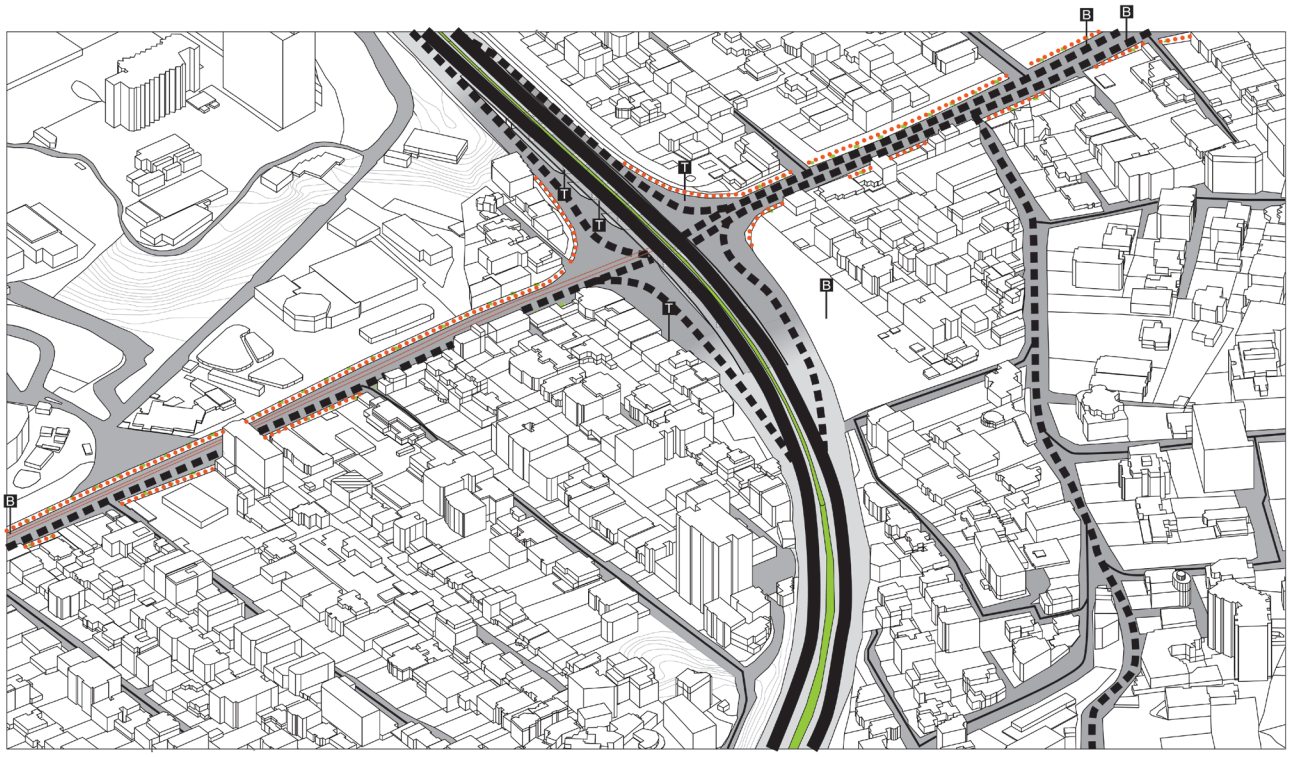


Farhang Boullevard / Niyayesh Highway





Parkway Bridge / Valiasr Street



Highway
Primary Road
Local Road

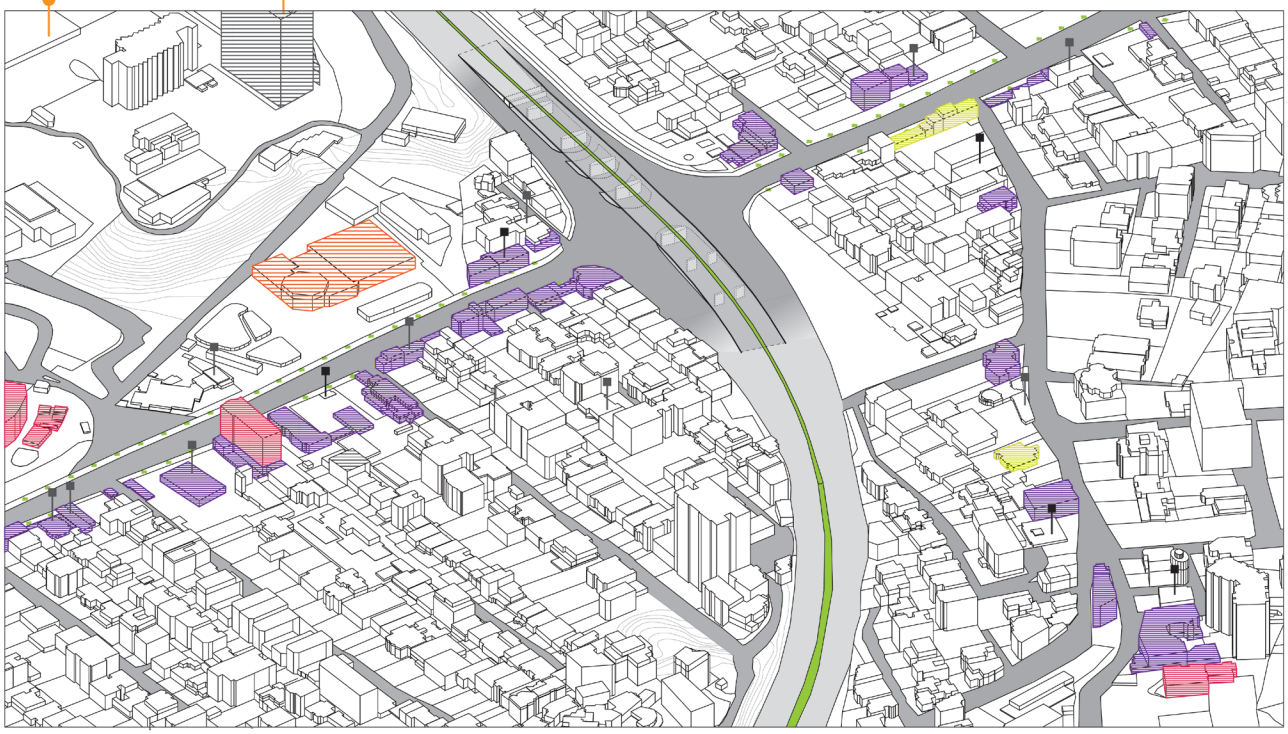
Rail
Pedestrian Paths
Bus Lines

B Bus Station
T Taxi Station
M Metro Station

R Railroad Station

Tehran International Exhibition Center

Esteghlal International Hotel



Old Bazaar
University
Industrial Area

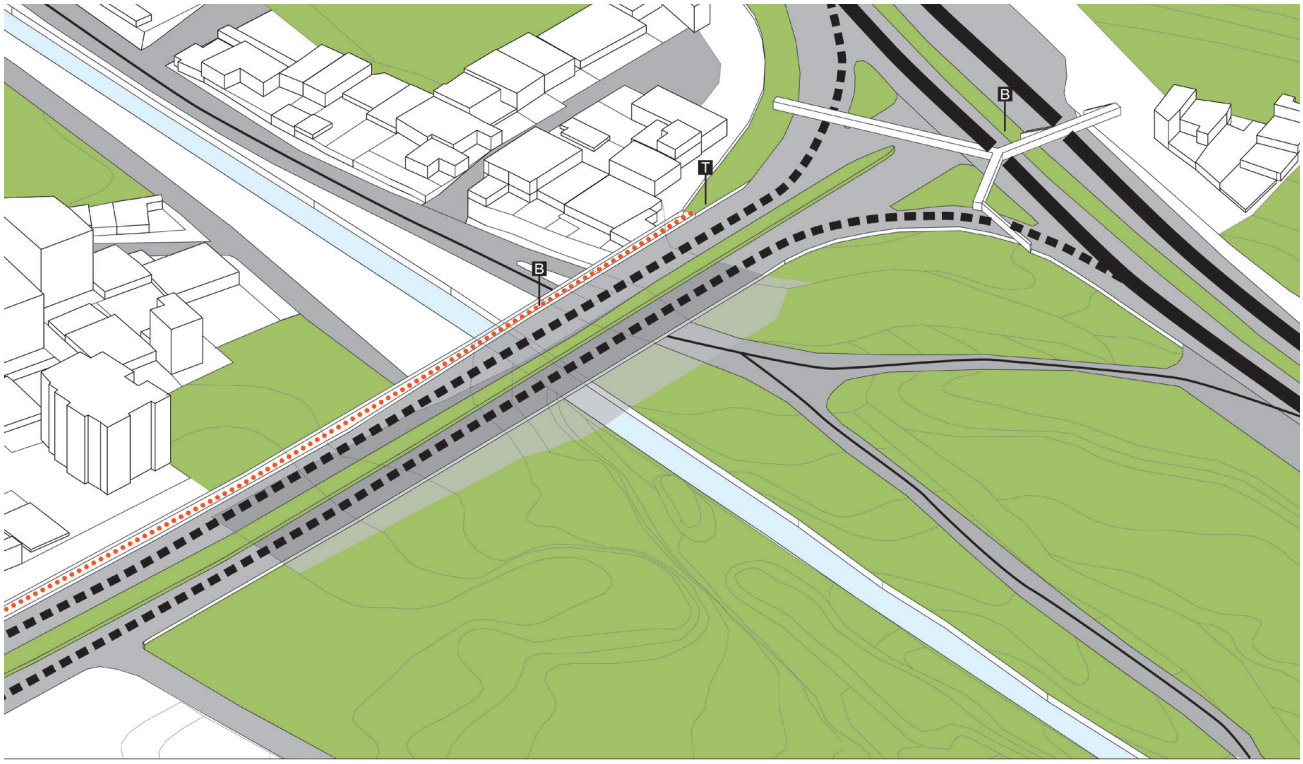
Open Public Areas
Cinema/ Theater/ Performance Hall
Commercial Store

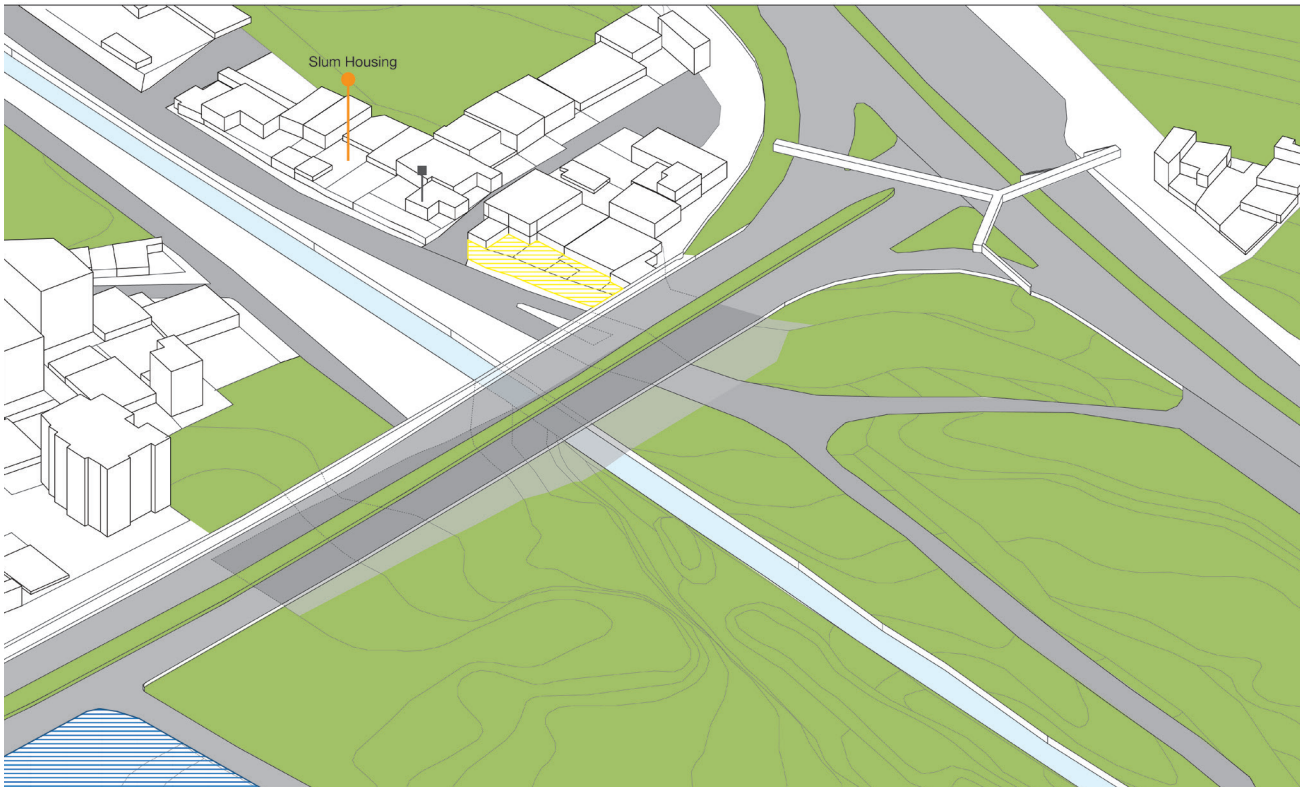
Gallery
Schools
Administrative Area

Sport Complex
Commercial Complex

Cafe
Restaurant

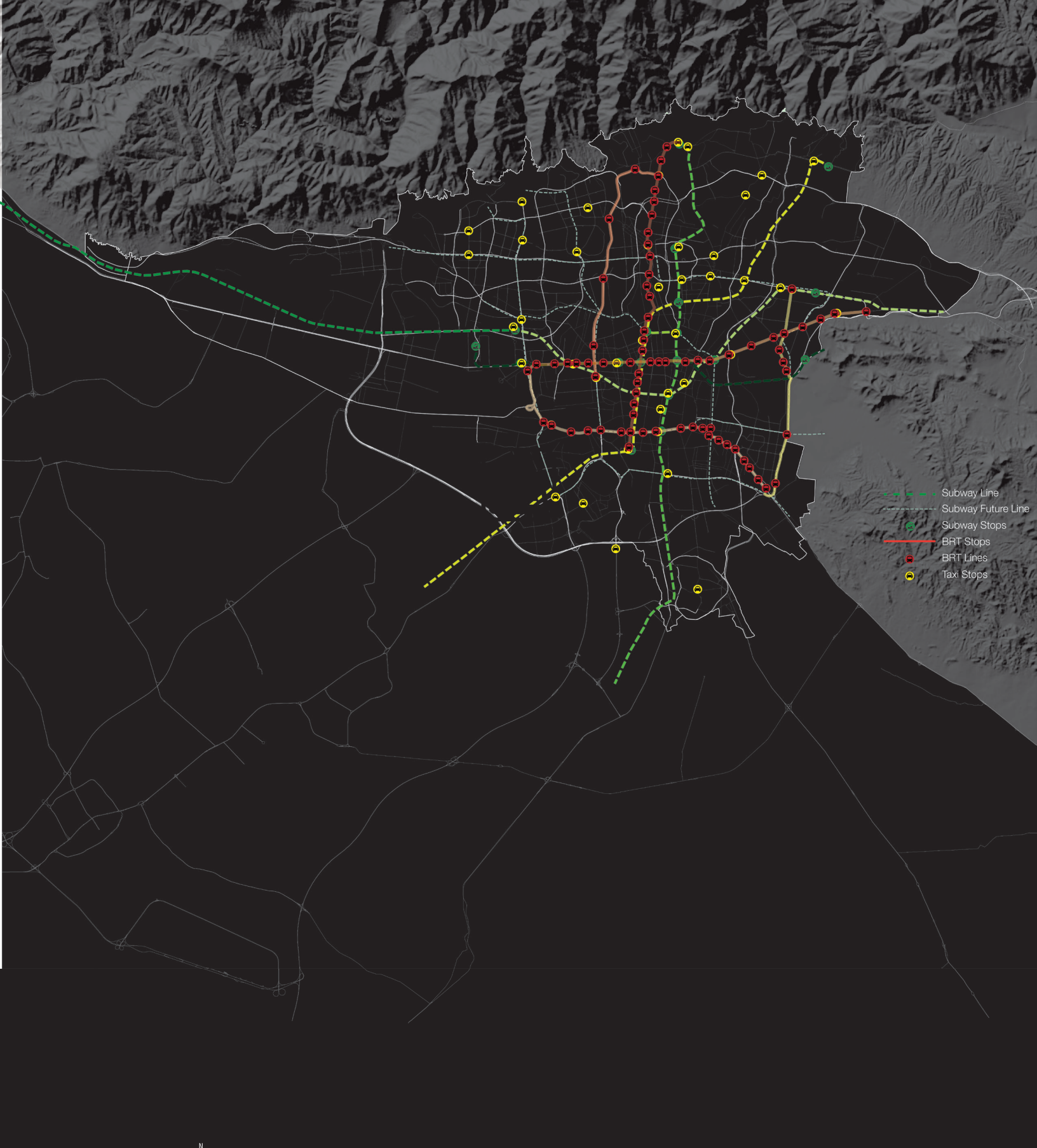
Modiriyat Boulevard / Darakeh River - MirMalek Street





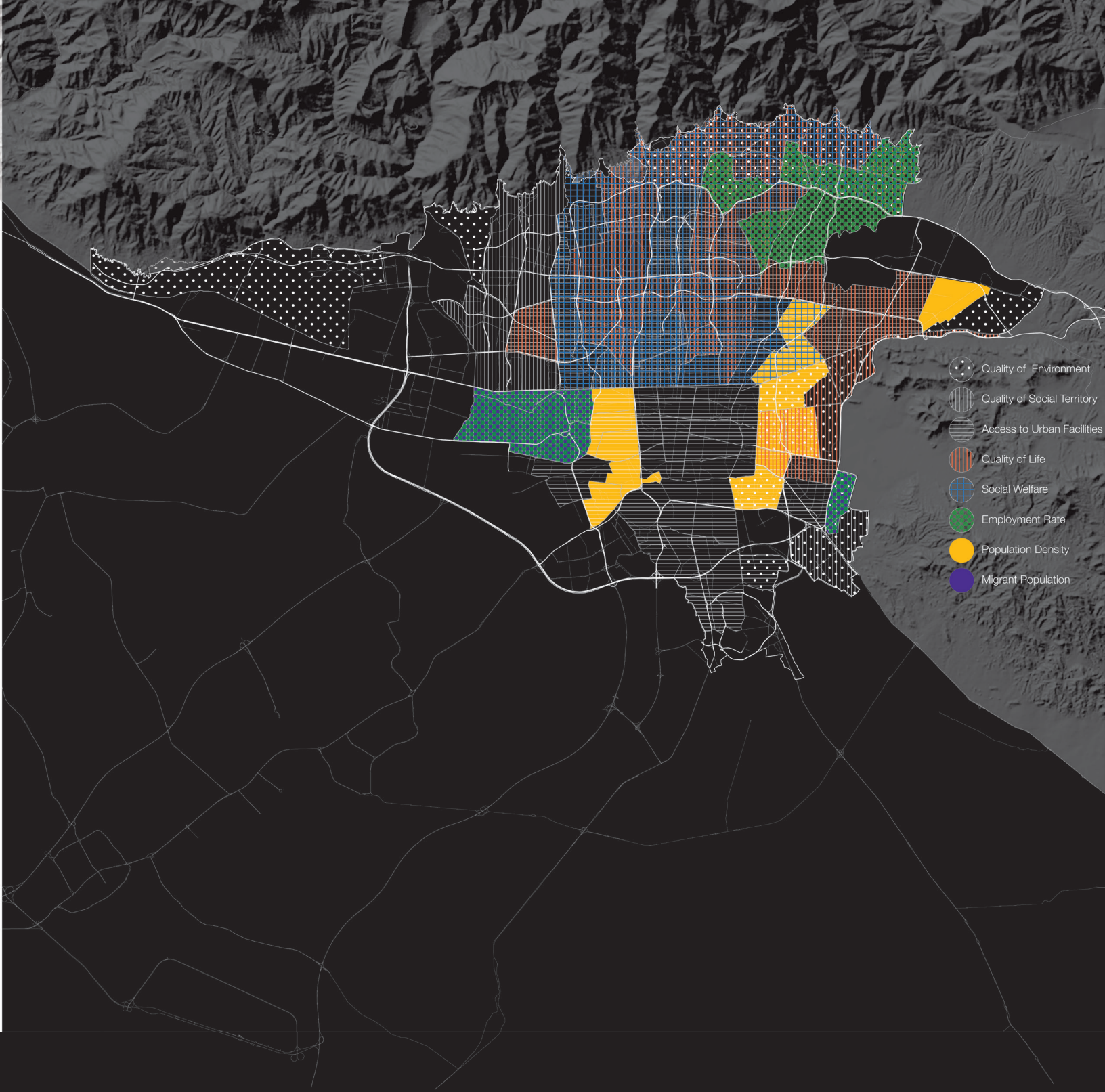
Appendix III:

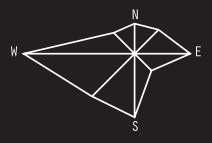
Tehran Analysis

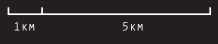


Public Transportation Lines in Tehran

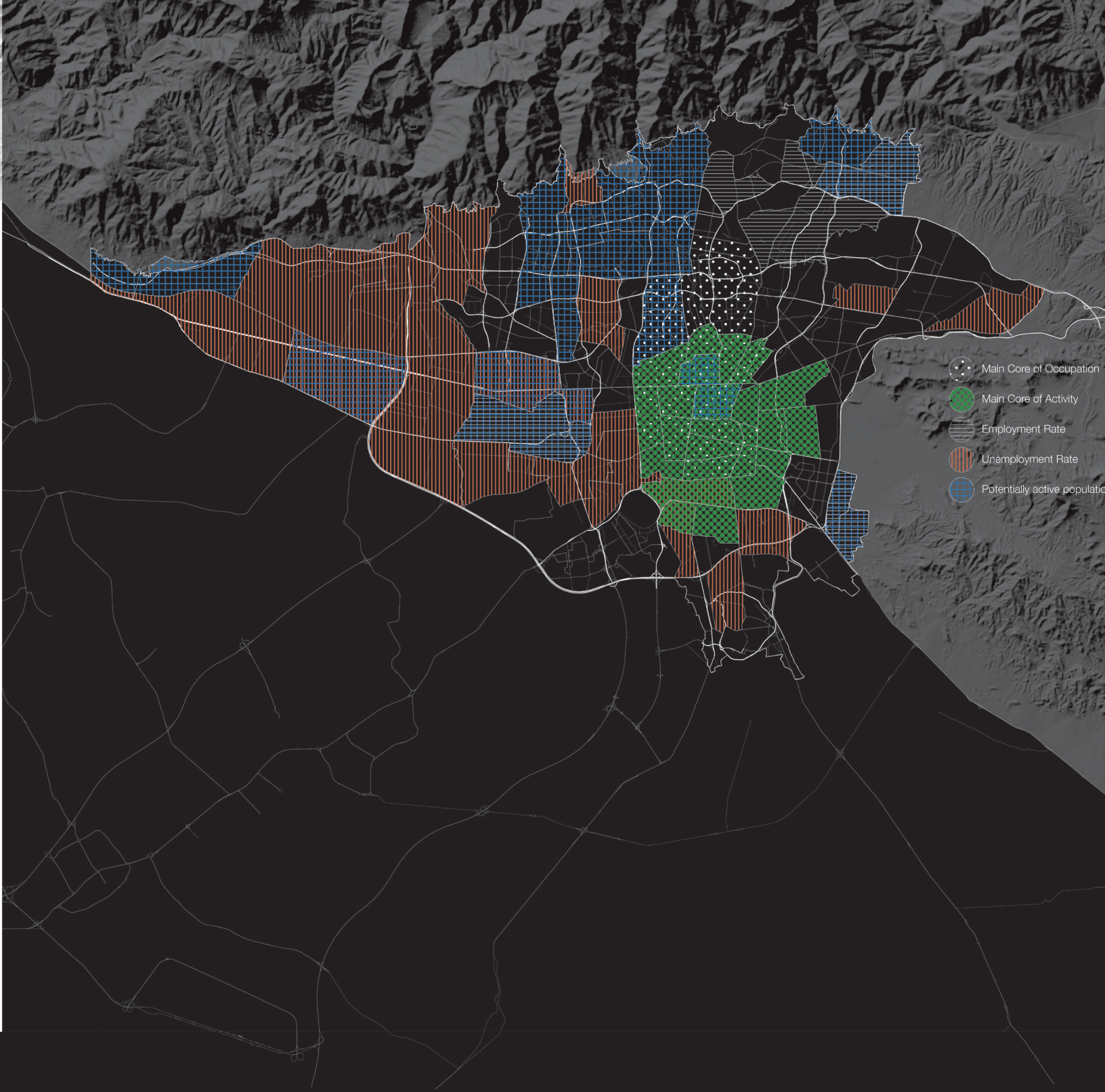
Environmental Analysis of the city







Socio Demographical Shifts in city



Activity and Employment Analysis

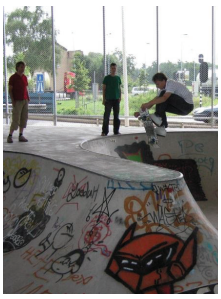
Appendix IV:

Precedent Analysis

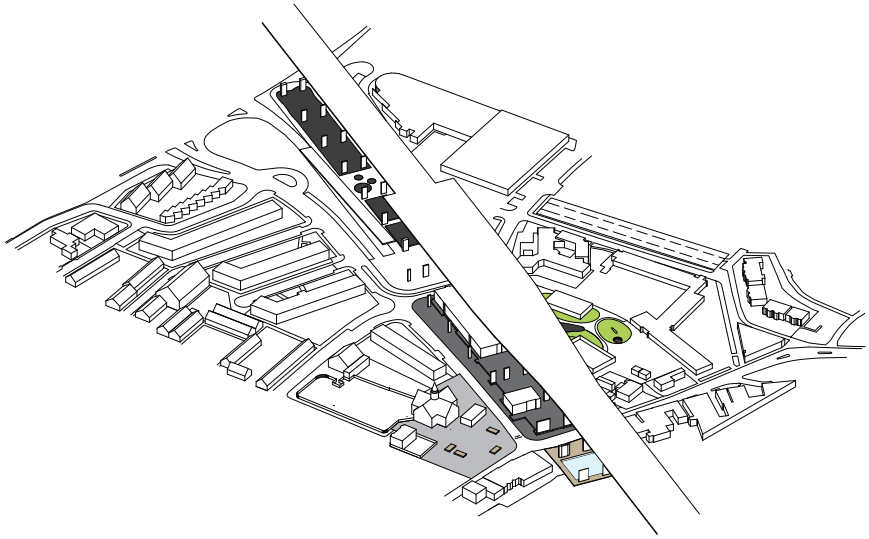
NL ARCHITECTS

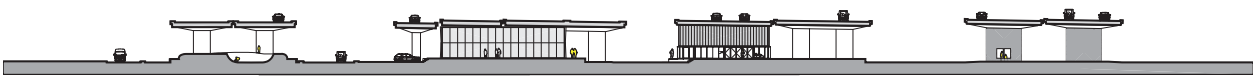
Country: Netherlands
City: Zaanstadt
Year: 2005
Influence Area: Oud Koog ann de Zaan

Two intercrossing streets divide the large arcade into three differentiated zones. In the central one is a covered square where we find the supermarket, the flower and pet shops, some letter boxes and a luminous fountain. At the eastern end, crossing the High Street, there is a 'sculptural' bus stop and a small harbour with a panoramic platform. The harbour brings the water as far as the High Street and fills the ceiling of the new public space with light reflections when it is sunny. The panoramic platform provides the citizens with an exceptional window over the River Zaan which, given the high density of industrial buildings on the banks, had until now been left out of the public domain. At the western end there is a children's and teenagers' playground consisting of a 'graffiti gallery', a skateboarding park, a break dance stage, some football and ping-pong tables, a seven-a-side football pitch, a basketball court and the 'lovers' benches'. The skateboarding park consists of a series of large semi-spherical concavities built with a sophisticated technique using blocks of polystyrene cut to measure with a computer-controlled saw and coated with concrete.



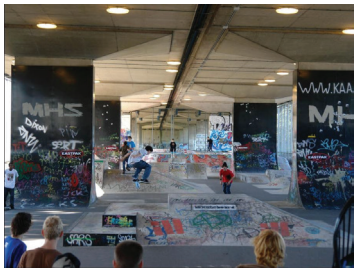
There was also work done outside the space covered by the motorway, at the height of the covered square, on both the town hall and the church sides. It generated a succession of public spaces following an axis perpendicular to the motorway and parallel to the High Street. In front of the church, it was decided to free the square of the existing greenery to make the space flexible for housing open air fairs and celebrations. On the paving of the refurbished square, with a change in the colour of the blocks, the urban fabric that preceded the building of the motorway is redrawn. From time to time pieces of wood set into the paving point to the position of the living rooms of old demolished houses. On the town hall side there is a new park with topographical features that adds a little green to the intervention. The park includes a bowling ground, a small grassy hill planted with birch trees, a space for barbecues and a football pitch surrounded by a metal fence. The shooting range has been kept beneath the motorway exit ramp.



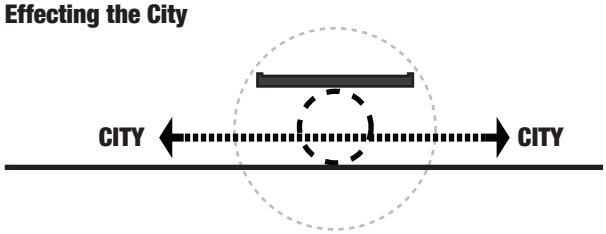


1975
1976

2004
2005



Effecting the City



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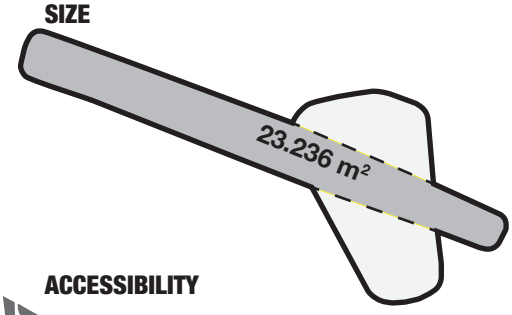
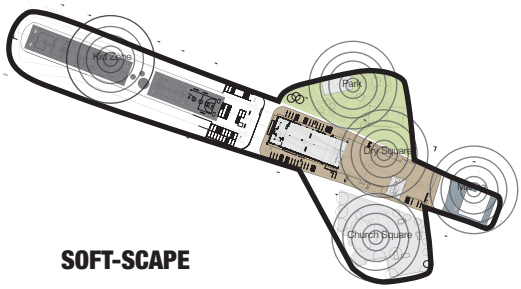


ACTIVITIES



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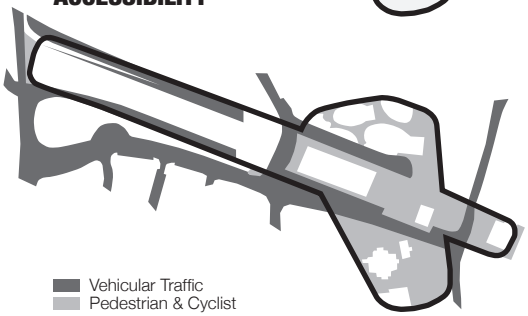
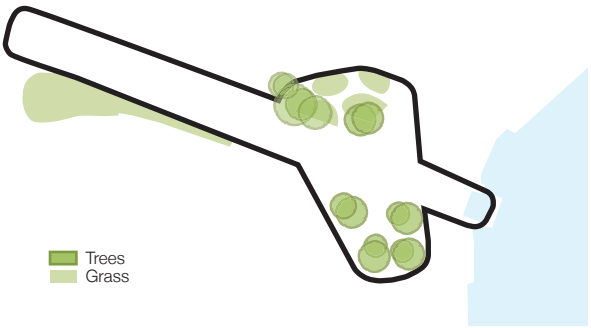
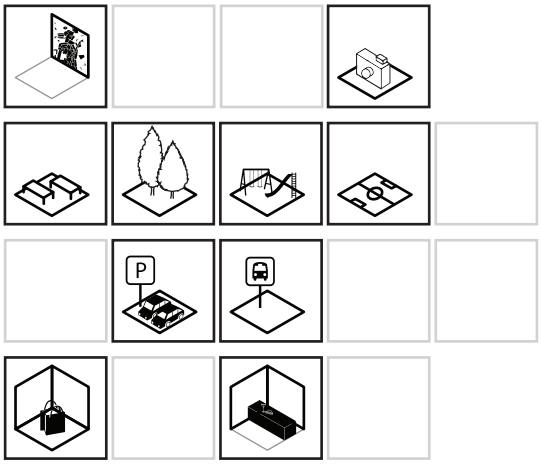


SOFT-SCAPE



Program



POPULATION

Population: **151,109** inhabitants
Density: **2,045** inhab/km²

FINANCING

Profit / ~~Non-Profit~~

STAKEHOLDER

Property owner: Public
Developement: Public/Private

TRANSFORMATION TYPE

Permanent / ~~Leased usage~~ / ~~Temporary usage~~

DAY LIFE

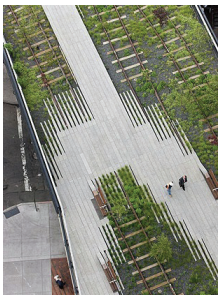
7 to 7

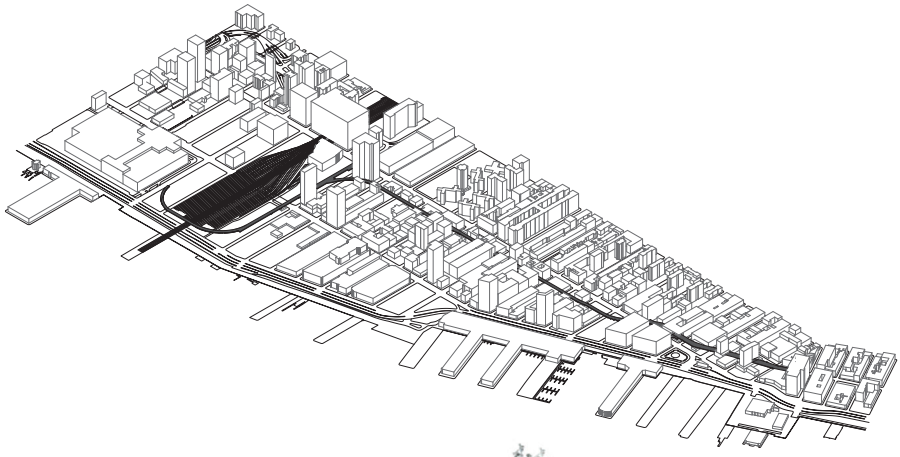
THE HIGH LINE

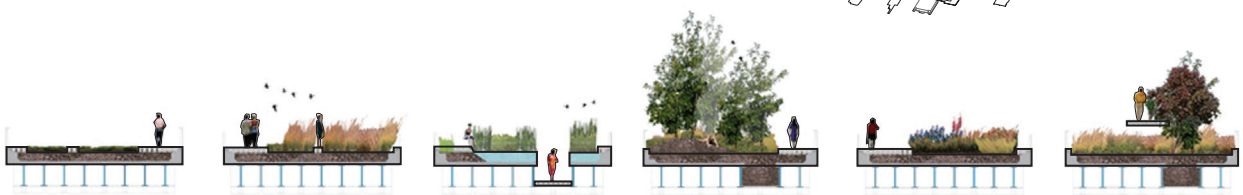
Designers: James Corner Field Operations / Diller Scofidio + Renfro Architecture
Country: Netherlands
City: New York
Year: 2009
Influence Area: Oud Koog ann de Zaan
Influence Area: Manhattan

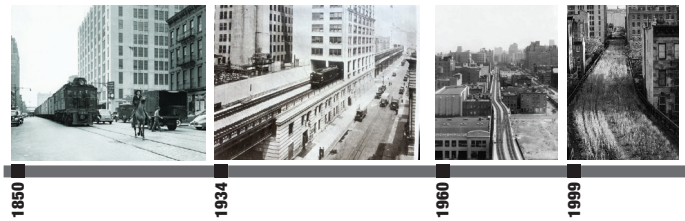
The High Line (also known as the High Line Park) is a -1.45mile-long (2.33 km) New York City linear park built in Manhattan on an elevated section of a disused New York Central Railroad spur called the West Side Line. Inspired by the -3mile (-4.8kilometer) Promenade plantée (tree-lined walkway), a similar project in Paris completed in 1993, the High Line has been redesigned and planted as an aerial greenway and rails-to-trails park.

The park extends from Gansevoort Street to 34th Street. At 30th Street, the elevated tracks turn west around the Hudson Yards Redevelopment Project to the Jacob K. Javits Convention Center on 34th Street, though the northern section is expected to be integrated within the Hudson Yards development and the Hudson Park and Boulevard. When the Hudson Yards Redevelopment Project's Western Rail Yard is finished in 2018, it will be elevated above the High Line Park, so an exit along the viaduct will be located over the West Side Yard, exiting out to the Western Rail Yard of Hudson Yards. The 34th Street entrance is at grade level, with wheelchair access.
The park's attractions include naturalized plantings that are inspired by the landscape that grew on the disused tracks,and views of the city and the Hudson River. It also has cultural attractions. As part of a long-term plan for the park to host temporary installations and performances of various kinds.

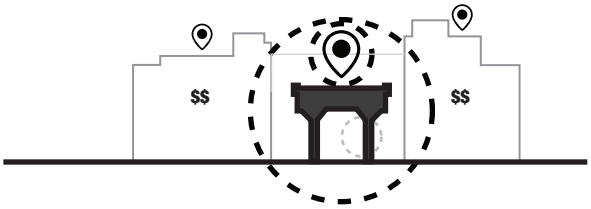








Effecting the City



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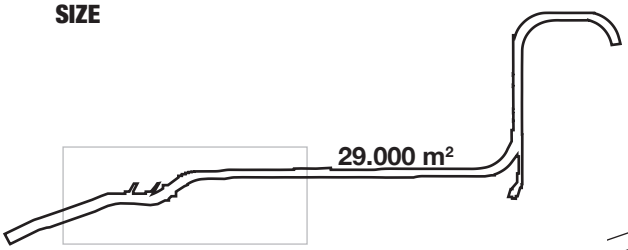
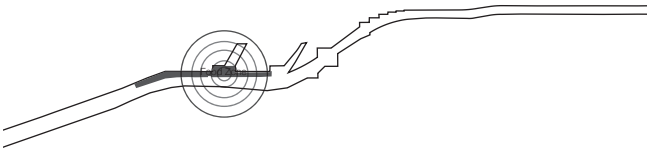


ACTIVITIES



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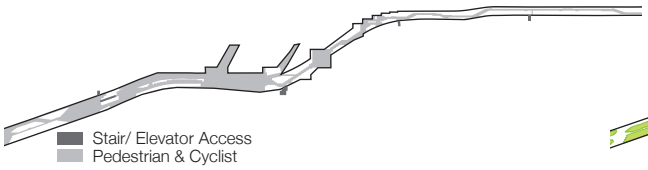
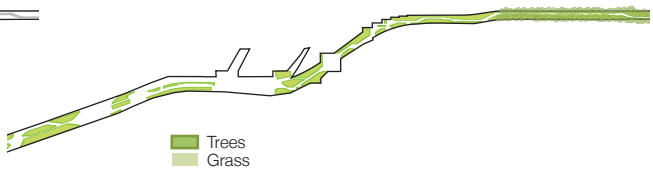


SOFT-SCAPE



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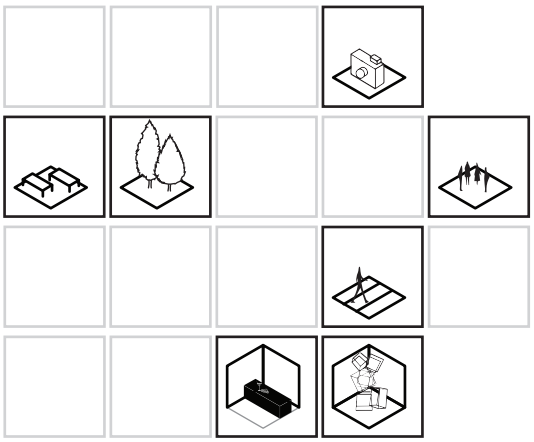


POPULATION

Population: **1.6 million** inhabitants
Density: **27,812** inhab/km²

STAKEHOLDER

Property owner: Public
Developement: Public/Private

TRANSFORMATION TYPE

Permanent / ~~Leased usage~~ / ~~Temporary usage~~

DAY LIFE

7 to 22

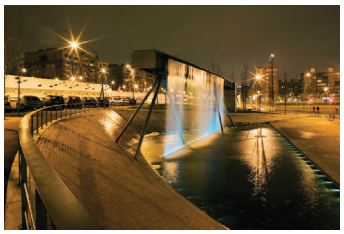
GRAN VIA

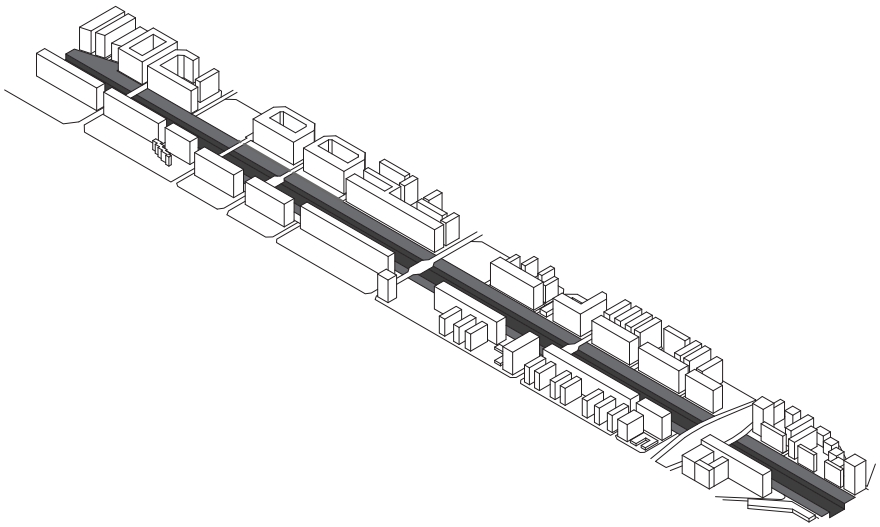
Arriola & Fiol arquitectes

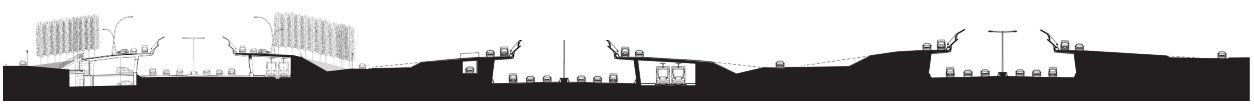
Country: Spain
City: Barcelona
Year: 2007
Influence Area: Sant Marti District

This is a project to improve the conditions of Gran Via, better known to many citizens as the A19- motorway, with greater attention to pedestrians than the motorists. It proposes a new section: a projection of the serviceroads to forms 3.5 metre projections over the central carriageway. This solution reduces noise and atmospheric pollution, and resolves the absence of sea-mountain relations and the shortage of open spaces by means of the following elements: sound screens situated along the edge of the side projections protect the buildings in the Gran Via from the noise produced by traffic on the central carriageway. The walkways situated at the end of all of the perpendicular streets reinforce relations between the two sides. By raising the level to be developed above the central traffic lanes it is possible to accommodate the layout of the new tramline on the same level as the road.

Four stations are planned on the sea side, to be integrated into the park's topography. On the mountain, two underground car parks of two floors occupy a -400metre stretch. Traffic is organized into three levels: (1) a central trunk that channels fast traffic, (2) service roads aver the projections, (3) two traffic lanes and a parking strip with services (access to the central carriageway, car park entrances, loading bays, bus stops), and three-metre wide pavement and a bicycle lane. Linear parks resolve the difference in level between the buildings in Gran Via and those in the roads on either sidew.



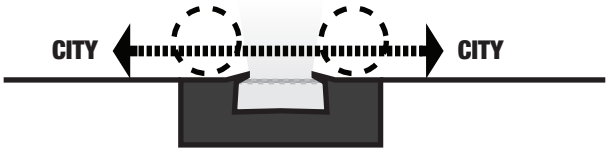




1999

2007

Effecting the City



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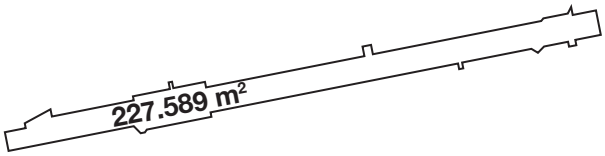
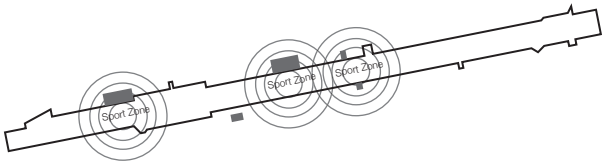


ACTIVITIES



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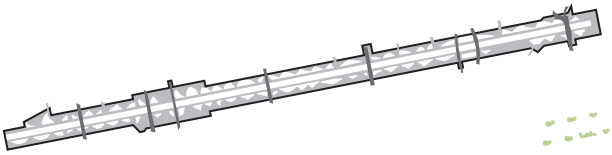
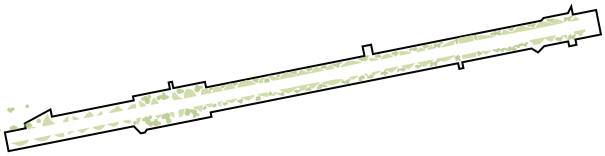


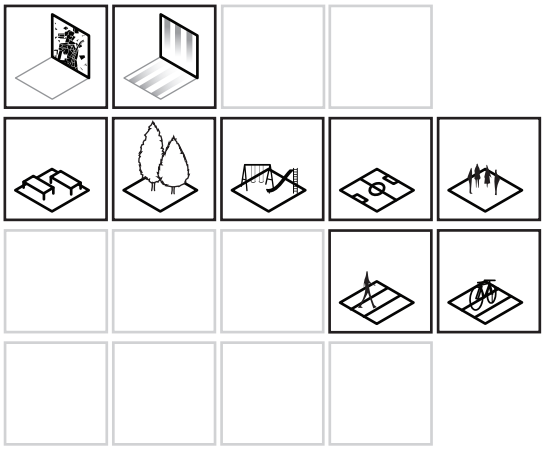
SOFT-SCAPE



Pedestrian Bridge
Pedestrian & Cyclist

Trees
Grass

Program



POPULATION

Population: **218.004** inhabitants
Density: **20.204** inhab/km²

FINANCING

~~Profit~~ / Non-Profit

STAKEHOLDER

Property owner: Public
Developement: Public

TRANSFORMATION TYPE

Permanent / ~~Leased usage~~ / ~~Temporary usage~~

DAY LIFE

7 to 7

RONDA del LITORAL

Pere Joan Ravetllat // Carme Ribas, architects

Country: Spain
City: Barcelona
Year: 2004
Influence Area: Barcelona

Carme Ribas: The resulting piece to urbanize is a strip of 40 m wide and 1,3 km long, divided into 3 parts because of Ronda Litoral road crossing. The execution of the works was divided in two phases, the first one between Bilbao and Selva de mar streets and the second and third between Selva de mar and Josep Pla streets These parts are subdivided in two zones: the coverage of one parking facing to Ronda and the remaining space between the road and the wall of the parking. The project draft starts with these initial considerations, consolidating that division with a paved promenade above the parking and a green strip.

The admissible overloads of the parking in the phase one (1.000 kg/m2) and the future maintenance led us to abandon the possibility to landscape and build on the roof. That is why we thought an asphalted pavement with two colours as the main character of that strip for bicycles, running and other similar activities. We want to emphasize the large size of this space taking out overlapping elements for reinforcing its primary qualities.

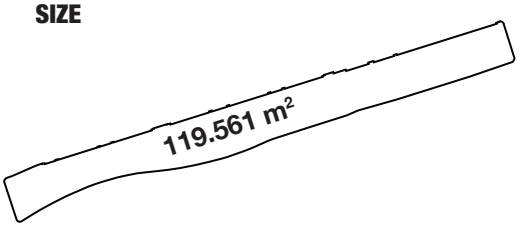
In the rest of the promenade we propose a linear garden organized by trapezoidal green parts allowing the permeability between the pedestrian ways and the plaza above the parking.

1992

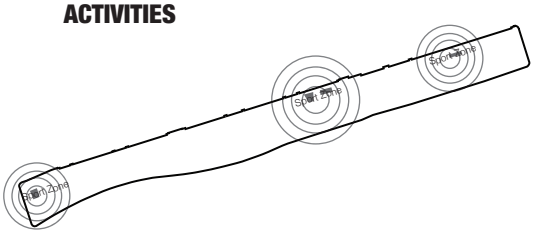
2004

Effecting the City

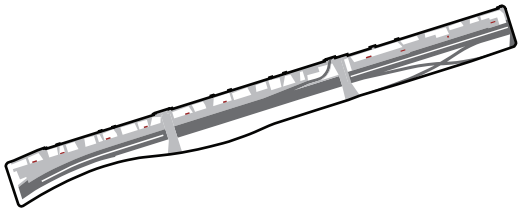
SIZE



ACTIVITIES

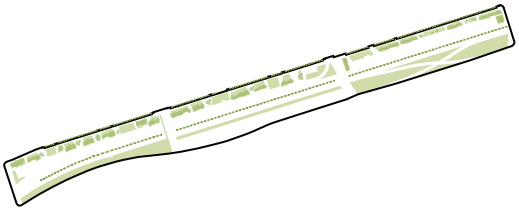


ACCESSIBILITY



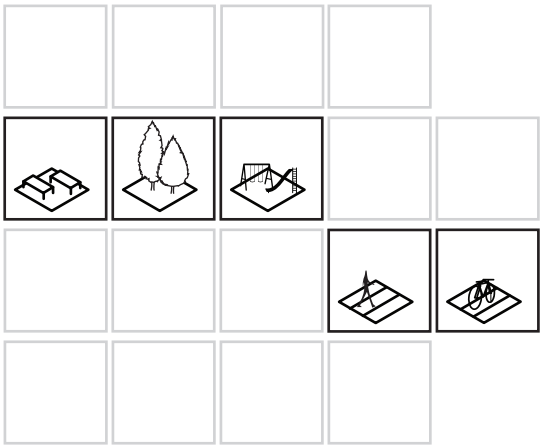
Stair & Elevator Access
Vehicular Traffic
Pedestrian & Cyclist

SOFT-SCAPE



Trees
Grass

Program



POPULATION

Population: **1.7 million** inhabitants
Density: **15,722** inhab/km²

FINANCING

~~Profit~~ / Non-Profit

STAKEHOLDER

Property owner: Public
Developement: Public/

TRANSFORMATION TYPE

Permanent / ~~Leased usage~~ / ~~Temporary usage~~

DAY LIFE

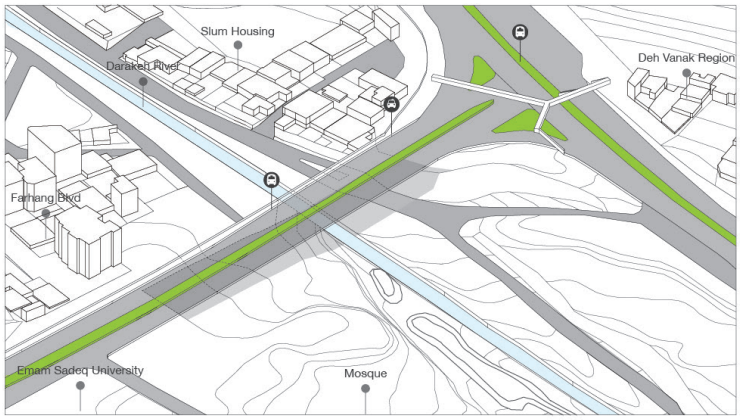
7 to 7

Appendix V:

These are the early taughts I designed at the first two terms. At the first term I was looking into all of the various infrastructures and the leftover spaces in their periphery. But then the project was narrowed down to the under the bridge spaces. These design attempts both help me find how I want to design these spaces, as small intervention rather than fully designing them.

Early Design Attempts

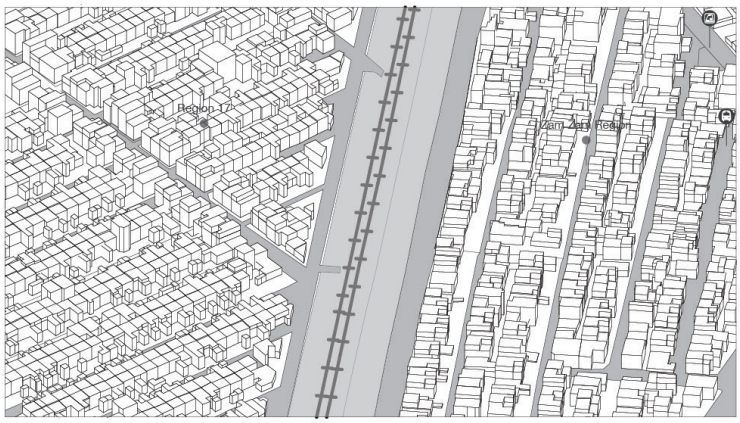
UNDER the BRIDGE



Modiriat Bridge -
On top of Darakeh River

Socio-Demographic	Site of Intervention	Current Performance	Lifespan	Stakeholder

ADJACENT to RAILROAD



Socio-Demographic	Site of Intervention	Current Performance	Lifespan	Stakeholder
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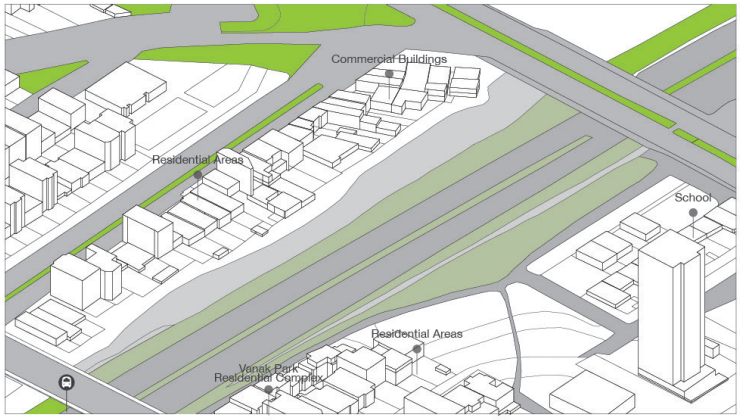
Tehran-Ahvaz Railroad -
Region 18

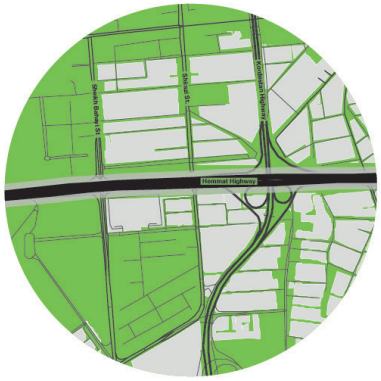
ON TOP of the TUNNEL

Socio-Demographic	Site of Intervention	Current Performance	Lifespan	Stakeholder

Resalat Tunnel -
Valiasr Street / Yousef Abad Street

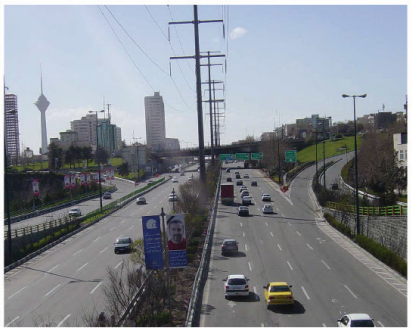
ADJACENT to HIGHWAY





Hemmat Highway -
Africa Blvd

Socio-Demographic	Site of Intervention	Current Performance	Lifespan	Stakeholder

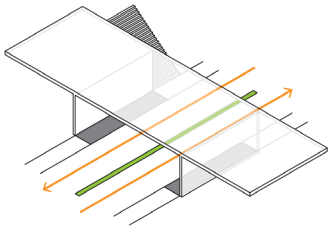


ROAD TUNNEL

Programs:

Instantaneous / Temporal Public Activity | Alongside | Public Spaces
Street Music- Street Theater- Open Air Gallery- Event Area- Gathering Area- Market- Open Library

- A place for student installations in the city- connected with universities/ innovation centers(other under the bridges/ Tuic/...



Accessability:

Highway on Top of Local Road

Neighbourhoods:

Commercial/Administrative - Open Public Areas - Educational

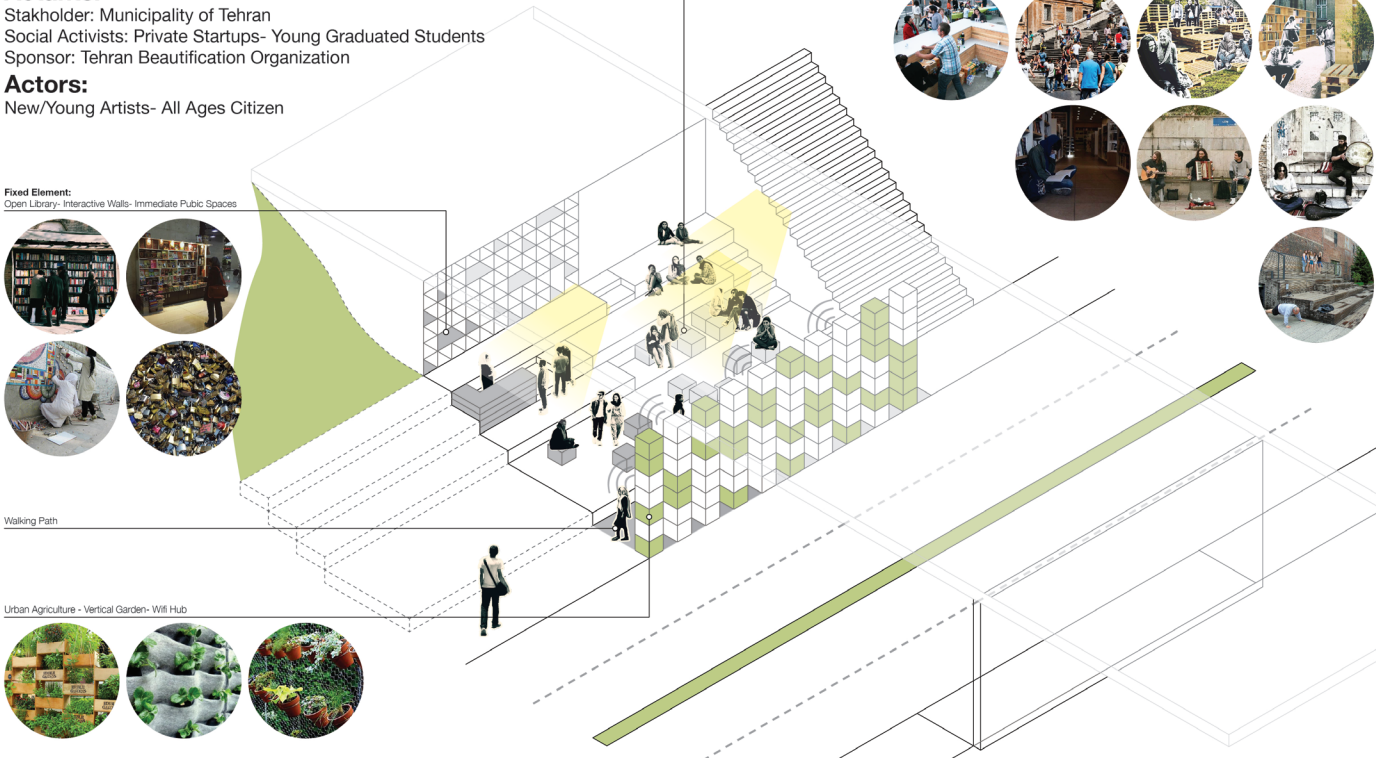
Actants:

Stakholder: Municipality of Tehran
Social Activists: Private Startups- Young Graduated Students
Sponsor: Tehran Beautification Organization

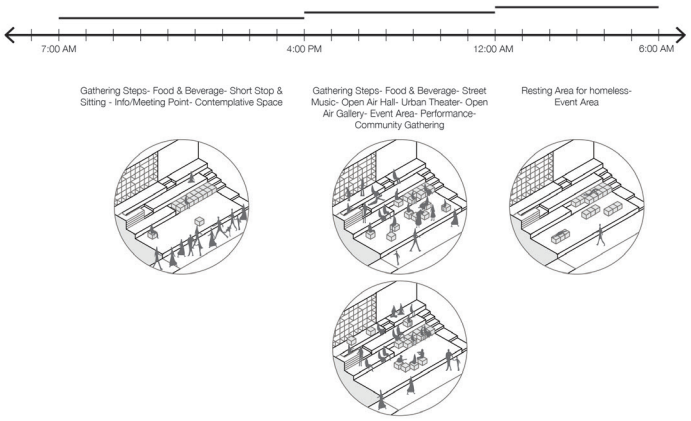
Actors:

New/Young Artists- All Ages Citizen

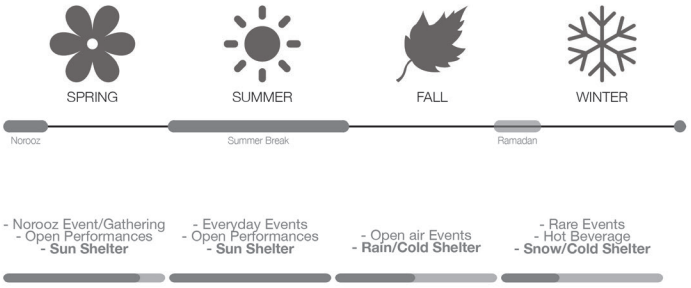
Fixed Element:
Gathering Steps- Food & Beverage
Movable Elements:
Short Stop & Sitting - Info/Meeting Point- Street Music- Open Air Hall- Urban Theater- Open Air Gallery- Event Area- Performance- Contemplative Space- Community Gathering- Improvisational Gathering and Activities



Day:



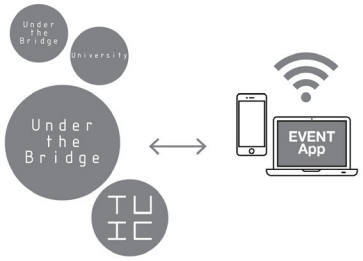
Seasonality:



Digital Elements:

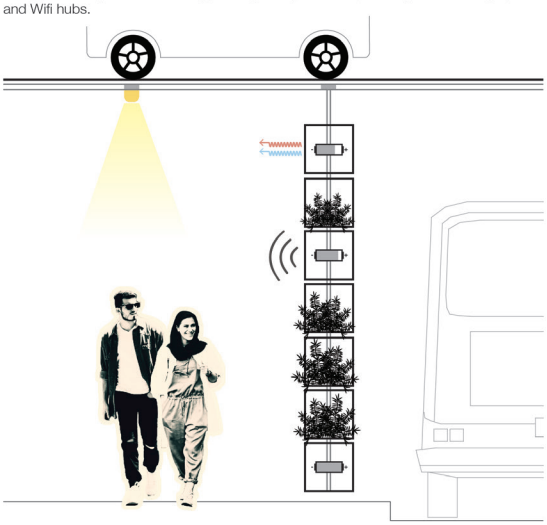
Mobile App:

An application for connecting the private sector social and urban activist (exp: TUIC,...) and the young artists,and also they can book these spaces for some special occasions to perform. These spaces are connected to the other making spaces designed under the bridge and universities for small exhibition and performances.
Virtual platform including a dynamic website, an application and a corresponding social network of citizen activities



Physical Elements:

Regarding the speed limit of 80km/h and the approximate weight of different vehicles that pass the bridge and the traffic because of the highway, we could expect a great amount of energy harvested from the vibrations of the bridge by quartz piezoelectric tiles. This energy is enough electrical energy for Lightning elements, Heating and Cooling System and Wifi hubs.



BIG ISLAND

Programs:

Long Term Stops | On Top | Public Spaces

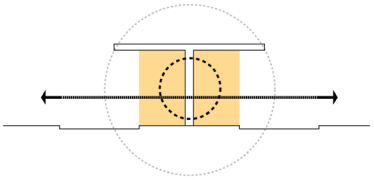
Public Spaces: Street Music- Open Air Hall- Urban Theater- Open Air Gallery- Event Area- Performance- Exhibition Space- Informal Sports Courts- Park- Adventure Playground- Childrens Garden- Urban Agriculture - Liquid Landscape

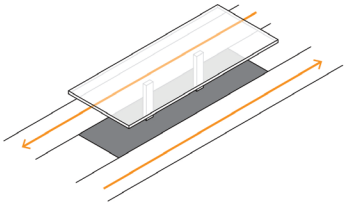
Public Amenity: Outroom Cinema- Outroom Theater- Felxible Gallery- Outroom Classroom- Cafe- Food & Beverage

Commercial: Public Market- Open Air Market- Retail- Book Store

Housing: Live|Work- House for Homeless

Administrative: Art/Architectural Office- Open Studios- Creative Workshops- Maker Space- Innovation Center- Art/Design/Fabrication Studios





Accessability:

Highway/Local Road on Top of Local Road

Neighbourhoods:

Commercial/Administrative - Public Cultural Centers- Educational- Residential- Historical Area

Actants:

Stakholder: Municipality of Tehran

Social Activists: Private Startups- Young Graduated Students

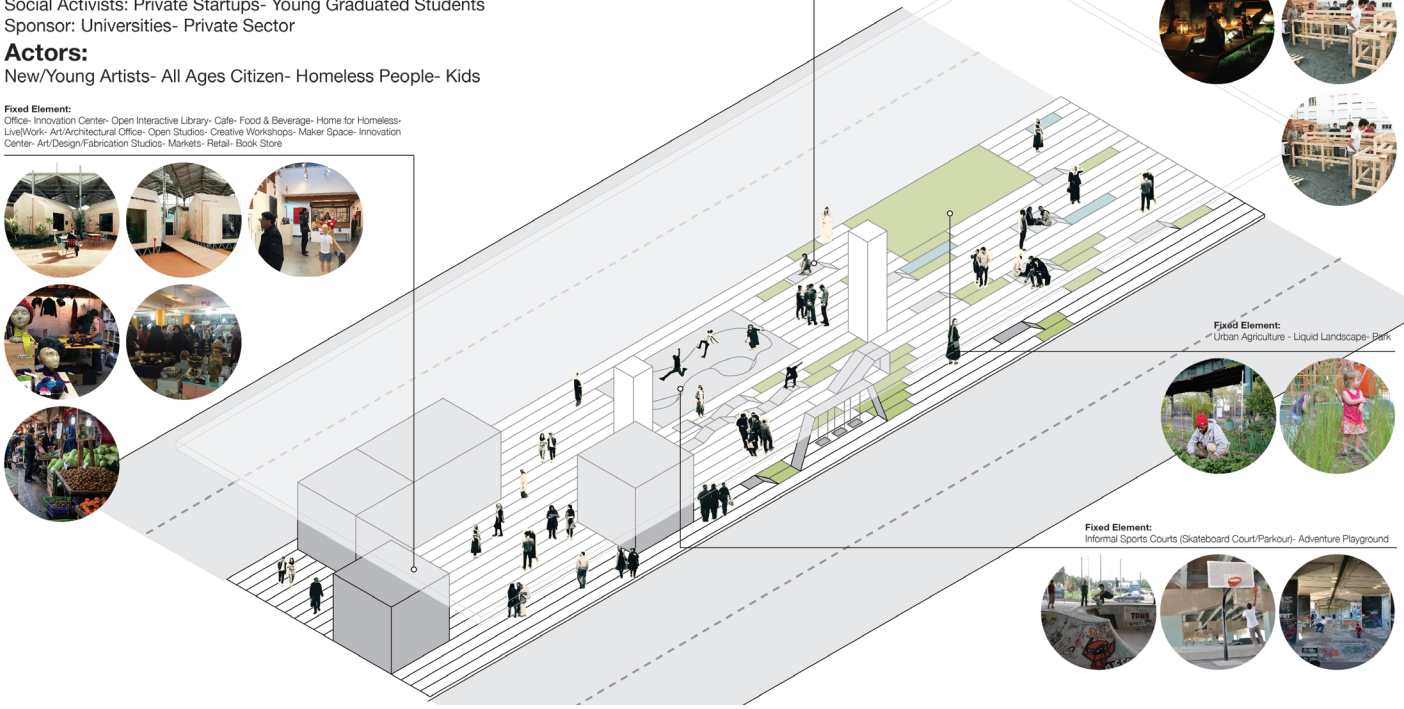
Sponsor: Universities- Private Sector

Actors:

New/Young Artists- All Ages Citizen- Homeless People- Kids

Fixed Element - Public Interactions:
Event Area- Performance- Exhibition Space- Contemplative Space- Community Gathering- Improvisational Gathering and Activities- Outroom Cinema

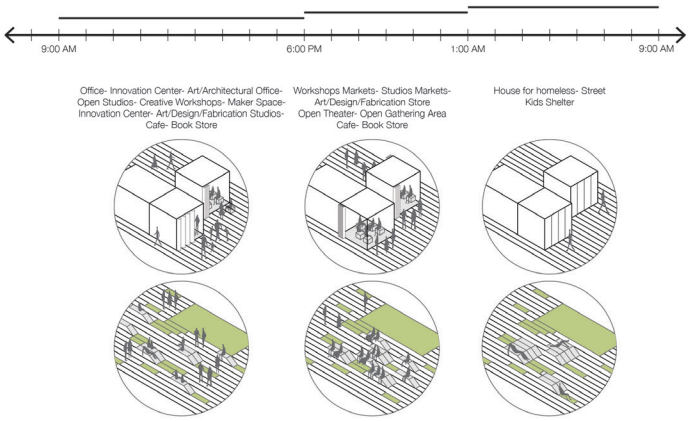
Fixed Element:
Office- Innovation Center- Open Interactive Library- Cafe- Food & Beverage- Home for Homeless- Live|Work- Art/Architectural Office- Open Studios- Creative Workshops- Maker Space- Innovation Center- Art/Design/Fabrication Studios- Markets- Retail- Book Store



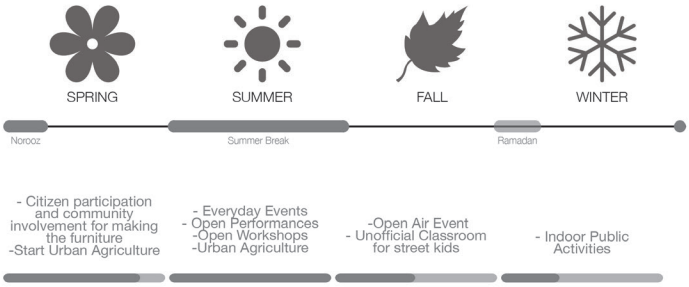
Fixed Element:
Urban Agriculture - Liquid Landscape- Park

Fixed Element:
Informal Sports Courts (Skateboard Court/Parkour)- Adventure Playground

Day:



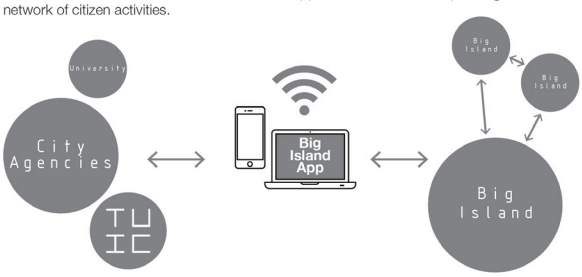
Seasonality:

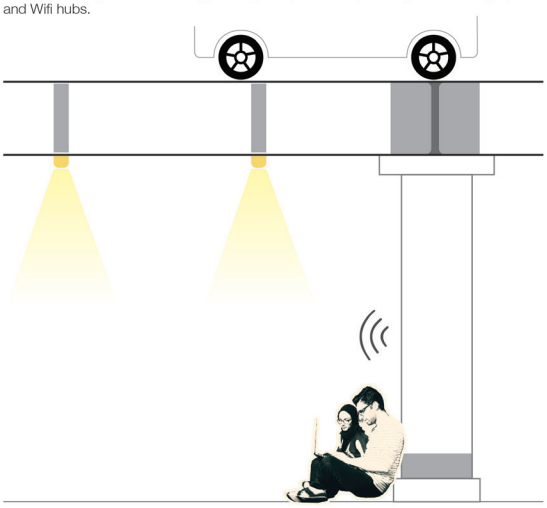


Digital Elements:

Mobile App:

An application for connecting various "Big Island" types with various activities happening in them, to connect the resources and the consumers and how they have a network of connection. This application will also be use to connect city agencies, universities, urban activist (exp: TUIC,...),community organizations, architects, and neighborhood groups.
Virtual platform including a dynamic website, to showcase the everyday life on the construction site with citizen interaction, an application and a corresponding social network of citizen activities.



Physical Elements:

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