

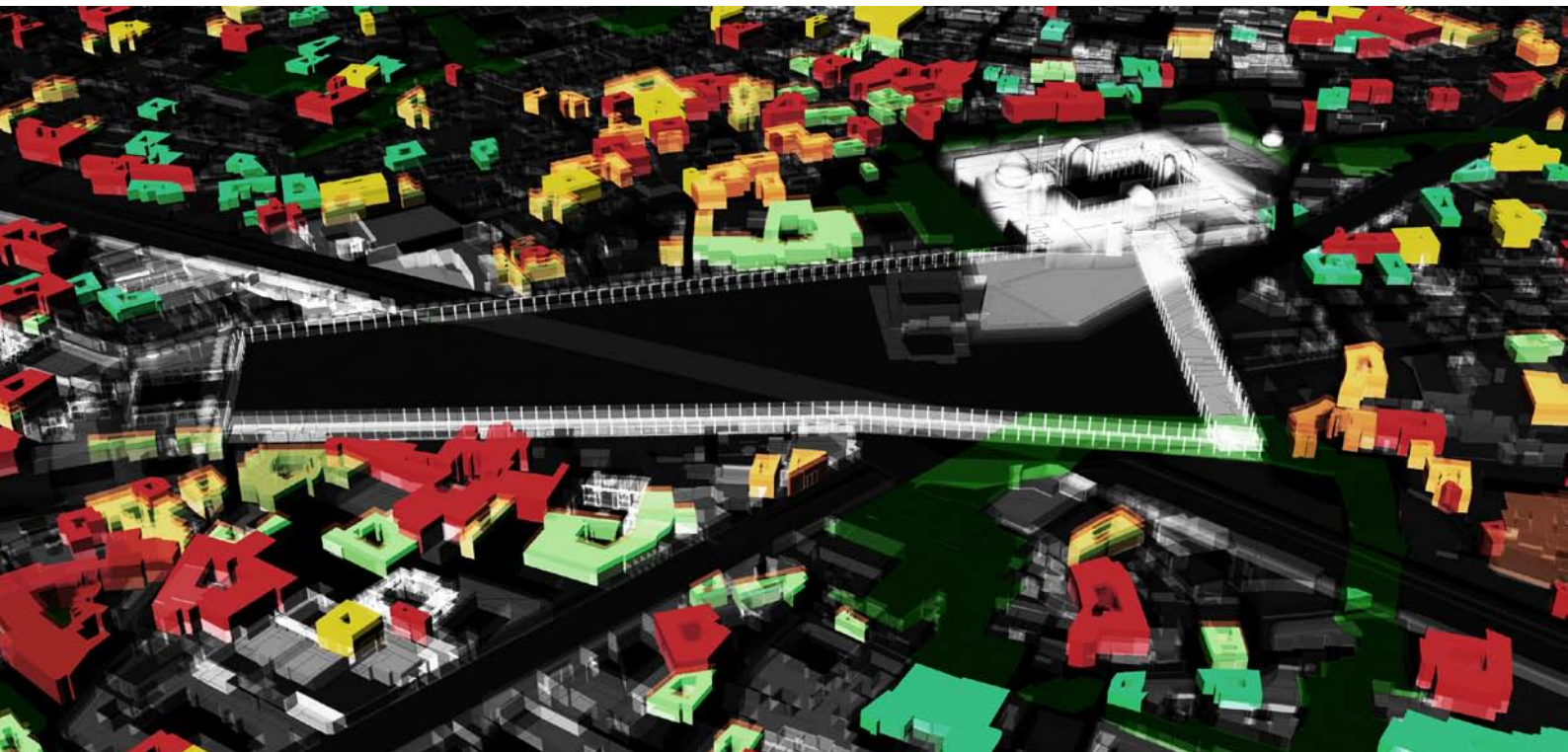


POLITECNICO DI MILANO
SCUOLA DI ARCHITETTURA E SOCIETA

Master Thesis in Urban Planning and Policy Design

Once Upon a Place

Regenerating the Old Neighbourhood Isfahan, Iran



Supervisors: Gabriele Pasqui
Giulia Fini
Student: Negar Abbasi
Matr. 750210

Academic Year 2011-2012



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Abstract

This is a pilot project working on Isfahan historical city center.

It is an urban redevelopment project starting from the information at hand and current situation; shortcomings and resources. It attempts to "define a clear but flexible spacial framework.

Main issues to be defined in the spatial framework are: functional use, density, localization and types of public spaces and public amenities and infrastructure, accessibility and road hierarchy

Other than the redevelopment project itself, more attempts have been made to promote a generic planning tool assisting the planner to define densities according to the targets ((leading idea)) of the project. **The general target is optimizing a density which provides enough area for spurring the mixed-used community in this context while achieving the highest spacial, social, environmental and economical productivity.**

Undeniably, the role of planner is not under question.. Planner makes some reference decisions; the tool would help the planner to simply and test scenarios, evaluate urban performance and optimize solution(s). The intervention entails implementing associative approach in the field of planning other than formal design.

key words:

NEIGHBORHOOD, PROCESS, PLACE, REDEVELOPMENT
VIBRANCY, CRITICAL MASS, ACCESSIBILITY, INTEGRATION, CONNECTIVITY, SAFETY,
QUALITY-MIXED USED, REGENERATE, REHABILITATE, VARIATIONS, OPTIMIZATION, PERFORMANCE EVALUATION

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INTRODUCTION

NEIGHBORHOOD-PROCESS-PLACE

The project is a process ;it starts from the redevelopment of the historical zone of Isfahan ,Iran's 3rd largest city, approaching series of trans-national experiences and studies .The First and foremost is practicing the associative design followed by author's studies about parametric and associative planning, Space-mate: Density and the Typomorphology of the Urban Fabric.by Berghauser Pont, M. and P. Haupt(T.U Delft), computational method for Urban Densification(T.U Delft) university and the "measuring density "workshop results(T.U Lisbon).

The current intervention entails implementing an associative approach in the field of planning other than formal design.

Two other experiences have been practiced in this project

- dealing with implementing an urban plan and property possession users-Malpère-Marciaissone in Architecture Studio(Paris)
- practicing GIS for localization of different uses in realizing a practical project(in Chicago)

The book is divided in 2 in main parts:existing situation and the project. For many interventions discussed, relevant projects and studies are presented in rectangular "frames" which identify the link with the intervention with colored fonts(blue).

In the first part of the book ,after investigating the existing condition of Isfahan historical city center which has been dilapidated specially ,socially and economically in units 1 to 11,the drawbacks and opportunities would be set to inspire an interpretation of the case in unit 12.

In the second part, the redevelopment project is explained.

Targets and resources for the project are introduced in unit 13 and 14 and the boundaries of the project are set according to the demands in unit 15.

Then,the project's general approach and the "leading" idea are proposed: Integrated vibrancy, MIXED USED INTEGRATED NEIGHBORHOOD connected through a decentralized urban mosaic of mixed used places on urban axis, green corridors, and places.

To fulfill the concept, 6 urban principles are targeted in the project which inspire five general strategies in units 18 and 19. The strategies are realized by strategic tools and actions. Creating a mosaic of urban mixed used, networked functions is emphasized in the strategies.

Next, spacial, economic and institutional tools are elaborated in unit 20. The tools provide an integrated toolkit interlinked and overlapped at times spurring remedies for different problems.

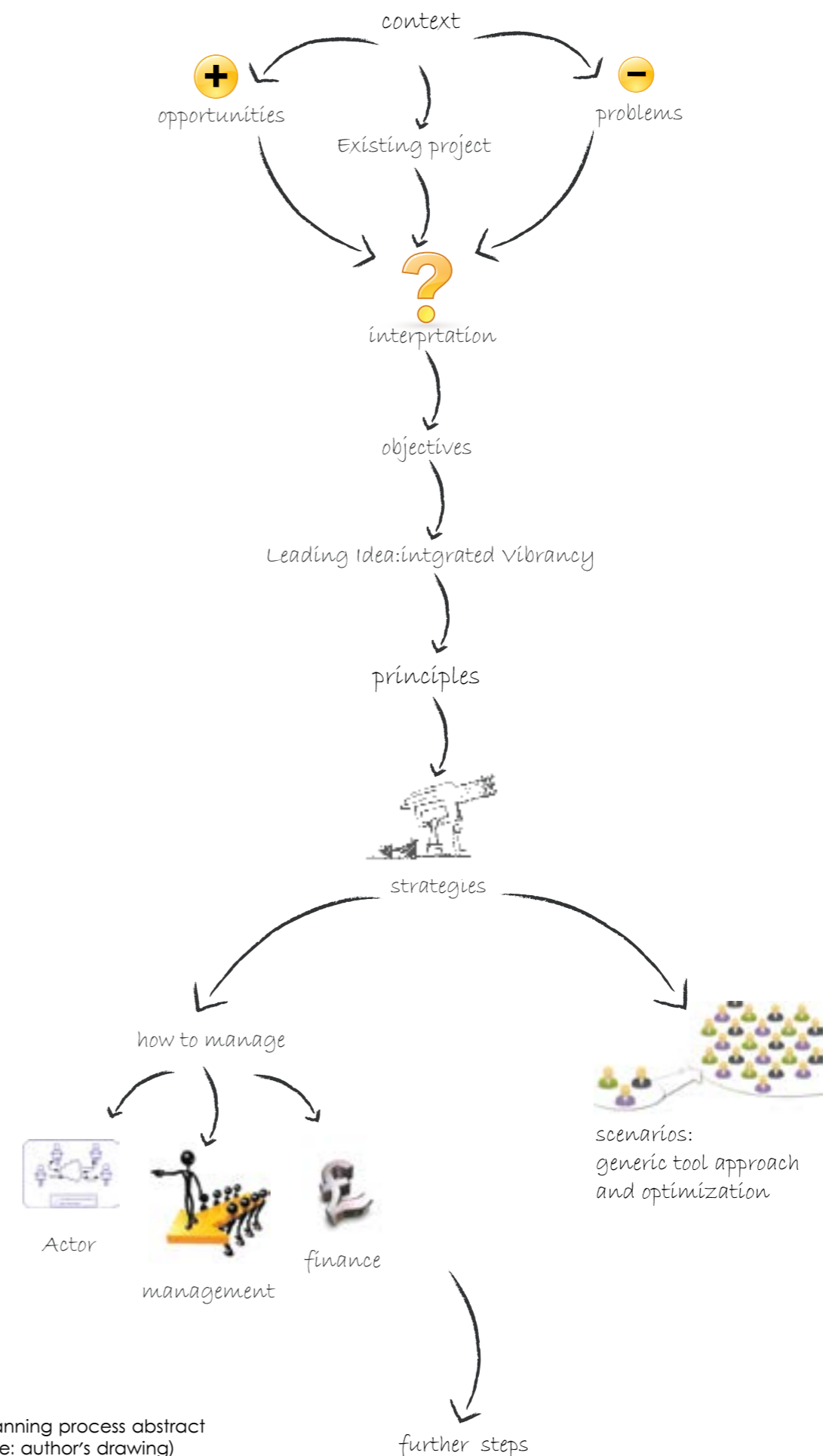
After setting the required toolkit the project advances to proposing a scenario for the redevelopment project. An associative parametric planning method has been chosen to test different scenarios in terms of densities. Although unlimited scenarios could be tested by the associative tool proposed, because of the targets of the project it is determined to test 5 low to mid density scenarios. They would be materialized and their behavior would be evaluated accordingly and one scenario is prioritized as the optimized solution to the project which is more socially, economically and environmentally viable.

For prioritizing and optimizing the scenarios, they are evaluated, moving from a subjective approach to a subjective one.

As a practical result of all the interventions cited, an urban axe is zoomed in to illustrate the implementation of the tools according to the optimized scenario.

To determine feasibility of the proposal, the last 3 units propose models and ideas for the partnership, management and financing the project. The discussions accentuate networking and collaboration between different partners along with participation of the users of the urban arena.

Finally possible the further steps for the pilot project are regarded.

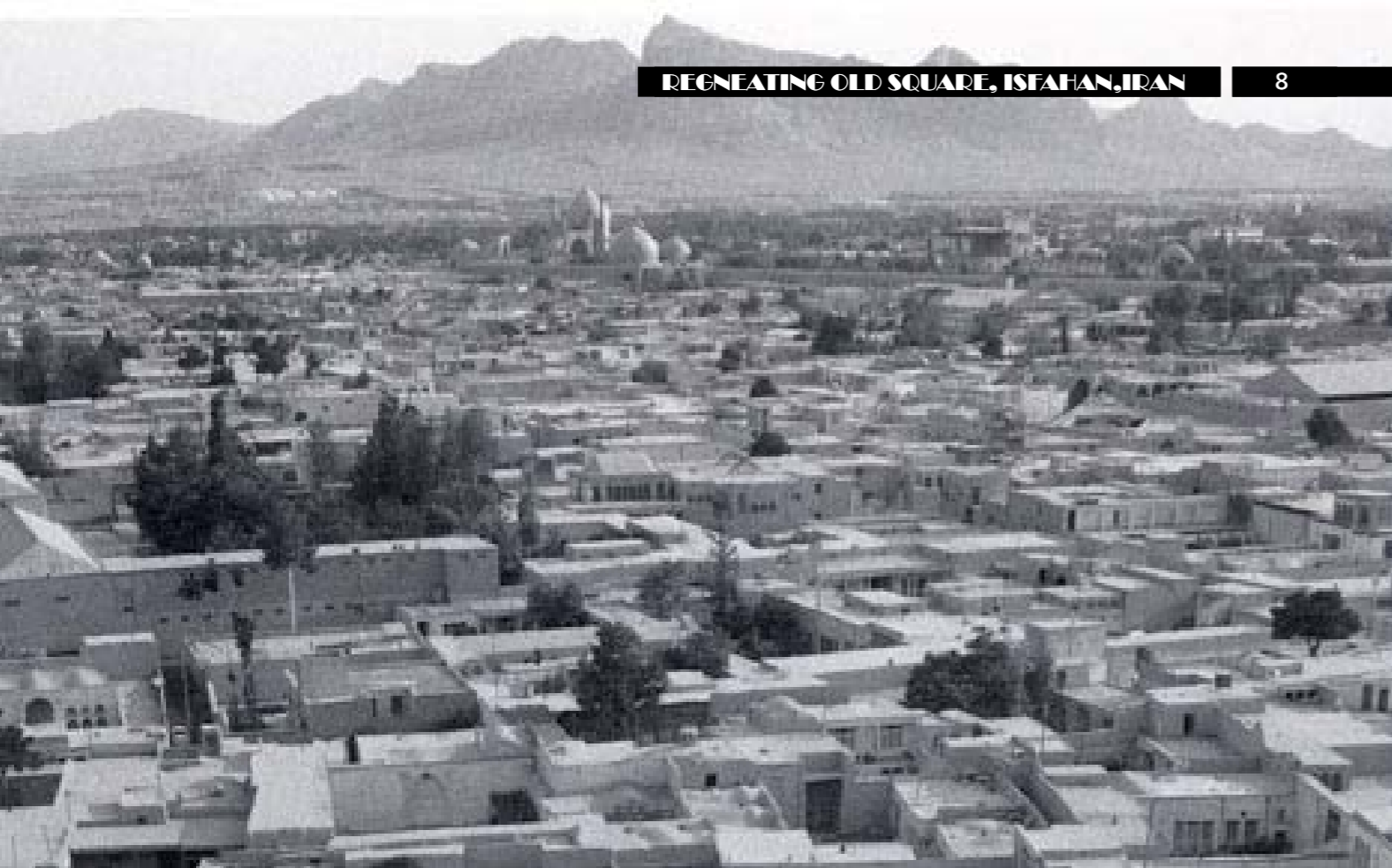


01-planning process abstract (source: author's drawing)

Once upon a neighborhood

EXISTING SITUATION





02. A view of Isfahan, Khajou Bridge (source:<http://www.iranchamber.com/cities/esfahan/esfahan.php>)

1 - Localization: Isfahan, Iran

The project location is situated in municipal district 3 of Isfahan, Iran. Isfahan is the capital of Isfahan Province in Iran and has a population of 1,583,609 and is Iran's third largest city. The Isfahan metropolitan area had a population of 3,430,353 in the 2006 Census, the second most populous metropolitan area in Iran after Tehran.

Isfahan is located on the main north-south and east-west routes crossing Iran, and was once one of the largest cities in the world. It flourished from 1050 to 1722, particularly in the 16th century under the Safavid dynasty, when it became the capital of Persia for the second time in its history.¹

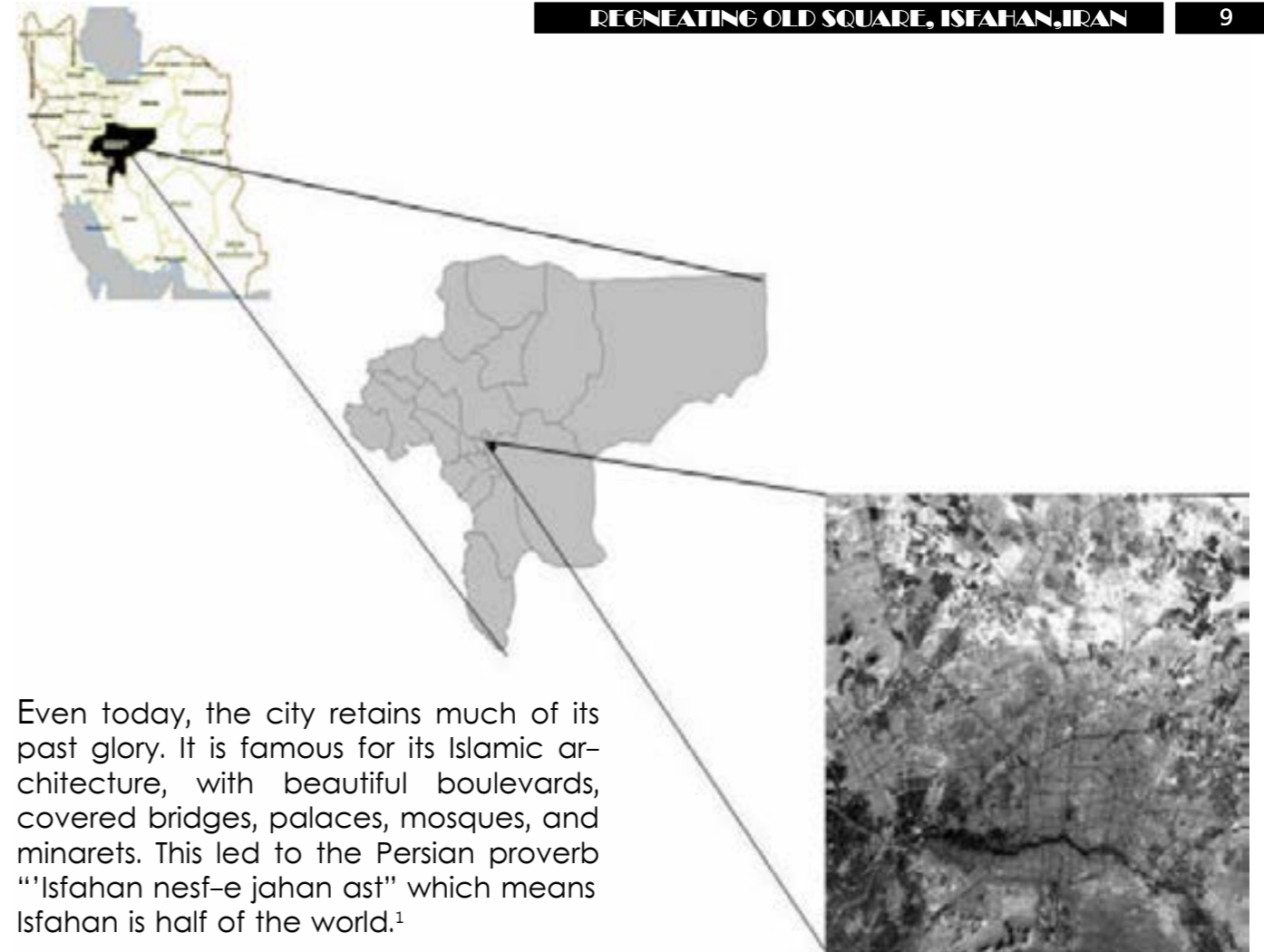


03. Naghse-e-Jahan Square (source: Naghse-e-Jahan-Pars Archive, 2010)



04. Emam mosque-Isfahan (Source: <http://videovision-one.com/bbc-world-wonders-isfahan-mosque-iran/>)

1- <http://en.wikipedia.org/wiki/Isfahan>

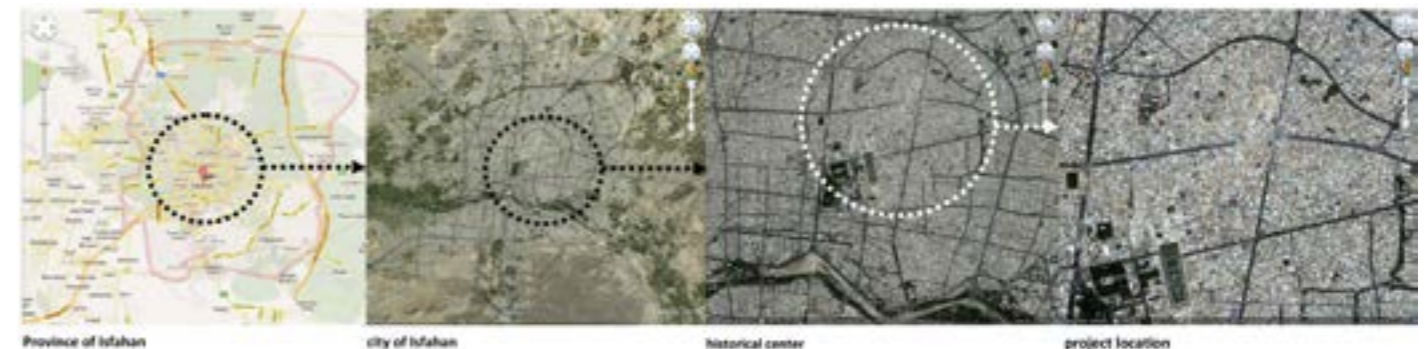


Even today, the city retains much of its past glory. It is famous for its Islamic architecture, with beautiful boulevards, covered bridges, palaces, mosques, and minarets. This led to the Persian proverb "Isfahan nef-e jahan ast" which means Isfahan is half of the world.¹

Isfahan dates back to the third king of Pishdadian chain. This city has been in across of the main roads and residing place of Hakhamaneshi kings.²

Isfahan has an arid climate. It is very hot during the summer with maxima typically around 36 °C. During nights with low humidity and moderate temperature the climate can be pleasant. During the winter, days are mild but nights can be very cold and it snows at least once every winter. Esfahan's climate is extremely cold in winter.³

05. localization of Isfahan in Iran (source: Assari, 2012, p.13)

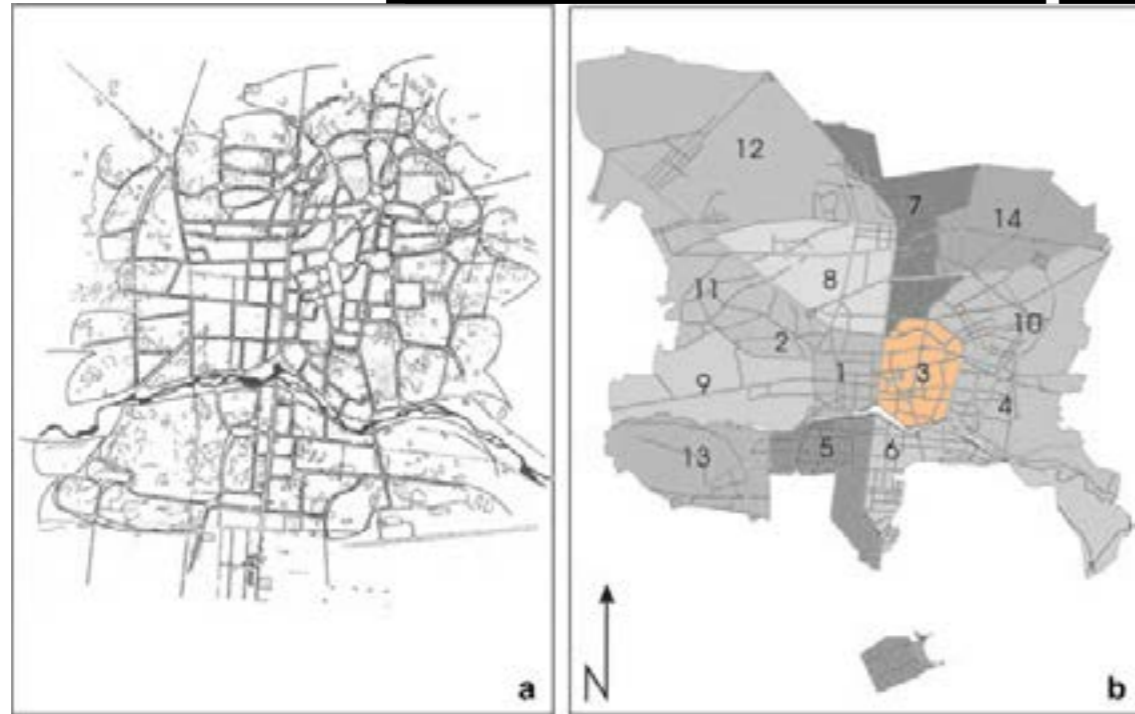


06. localization of the project in Isfahan (source: author-based of google map)

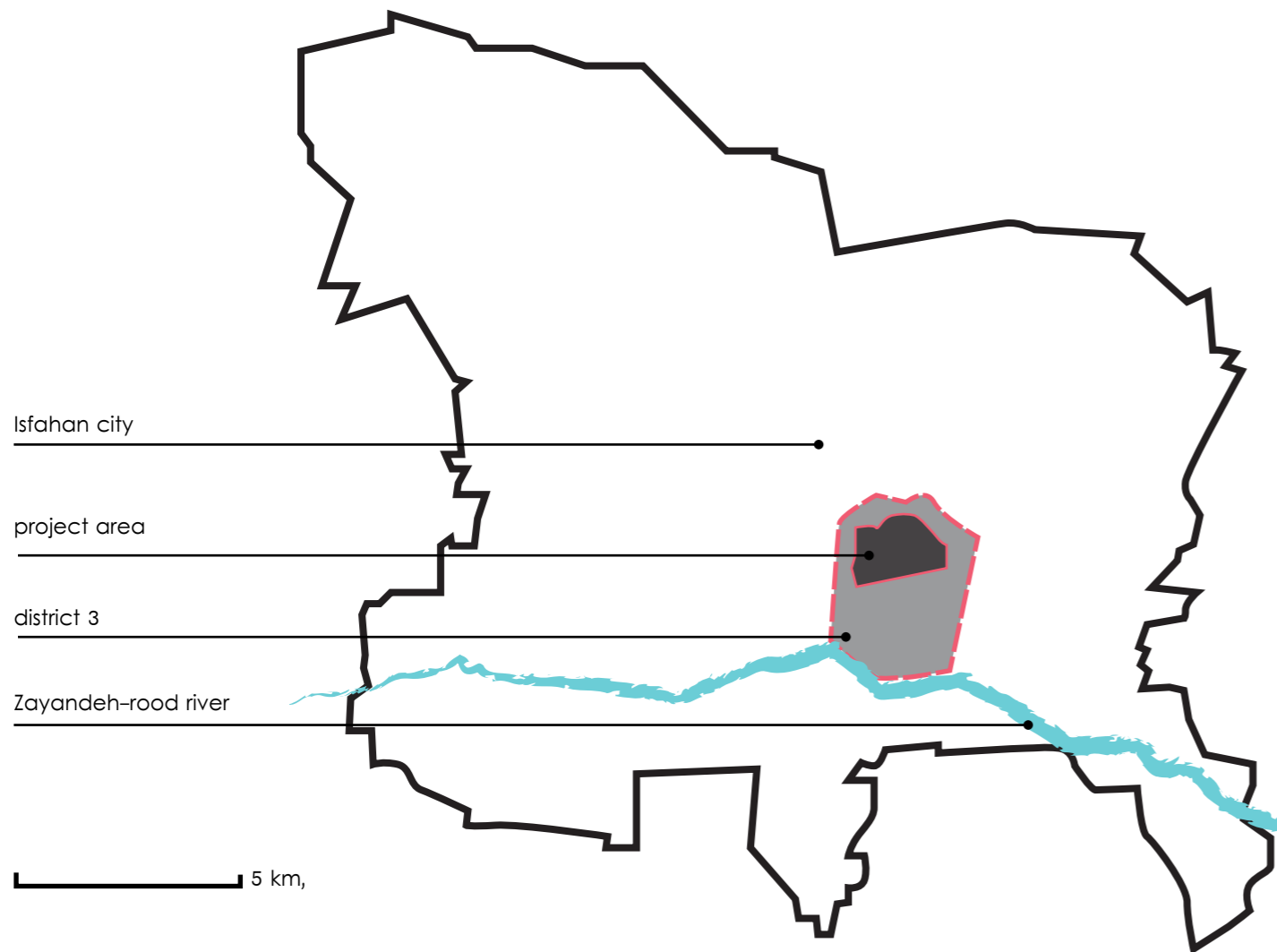
1- <http://en.wikipedia.org/wiki/Isfahan>

2- <http://www.unhabitat.org/bestpractices/2008/mainview04.asp?BPID=1905>

3- <http://en.wikipedia.org/wiki/Isfahan>

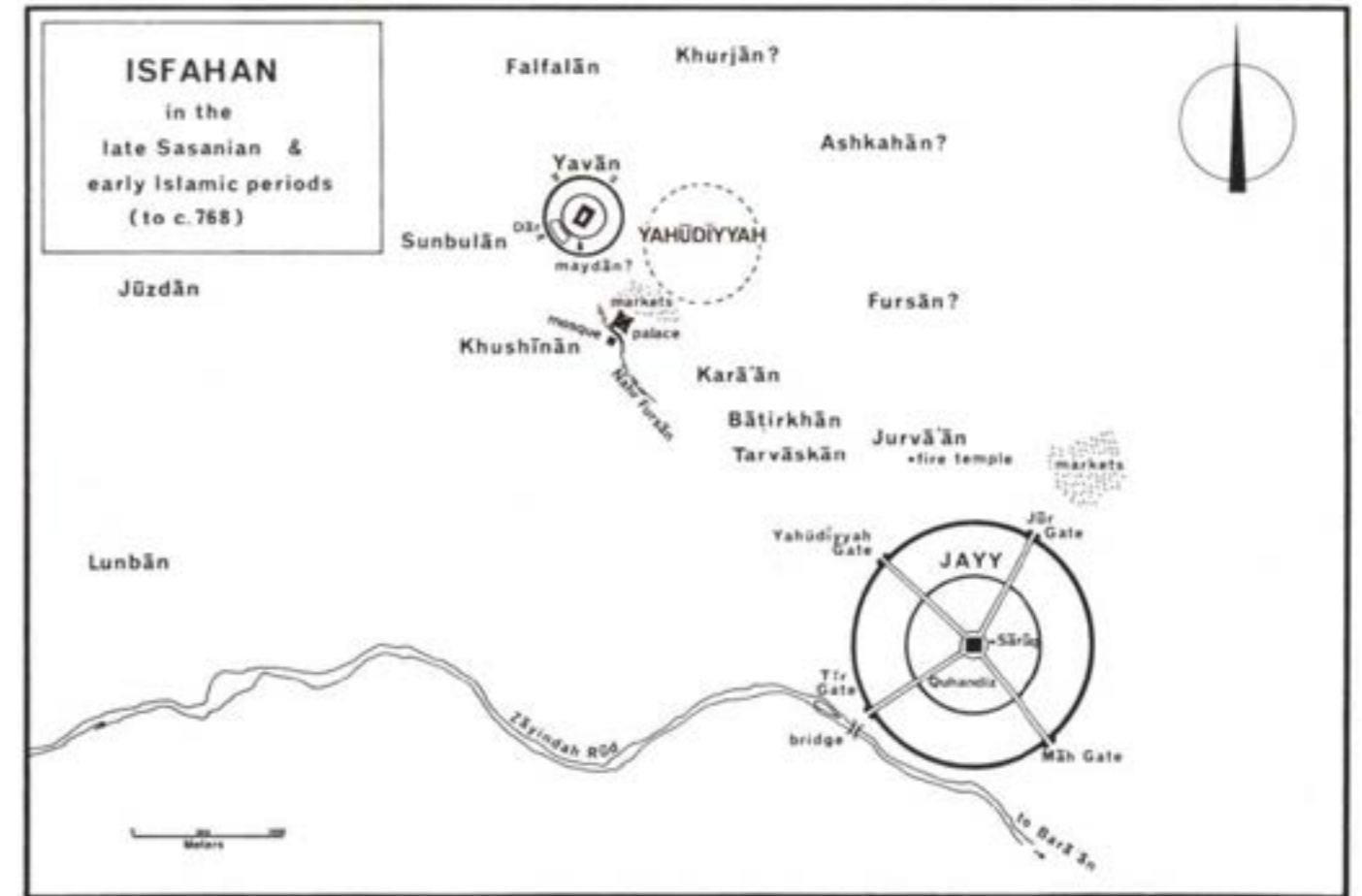


07.localization of municipal district 3 Isfahan(source: <http://www.sciencedirect.com/science/article/pii/S0264275112000443>)



08 boundaries of the project in the context (source:author's drawing)

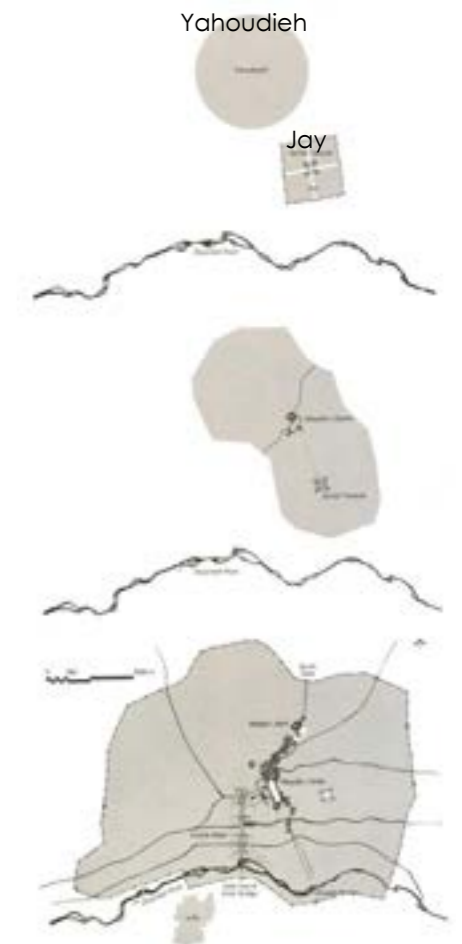
2-GROWTH OF THE CITY



09.The amalgamation and circumvallation period of Isfahan region. (source: Assari et al. ,2012,p.61)

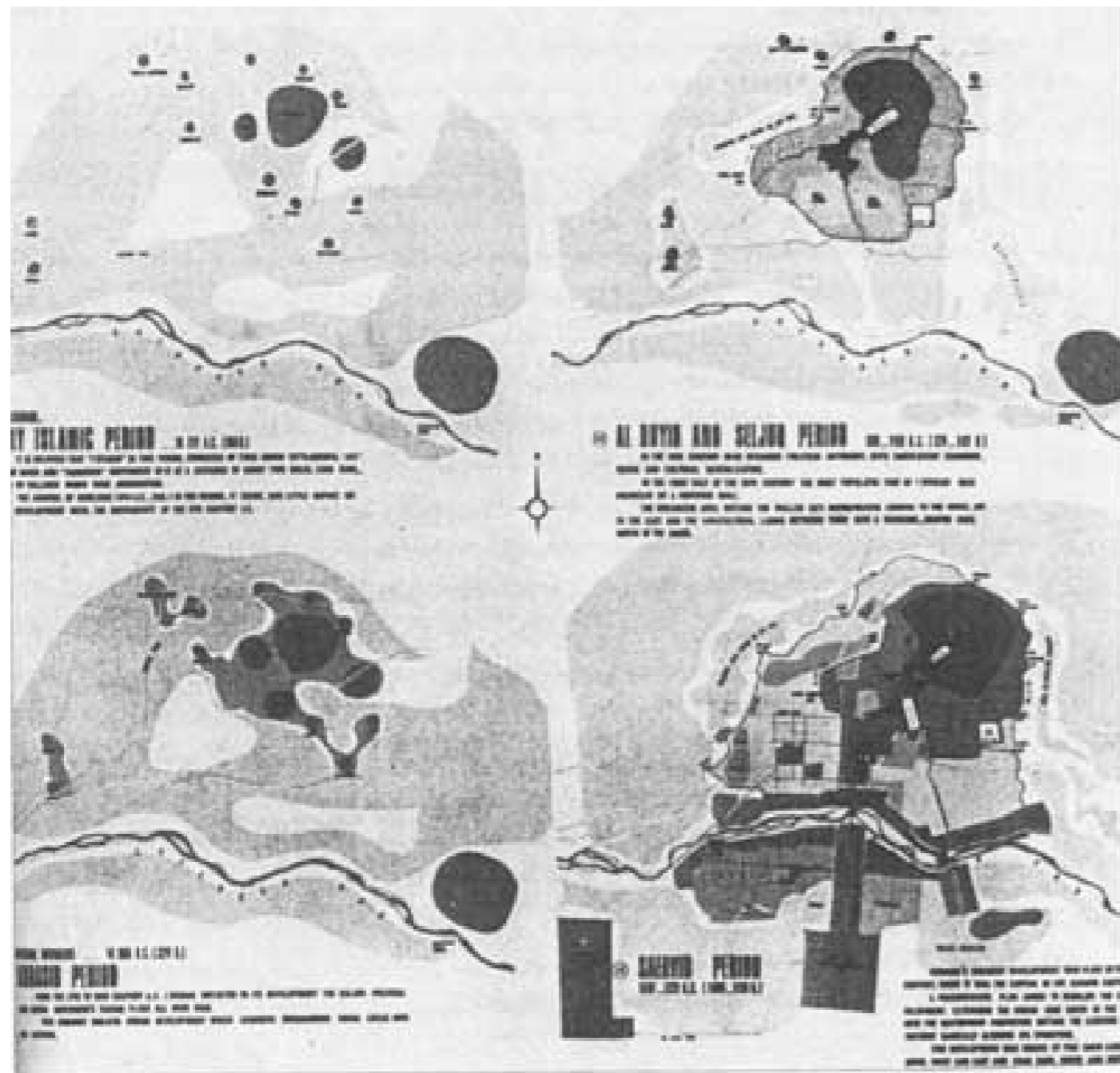
Isfahan has been a garrison town of Sassanid empire(from AD 224 to AD 651) and in the early Islamic times it has consisted of two big settlements: Jay the seat of Sassanid governors, and Yahudieh the Jewish quarter. Old Square was situated in the suburbs of Yahudieh). According to historian Balazari, it seems that Yahudiyeh and Jey were two important settlements in central Iran in 637 AD.¹

After Muslims conquered Iran they built a an important mosque(Jameh mosque in old Square. New urban developments called Khozinan had been settled between two sites connecting them. As a result of the connection of 2 sites old square would have been re-situated at the center of the city. A bazaar also has been established in Khozinan which later passed the old square. The city and the square flourished and during Saljuk era(11th century) the old square had been the political,social and cultural center of the city.²



10.Three crucial stages of Isfahan's physical transformation. Source:(Ardalan & Bakhtiar, 1979) (source: Assari et al. ,2012,p.64)

1- Isfahan ,the second heaven,Irandaily(February,16,2012
2-Hamidi(1997)



11. Isfahan's growth towards the river (south) from more than 1400 years ago until Safavid Dynasty era (1502-1722) (source: <http://www.rasekhoon.net/article/show-85080.aspx>)

Transformation of Isfahan during 16th and 17th century

From the middle of the Safavid era (1502-1722) and as the result of development of Naqsh-e Jahan plaza its importance decreased gradually as during Ghajar era (1794-1920) while the capital of Iran was transferred to Isfahan. A new Friday mosque was constructed in the new Square. The new square got developed extensively and replaced the old square as the main city center for gatherings, shopping, and participating in Friday prayer. Old square lost its urban importance and gradually got surrounded by shops and filled with stalls and non-permanent traders.

The second important decision in the development of Isfahan was the creation of a new street, Chaharbagh (or Four Gardens). Unlike most of the old streets in the old Isfahan, this avenue was a wide, straight boulevard with four rows of

large trees and a stream in the middle. But Chaharbagh was not cut through the fabric of the old city as the Haussmann style boulevards in Paris. This boulevard was created as a north-south extension of the old city, continuing to the south, where an extensive complex of Safavid gardens were created. The glorious bridge of Sio-seh-Pol across the river Zayandeh-Rood was used to connect Chaharbagh to the south side of the river.

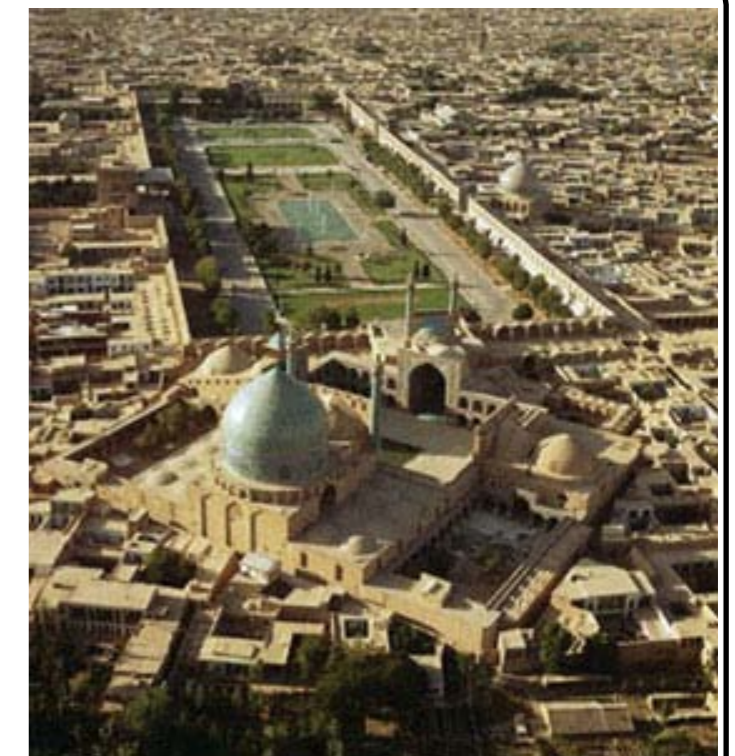
The intention behind this bridge was to create a city on both side of the river.

The axe ends in 1000-Jarib gardens on the south edge of the river which has today been transformed to university of Isfahan.

Naqsh-e Jahan Square

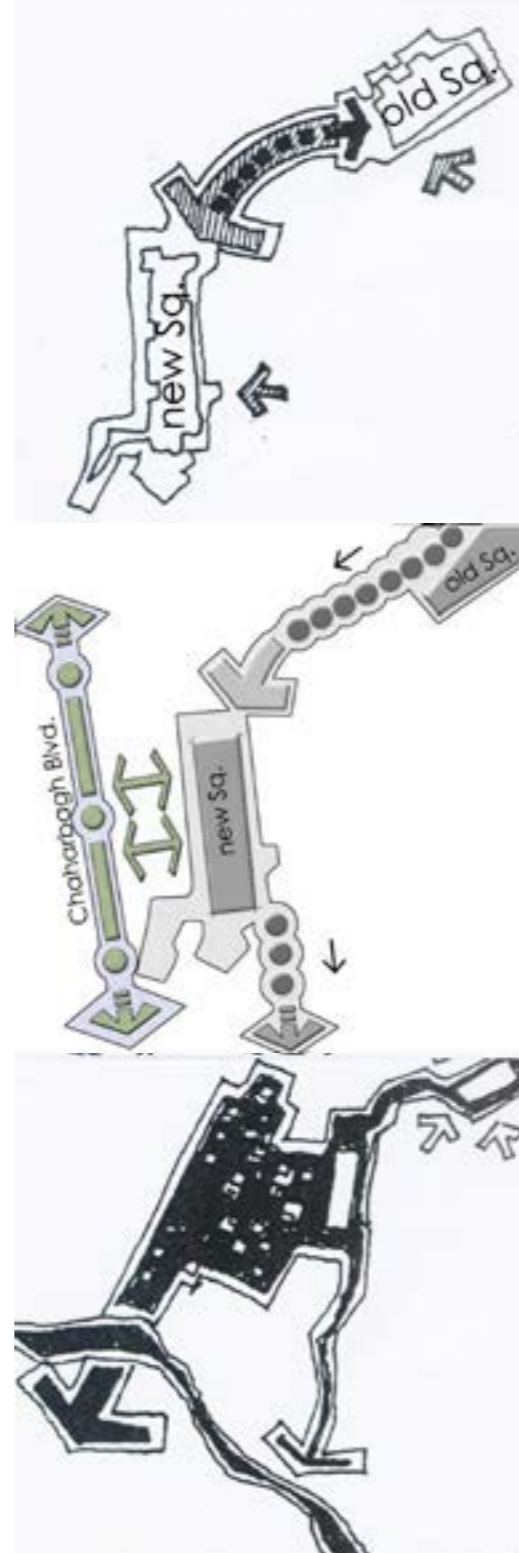
Maidān-e Naqsh-e Jahān; trans: "Image of the World Square"), known as Imam Square formerly known as Shah Square is a square situated at the center of Isfahan city, Iran. Constructed between 1598 and 1629, it is now an important historical site, and one of UNESCO's World Heritage Sites. It is 160 meters wide by 508 meters long [1] (an area of 89,600 m²). The square is surrounded by buildings from the Safavid era. The Shah Mosque is situated on the south side of this square. On the west side is the Ali Qapu Palace. Sheikh Lott Allah Mosque is situated on the eastern side of this square and the northern side opens into the Isfahan Grand Bazaar. Today, Namaaz-e Jom'eh (the Muslim Friday prayer) is held in the Shah Mosque.

(source: http://en.wikipedia.org/wiki/Naqsh-e_Jahan_Square)



12. Naqsh-e jahan Square; the new square connected to the old square by bazaar (source: <http://www.mardomak.org/story/49027>)

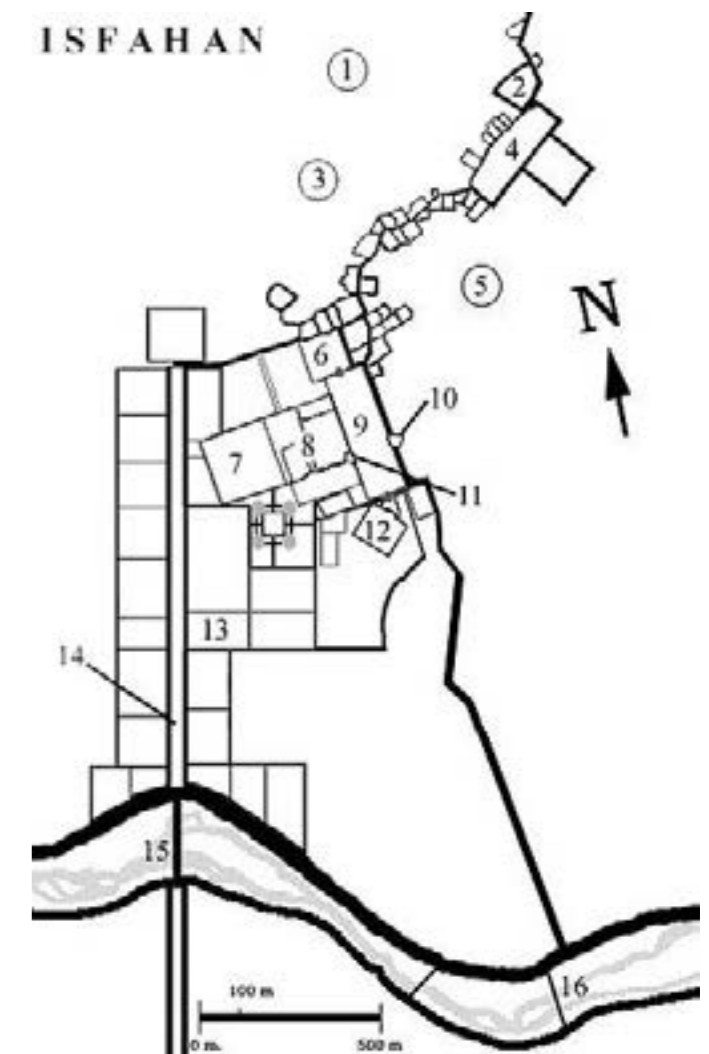
13. Chaharbagh street in 1920(source:http://new.njp-arch.com/default.aspx?cnt=prjimg)



14. Growth of the city towards the river in course of time:
 1-from old square to new square 2-creation of Chaharbagh axe 3-ention of the city towards the river in 2 axis:Chaharbagh and the second parallel axe starting from Naghsh-E-jahan (new)square,bazaar continues along this axe
 (source:authors modifications on sketches from Hamidi et. al,1987)

15.sfahan's historical axe and important places
 (surce: http://depts.washington.edu/silkroad/cities/iran/isfahan/map/map.html)

- 1 Darb-i-Imam
- 2 Great Friday Mosque
- 3 Harun Velayet
- 4 Old Square
- 5 Imamzadeh Jafar
- 6 Qaisariya Imperial Bazaar
- 7 Chihil Sutun Garden
- 8 Imperial Palace
- 9 New Maidan
- 10 Mosque of Sheikh Lutfallah
- 11 Ali Qapu
- 12 Emam Mosque
- 13 Medrese Madar-i-Shah
- 14 Chahar Bagh Avenue
- 15 Allahverdi Khan Bridge
- 16 Khaju Bridge



The third undertaking of the plan for renewal of the capital was the creation of a rectilinear grid around the northern Chaharbagh for new residential developments and governmental places. This part of the city was planned to accommodate the new residential needed for the important people of the capital. ¹

The Safavid gardens of southern Isfahan began to vanish after the fall of Safavids, but they continued to exist up to 80 years ago, when a movement for industrialisation of the country started. Some Industrialists chose the gardens of Chaharbagh-e-Bala area (i.e. the extension of the Chaharbagh Avenue to the south of the river) for building their textile factory sites. These factories, which replaced some gardens in this area, created them-

selves a new urban formation in Isfahan and were in use until about 20 years ago (Fagih, 2002).²

A campaign to transform these sites to residential/commercial developments was initiated by owners or sponsors of the factories or by others who had realized the economic potentials of these sites.³

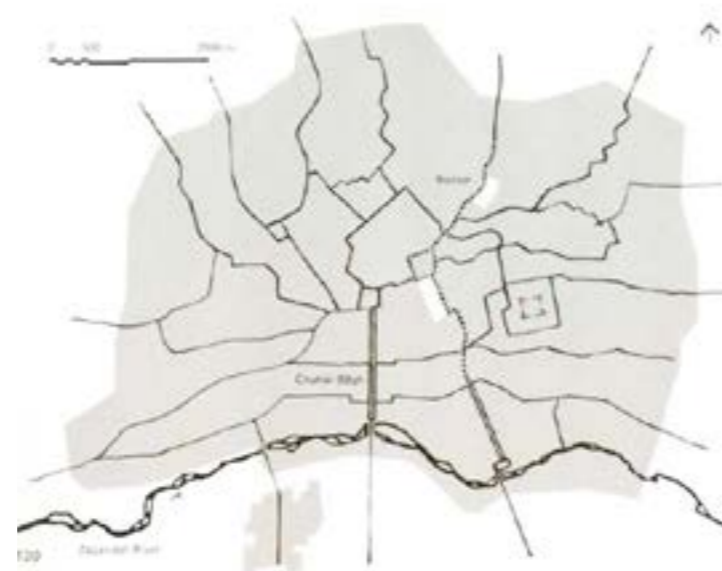
The factory sites therefor changed to small plots of invaluable residential/commercials.

1-Karimi et al.(2003),p.6
 2-the same,p.11
 3-the same,p.12



16,17. Comparison between Chaharbagh Street in 1920 and 2012, places and gardens are replaced by small plots. (sources: <http://www.ichodoc.ir/p-a/CHANGED/152/html/152-2.HTM> google map, June 2012)

The fourth endeavour of urban planning in this area was the admirable renovation of the water distribution system of Zayandeh-Rood's through creation and enhancement of a network of little and large streams, called "madi" in local dialect. These streams, which were responsible to bring water to where it was needed in the city, had inevitably a clear morphological effect on the structure of the city.¹



18. Schematic map of Isfahan's water channel (Madi) system (source: Saraf, 2010, p.85)

1-Karimi et al.(2003),p.6

3-Patterns

The existing pattern of city is the result of a new pattern of rectangular streets superimposed on the old organic hierarchal pattern of the historical city, by master plan of Isfahan during 70's.

The old and new patterns and the result; the existing situation are studied in this unit.



19. comparison between old vs. modern context in the area; Old allies vs. Hatef Street (source: google earth pics-July 2012)

1-Karimi et al.(2003),p.6

Historical context

Traditionally people's ordinary social communication within the historic fabric of Isfahan used to occur through the bazaar artery and its branches.

Bazaar was the main communication artery in which other social activities could occur. Different secondary passages branch off from bazaar each of which usually defines a neighborhood.

The physical width and shape of the passages are in complete accordance with the social function they carry. Not only from the physical point of view, but also the different social and urban activities were situated in the accurate place within the fabric; a continuous communication between the form and the function. One could easily feel the integrity of urban fabric passing through this communicative pattern.

Quarters(mahalles and Polycentric context)

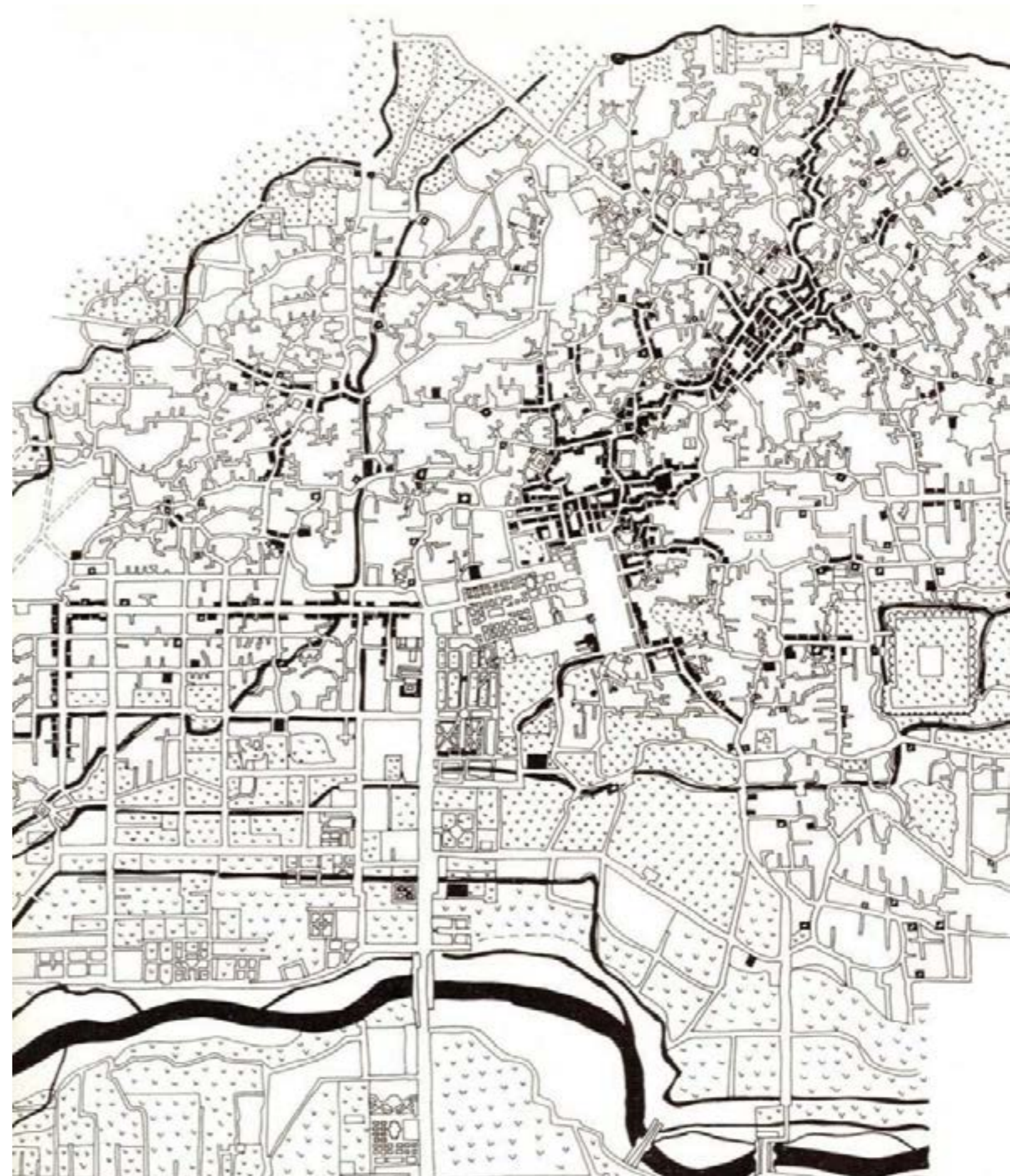
Traditionally the physical division of many cities of Iran was based on the neighborhood system. Depending on the social, economic and natural circumstances, this physical pattern of urban division was different from one city to another. Usually the city was divided into several neighborhoods (mahalle), each of which had its own public amenities responding to the needs of its citizens. The situation of the public amenities of each residential quarter (mahalle) depended on the population and the area of that neighborhood. Those urban amenities were usually financially supported as endowments by the social, political and economic elite who used to live in the same neighborhood. Those monuments and buildings were often named after their sponsors.

The physical spacial hierarchy of old fabrics is the significant character of the urban structure of most cities in Iran.

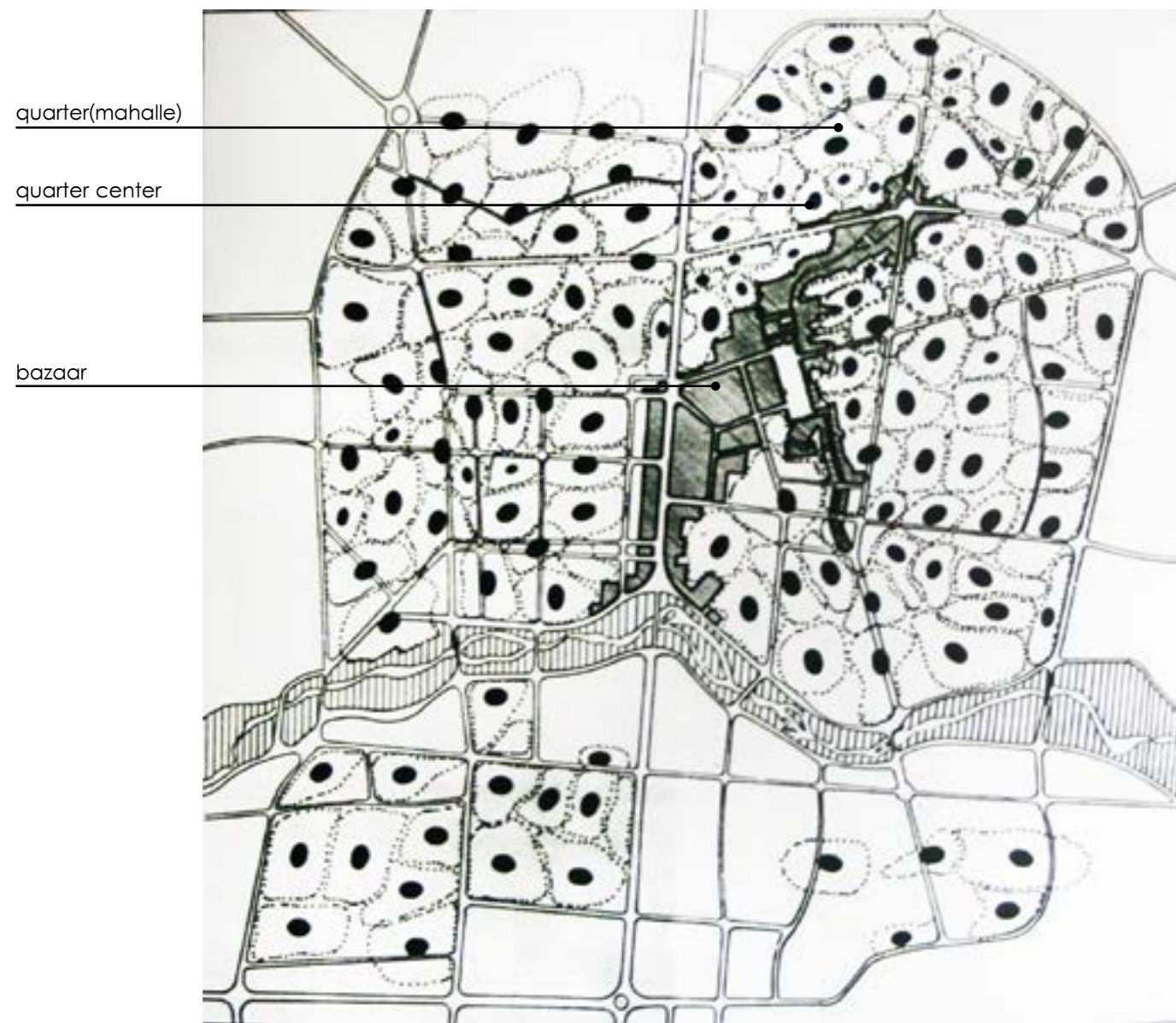
The socio-spatial interconnectivity of the old neighborhoods in the city fabric was best bolstered by the polycentric character of the urban structure.²

1-Sarra(2010),P.110,111

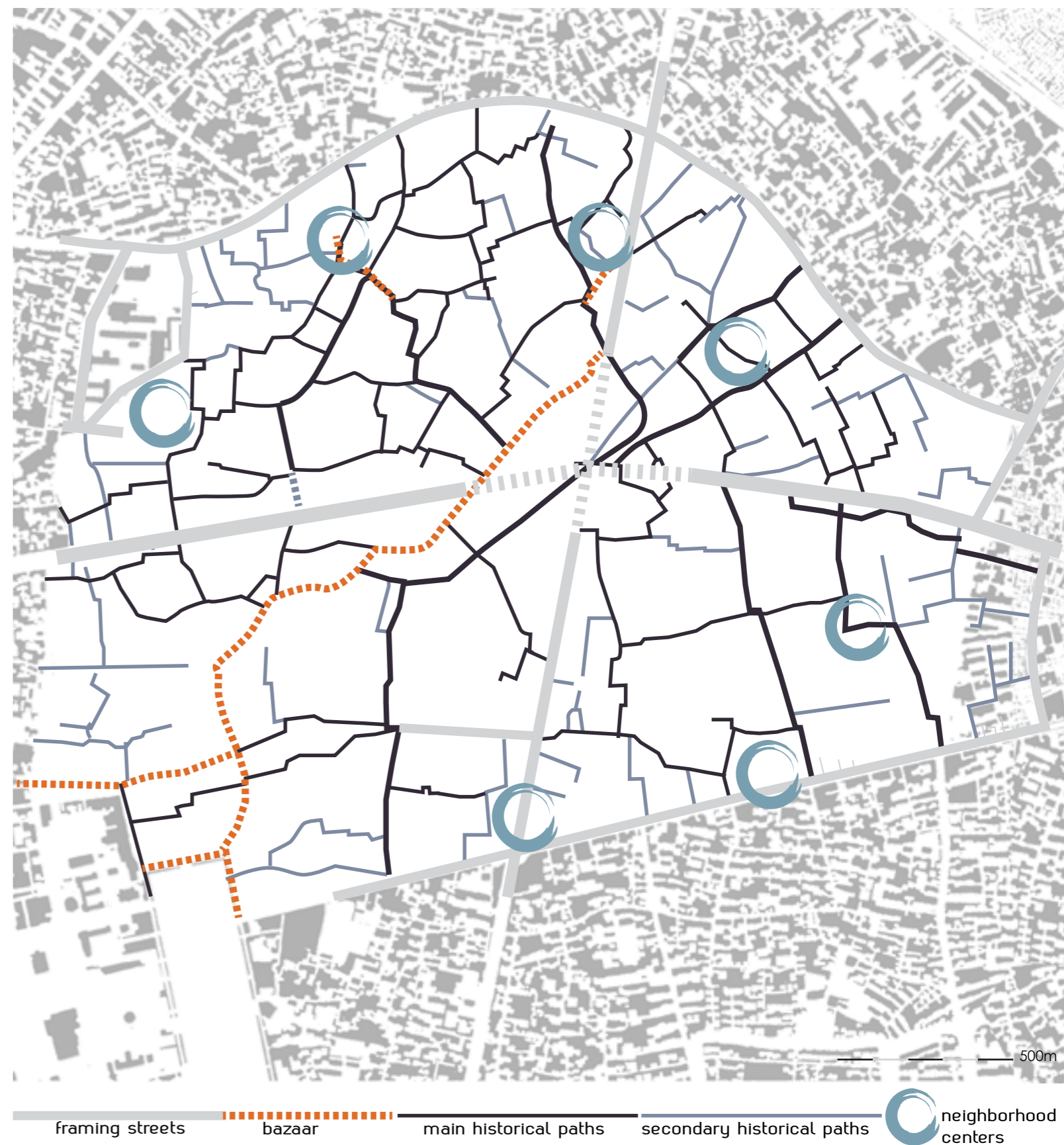
2-Sarra(2010),P.110,118



20.old fabric in Isfahan;This map shows the city of Isfahan in 1919, before being cut through by new straight streets during modernization plans. . (Source: Sarraf,2010,p.91)¹



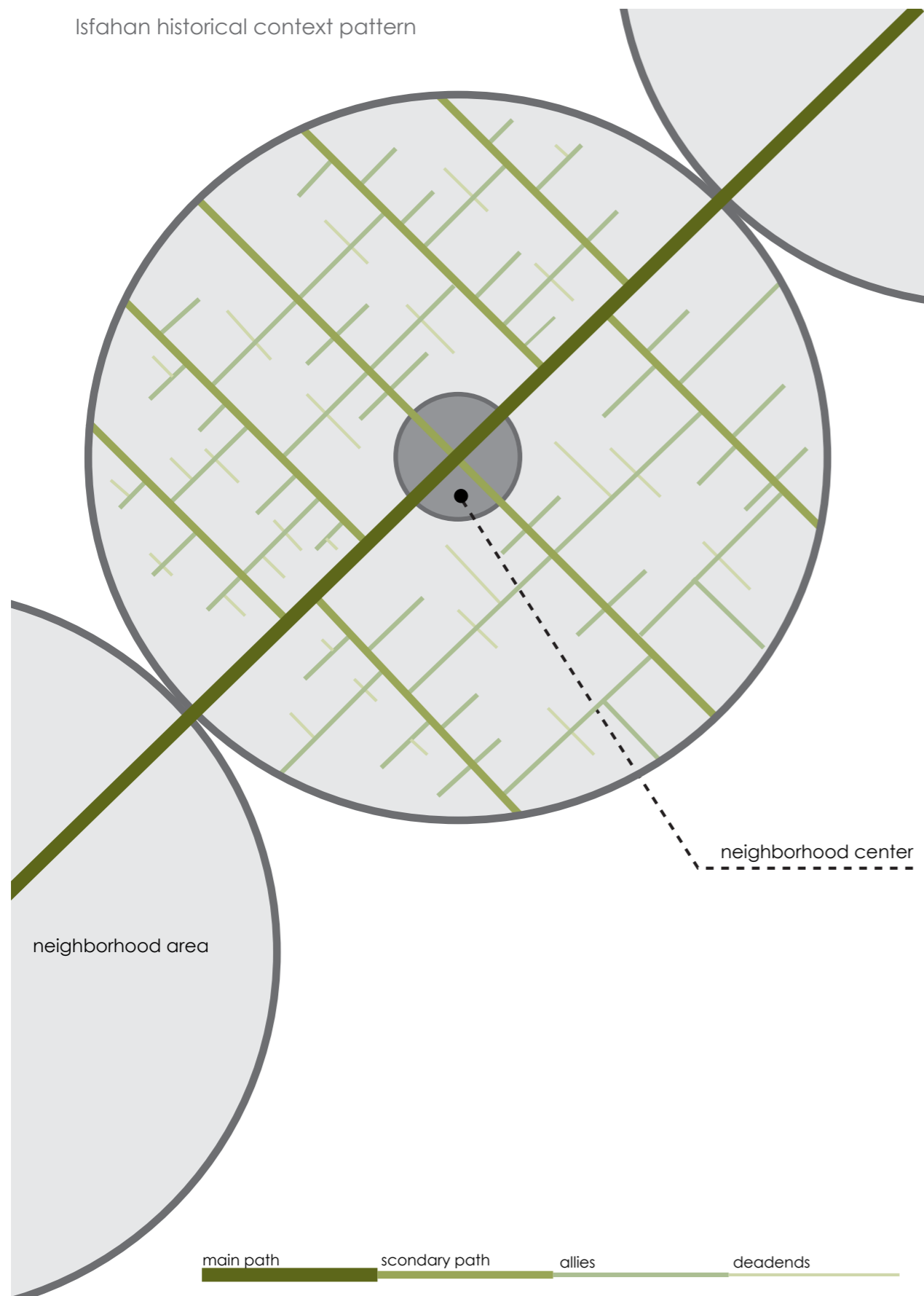
21 quarters (mahalle) divisions ,shown in the area as cells with the quarter centers as the dark cores (source: Naghsh-e-jahan Pars,1991)



O2 remains of old structure of the context

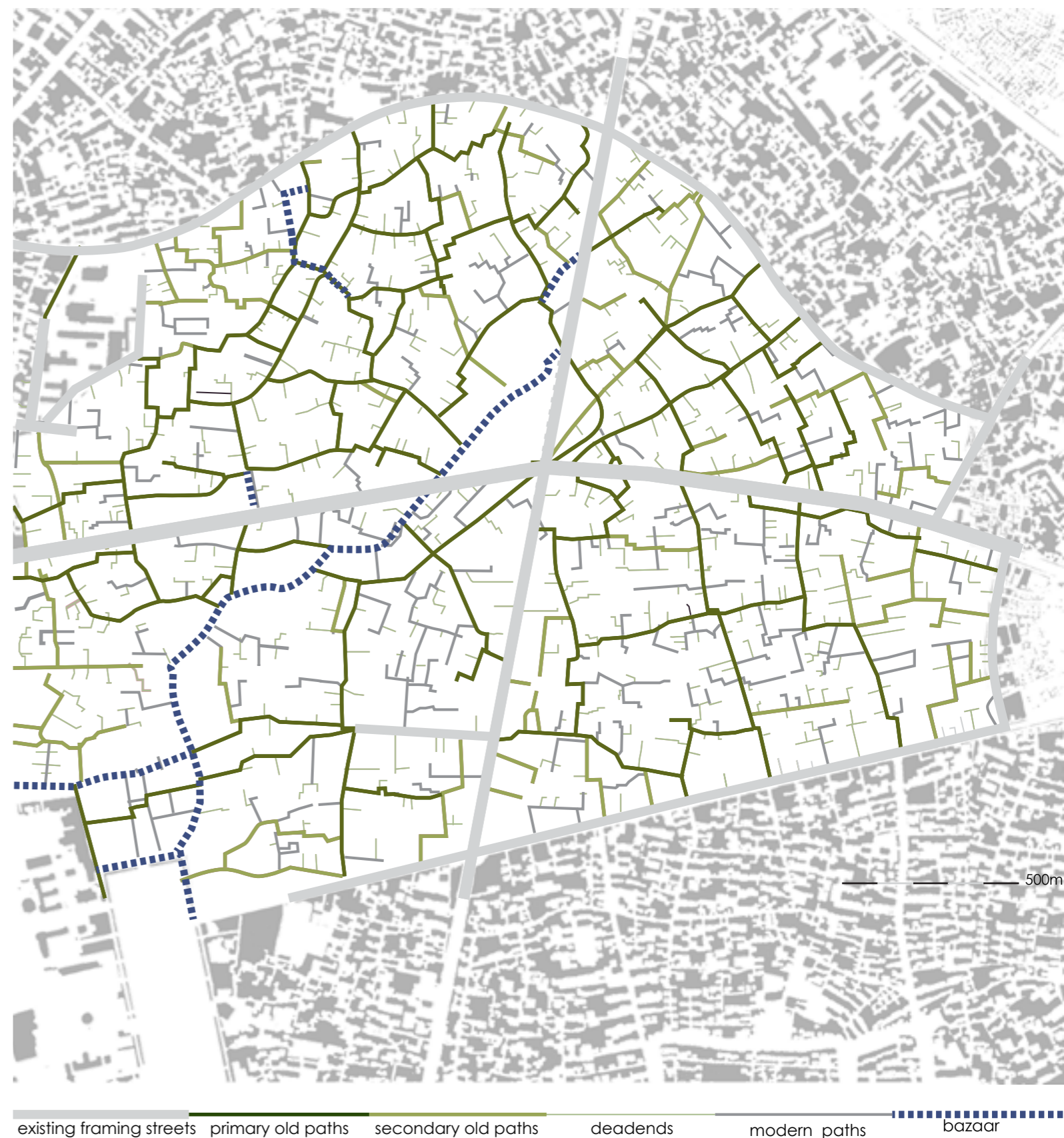
remains of the old infrastructure of the city (the opposite page) at present time among modernized framing streets;the hierarchy(main and secondary paths,neighborhood centers and bazaar(source:author's drawing)

Isfahan historical context pattern



O3 the hierarchal traditional infrastructure of Isfahan's old fabric

main paths, secondary paths and dead-ends (source: author's drawing)



O4 the hierarchal traditional infrastructure of Isfahan in the area

old infrastructure hierarchy: main paths - secondary paths and deadends (source: author's drawings)

A MAJOR TRANSITIONAL UPHEAVAL

MASTERPLAN OF ISFAHAN (1968)

One of the mistakes of the contemporary urban renewal programs of Isfahan was the devastation of the historic pattern; an urban structure left from centuries of evolution.

After the first programme of road building in Isfahan, a comprehensive plan was produced by E. Beaudouin, a French architect and planner who published a special issue of *Urbanisme* (no. 10) on Isfahan, in collaboration with Organic Consultants, an Iranian architectural and planning firm. The plan produced by these planners was outrageously radical.¹ A new pattern of rectangular streets is superimposed on the old fabric of the city, regardless to the physical wholeness of the urban structure. Although this plan is not completely implemented yet, it seems that this rectangular network of streets is the actual goal of urban planners. Not only did the new grid damage the integrity of the physical structure, it also demolished the social communication which was supplemented by the physical form.²

All the proposed streets had relatively the same in the fabric. The new roads, ignoring the integrity of urban fabric in many districts, have cut through the old parts. The centrality of square and bazaar, as the heart of the historic city, has faded away and replaced with a pattern of straight streets directing outward the city core.³

The grid of modern streets attracted most of the urban activities.⁴

Those urban programs replace the physical hierarchical communication structure of cities with a widespread grid of similar streets, and became the departure point for many future socio-spatial discrepancies between the old and the new.¹

1-Sarraf(2010),P.110,111
2-Karimi et al.(2003),p.8-9
3-Sarraf(2010),P.109
4-Sarraf(2010),P.110,112

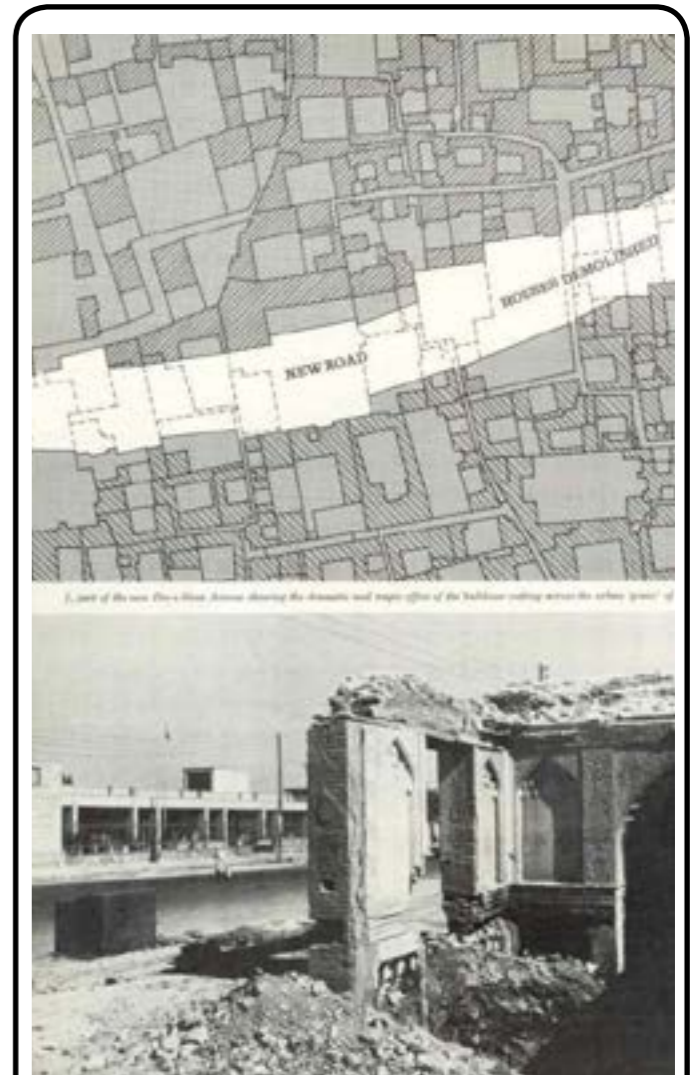
They established a new set of socio-spatial relations. But, those physical transformations could take place in accordance with Isfahan's natural urban growth. In that case, they could better fortify the city main structure, which was the outcome of an urban development process over centuries.¹

The urban privacy, which was the result of the socio-physical hierarchy in the urban form of cities, was displaced by urban openness for all people. In the historic fabric

The contemporary streets let anyone wander anywhere within the city. For a society with a great regard to the privacy of life, this modern pattern of streets made many social problems.

On the other hand, they made the access of the city's population possible to the whole city and all the neighborhoods. The cluster of isolated neighborhoods was replaced with "a unified physical and human space."²

1-Sarraf(2010),P.118
2-Sarraf(2010),P.112



“

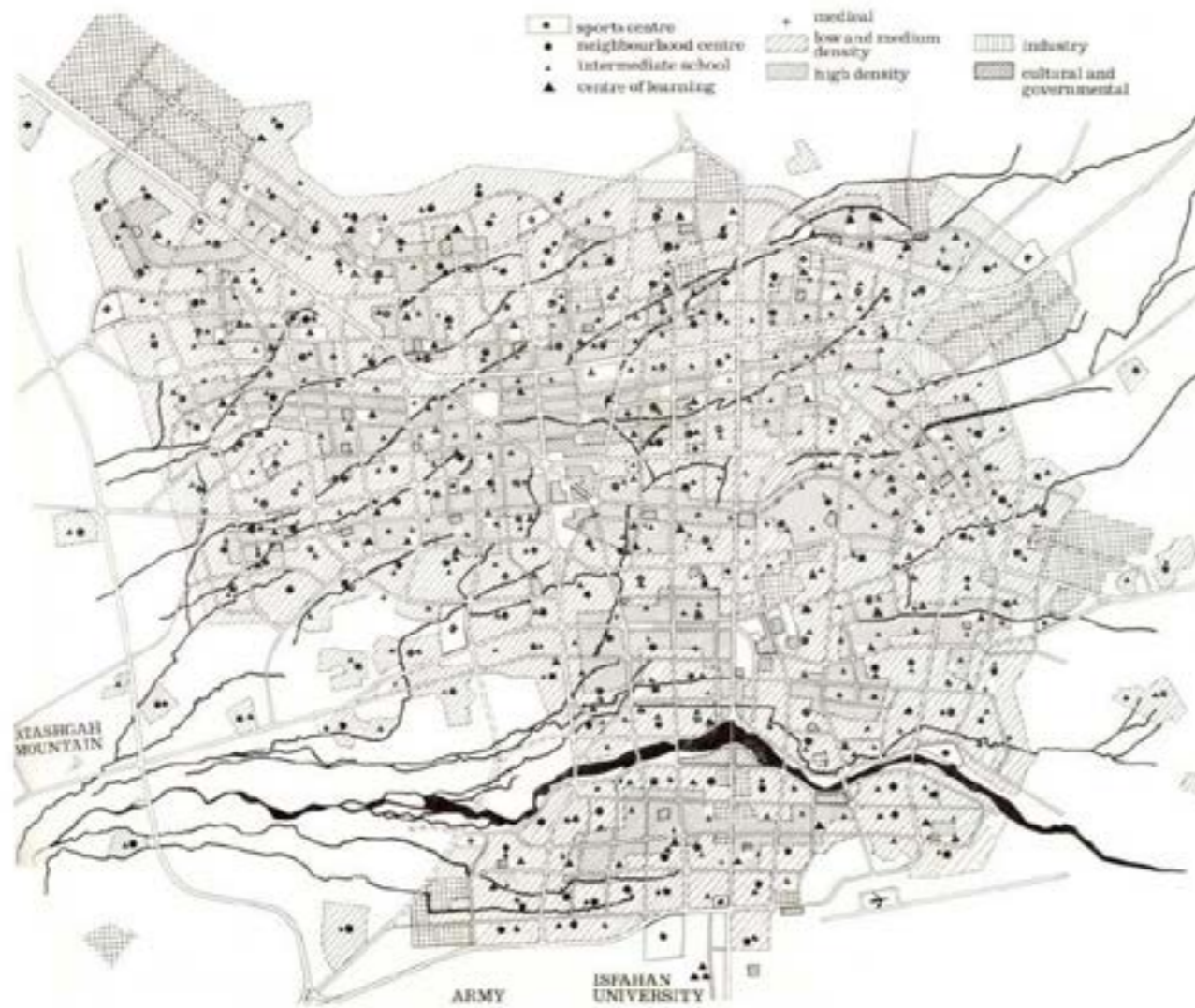
Isfahan, urban renewal activities during the urban renewal programs of 1930s-70s. Source:(Cantacuzino, 1976).

This photo was printed on the *Architectural Review* journal, vol. 159, 1976. The process of making a new street was widely disparaged by some of the urban planners of that time. Now, more than thirty years, exactly the same demolition-construction scenes can be seen in the

”

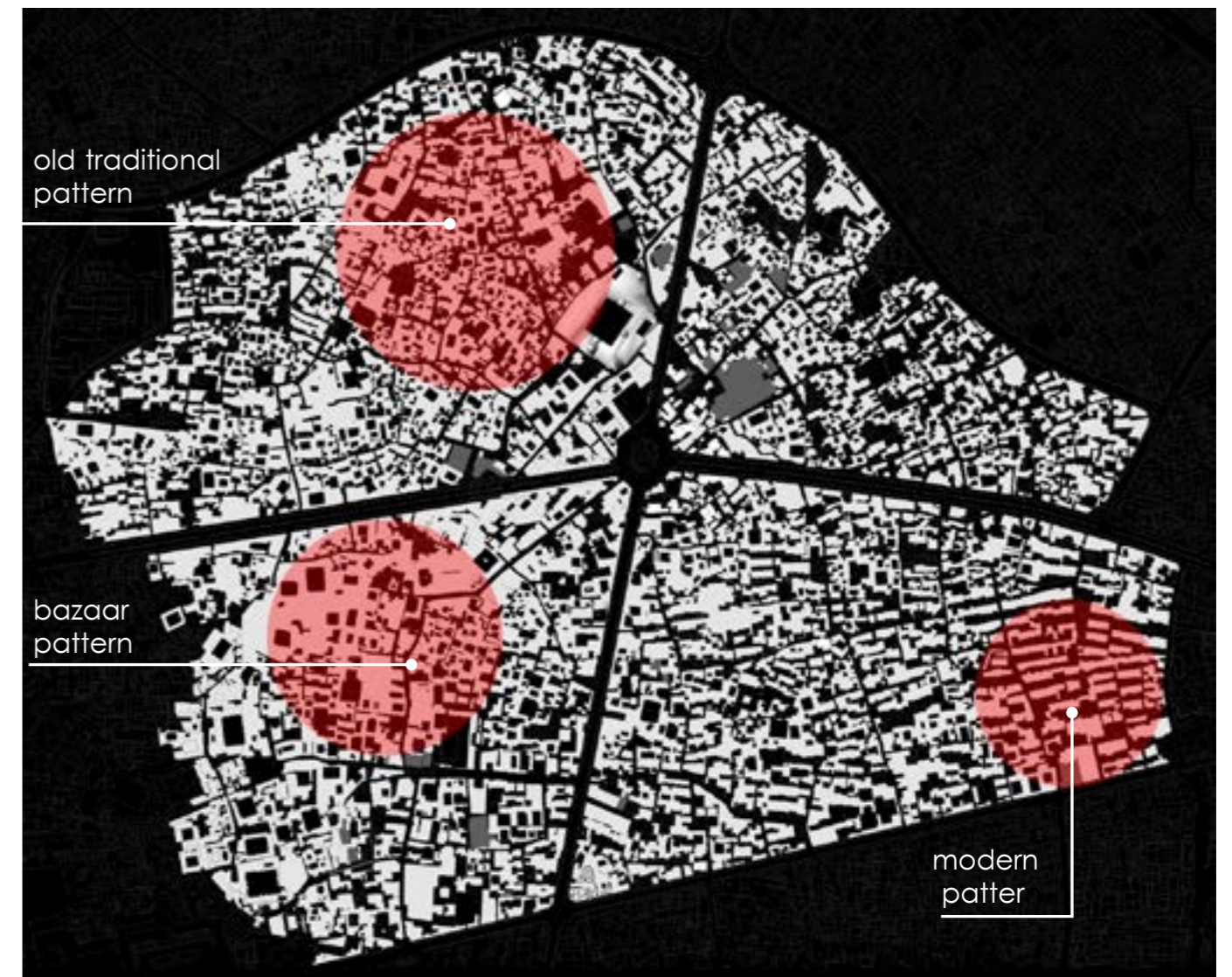
city ¹

(source:Sarraf,Mohammad,P.140)



22.The Master Plan of Isfahan(1968)

A new pattern of rectangular streets is superimposed on the old fabric of the city, regardless to the physical wholeness of the urban structure. (source: Sarraf,2010,p.96)



O5 existing patterns in project area

Existing context is the remains of the old quarters suffering from the superimposition of the new grids of street. Streets have cut through the quarters upsetting the hierarchies and the integrity of the neighborhoods. Though an spectrum of pure old inward looking courtyard style-quarters,dense linear bazaar context and rather modern quarters(especially by moving farther from the plaza to the boundaries of the project area) is distinguished in the area.

The old infrastructure cut by the new one do not meet the needs of the modern life.

(source: author's drawings upon google earth)

Introvert courtyard architecture style

The architecture style of project context is traditional introvert style in hot and humid sections of the country.

As Late Mohammad Karim Pirnia, an acknowledged expert on traditional Iranian architecture, has written: "One of the traditional beliefs of Iranians is to value personal life and honour private lives... Thus traditional Iranian architecture is always 'looking inward'. In a traditional Iranian plot, the whole structure is built around a central courtyard, with all rooms opening up towards this inner space...**in the hot dry climate of Iran, they are just like an oasis, a piece of heaven, in the heart of the desert.**"¹

Generally, Islamic architecture and Iranian architecture is given to hiding its principal features behind an unraveling exterior; it is an architecture that does not change its forms easily, if at all, according to functional demands, it tends to adapt functions to preconceived forms which are basically contained by the inner spaces.²

The courtyard, in a hot dry climate is usually the heart of the dwelling. Generally the size of the courtyards is determined according to the latitude of the place. They are narrow enough to maintain a shaded area during the heat of the day in summer, but wide enough to receive solar radiation in winter. A courtyard can provide security, privacy, and a comfortable place. The courtyard where it is usually planted with trees, flowers and shrubs, not only provides comfortable condition and a pleasant setting, but also supplies shade and increases the relative humidity of the courtyard space³



23. plan of commercial units around bazaar (source: http://www.iranchamber.com/architecture/articles/bazaar_of_isfahan5.php)



24. sfahan traditional context around bazaar (source: <http://archnet.org/>)

Isfahan's Climatic Investigation & Analysis

Isfahan is located at 32°38'N with maximum summer daylight hours of 14 hours, and 10 hours in the winter. Isfahan has a semi-arid climate. It is characterized by relatively high summer temperatures, low rainfall and humidity. Winter night-time temperatures are cold: Despite its altitude, Isfahan remains very hot during the summer with maxima typically around 37 °C (99 °F). However, with low humidity and moderate temperatures at night, the climate can be very pleasant. During the winter, days are mild but nights can be very cold and snow has occurred at least once every winter except 1986/1987 and 1989/1990. It is very dry. Less than 5 inches of rain annually, principally in the winter months falls.

Wind is typically westerly, ranging from 8 Km/Hr. in the winter to 22 km/hr. in the spring. Wind has been recorded up to 58 km/hr. creating dust/haze.

1-<http://www.eurojournals.com/qjsr.htm>

2-<http://english.irib.ir/programs/iran/item/54715-iranian-culture-and-architecture-15>

3-http://www.5thsastech.khi.ac.ir/uploads/ARC-O-7_1629734630.pdf

1-<http://toollib.site.aplus.net/UCBxweb/homework/HW1/HW1-results-11/nicola-stiff1-HW1.pdf>

4-Historical-cultural axis

traditional"urban axis"

There already exists 4 historical-cultural degraded axis in the area which could be restored and enjoyed upon the idea of "urban axis": Dardasht axe in west-north part of the area, Jouybare axe in east-north part of the area, Jamaleh axe in east central part and Harounieh axe passing the southern half of the area.

These axis were dynamic axis in the old historical context , connecting historical quarters in the area.

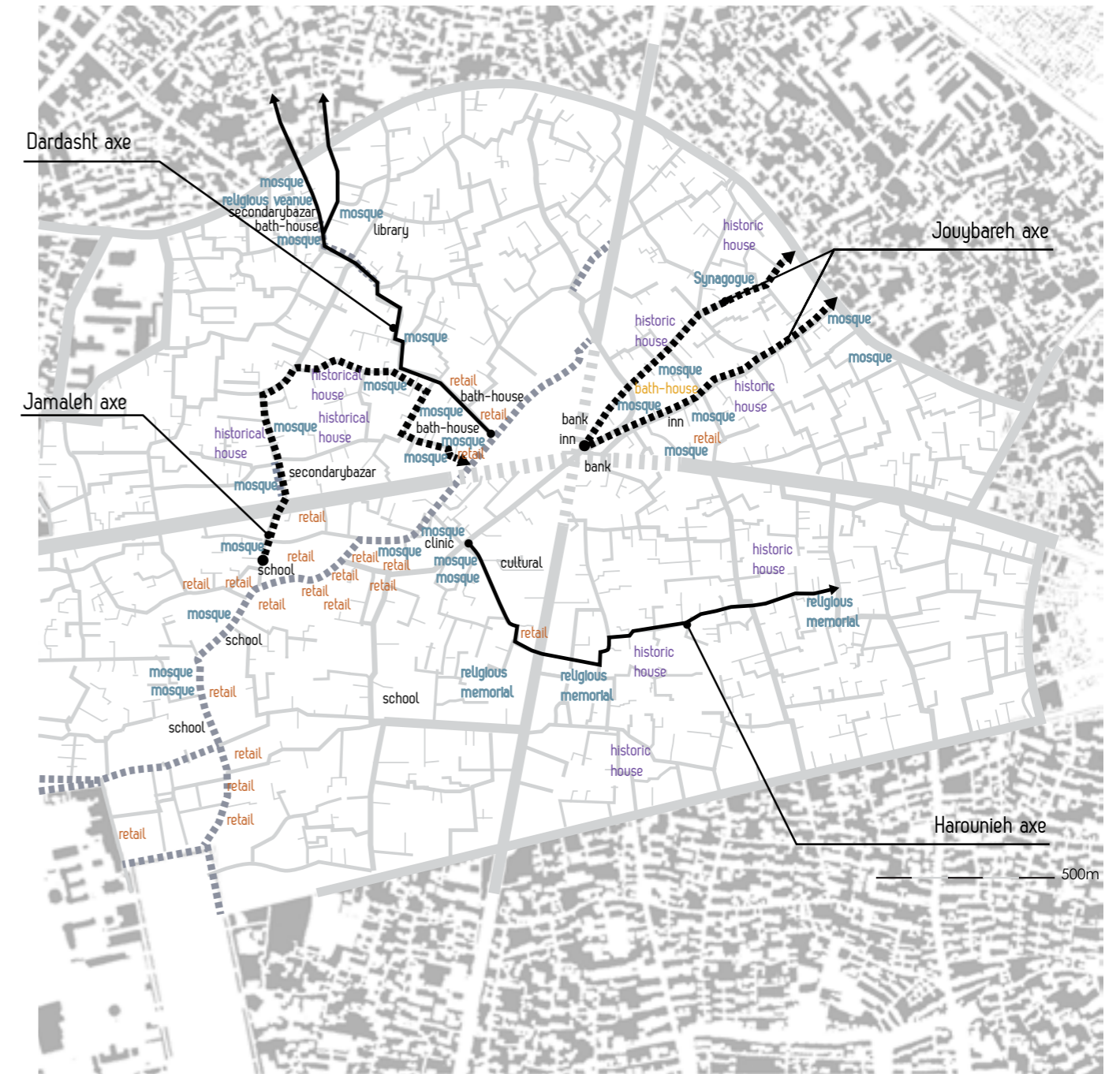
They used to link all the required facilities ,public spaces and meeting places at the time, such as the religious, cultural, retail and sanitary facilities; mosques, guestrooms, bath houses, schools, bazaars and other religious places all also working as meeting points.

Valuable residential units usually owned by higher classes of the community were built along these important axis, some of which have remained and are worth of preservation and restoration.

Neglecting the context, wrong modernization policies, shortage of budget and the damages of the bombardments in the war in 80's has lead to deterioration of the historical axis which have the potential to revitalize the area.

Revitalizing the area by continuous urban axis rooted in these old historical cultural axis is one of the main strategies of the project.

Recently 2 renovation projects has been implemented on Jamaleh and Jouybare axis, focusing on ,imptovement, renovation and reconstruction c of dilapidated historical heritage and widening and re-forming degraded paths.



existing infra-structure bazaar historical-cultural axis historical-cultural axis renovated facilities degraded facilities religious facilities historic houses retail

O6 The historical-cultural axis

four old historical cultural axis ,the public existing facilities and historical cuildings along them are defined in the area(source: author's drawings)

Jamaleh renovation project

implantation expenses: .

4950000000 rials

Jamaleh quarter is situated in five hundred meters from south west of Friday Mosque of Isfahan and north of Abdol-razaq street .This quarter with the population of 3000, has special values concerning architecture, urban planning and design, public building, dwelling units, connecting axes and passages, bazaars, and public and private space symbols.

The quarter which has suffered so much from gradual physical deterioration,destruction resulting from 80's war and facility deficiencies. It has lost a great portion of its population. It transformed to a slum resided by problematic immigrants.

After the destructions resulting from repeated bombardments of Isfahan in 1986 the Department of Housing and Urban Planning of Isfahan Province has started the restoration of Jamaleh quarter. ¹

The targets of the project are defined as:

- Promoting infrastructure and accessibility
- Providing required facilities
- Saving the degraded historical context
-

The campaign started with restoring the pavings and facades in Jamaleh quarter after the war . It has been suspended because of lack of required budget.

With new budget intended to the project in 2008, the project restarted with modification and widening the streets and proceeding the facade restoration of Vakil bazaar which is one of the secondary bazaars in the quarter.²



25.Jamaleh quarter in five hundred meters from south west of Friday Mosque . The pink points indicate the bombarded destructions the war of 80's(source: <http://www.imbf.ir>)



26.plan ratified for the project in 1993 (source: <http://www.imbf.ir>)

interventions

the plots

- Revitalization of historical texture; revitalization activities in the historical texture are influenced by past history and traditional architecture and urban planning patterns.
- introducing necessary community facilities in the context¹

The plots in the area has been divided in 3 categories:

1. Valuable plots: to be preserved and restored- **These plots would be bought, repaired, restored, provided by facilities and be used again**
 2. Invaluable active plots in good condition; preserved
 3. Blighted and dismissed plots which caused negative challenges in the area: approaching the targets; preserving the identity and providing the ratified density, **a commission started investigating about the possession of the plots and accordingly they were bought from owners to be redeveloped.**
 4. Degraded active plots: degraded plots did not benefit from primary facilities as kitchen, services and open space; negotiation with owners to exchange services and facilities to their real estate in exchange for co operation with the collective plans of the project
- **restoration with regard to the climate and environment** ²

27.facade modification interventions(source: <http://www.imbf.ir>)



1-<http://imbf.ir/new/index.php/en/iran/774-rehabilitation-of-jamaleh-historic-quarter-in-isfahan/1229-rehabilitation-of-jamaleh-historic-quarter-in-isfahan.html>

2-<http://www.imbf.ir/new/index.php/fa/%D8%AA%D8%AC%D8%A7%D8%B1%D8%A8/1390-06-19-06-07-05/1390-06-19-06-01-59/1390-12-06-08-37-44/1390-12-06-08-42-39/756-1390-08-04-06-57-49.htm>

1-<http://imbf.ir/new/index.php/en/iran/774-rehabilitation-of-jamaleh-historic-quarter-in-isfahan/1229-rehabilitation-of-jamaleh-historic-quarter-in-isfahan>.

2-<http://www.imbf.ir/new/index.php/fa/%D8%AA%D8%AC%D8%A7%D8%B1%D8%A8/1390-06-19-06-07-05/1390-06-19-06-01-59/1390-12-06-08-37-44/1390-12-06-08-42-39/756-1390-08-04-06-57-49.htm> html



28 .facade modification interventions(source: <http://www.imbf.ir>)

infrastructure

- **Access roads in the quarters follow prevailing texture** pattern.Moter-vehicle allowed streets should conform to the historical context ,scale, hierarchies and speed limits . They often are of minimum width, entering the context with a hierarchy and to preserve the historical monuments to be widened and modified out of their axis. Historical context should not be disconnected by Moter-vehicle allowed streets
- Widening the streets, focusing on entrances to the quarters, widening streets of 2.5-4 m to 5m streets.

administration

- Physical presence of actors in the neighborhood and justifying their ideas was a key to success
- Because of the complicated process and bureaucracy of redevelopment projects,and the municipality's legitimacy, influence and power in the system ,involvement of municipality as one of the main actors is inevitable.
- Practicing the redevelopment project(in Isfahan context)and getting more experienced has lead to younger more professional actors getting involved in the projects and though simplifying and facilitating the further steps.¹

1-<http://www.imbf.ir/new/index.php/fa/%D8%AA%D8%AC%D8%A7%D8%B1%D8%A8/1390-06-19-06-07-05/1390-06-19-06-01-59/1390-12-06-08-37-44/1390-12-06-08-42-39/756-1390-08-04-06-57-49.htm>

Interaction with residents

In these cases usually a percentage of people do not agree with the redevelopment project of their neighborhood before the project is finished and they see the positive consequences. In some cases, residents specially owners prioritize their individual welfare and though solving their individual deficits to community welfare. However some people welcome the long term consequences of the project and contribute to it.

This supporting residents were asked to reflect their understandings to the other residents of the neighborhood and spur them.

After holding some meetings with the owners of degraded plots, they came to an agreement to give away a part of the lots for widening and modifying the streets in exchange for restoration , provision of facilities and facade restoration of their possessions.

The dissidents; the group who prioritize their individual welfare were obliged to imitate the others or compelled to comply with the project according to the rules ratified.

People,private and public authorities have started to support the project after the primary positive achievements.¹



29.restoration of the residential plots (source: <http://www.imbf.ir>)



30.restoration of Vakil bazaar (source: <http://www.imbf.ir>)

1-<http://www.imbf.ir/new/index.php/fa/%D8%AA%D8%AC%D8%A7%D8%B1%D8%A8/1390-06-19-06-07-05/1390-06-19-06-01-59/1390-12-06-08-37-44/1390-12-06-08-42-39/756-1390-08-04-06-57-49.htm>

Jouybareh renovation project

The project of restoring Jouybareh historical axe started in 2003
The main actor is a public foundation in Isfahan under supervision of housing and urbanism department of Isfahan.

It focuses on the northern street of Jouybareh quarter(as this quarter is situated between two streets. The southern street has been restored previously(paving and facade restoration).

The focus of this project is on the northern street.

The planners have divided the area in 4 zones: green zone, invaluable plots to be replaced by new residential development .valuable context and the zone which is situated in new pedestrian plaza project.

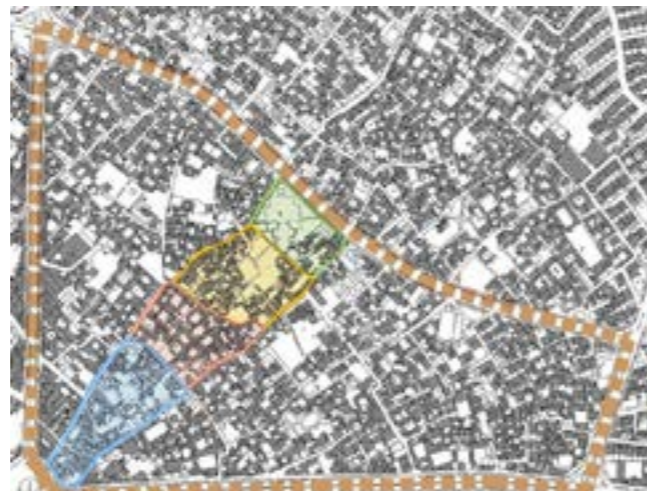
Interventions:

The plots

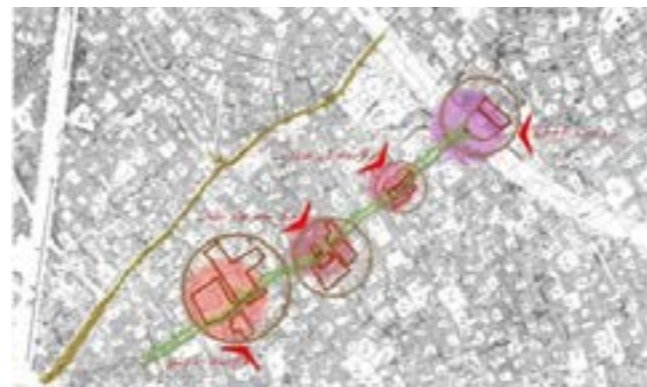
1. valuable plots
 - identifying valuable plots—restoring and preservation
 - building/adding new extensions usually when a part of the building has been destroyed e.g the secondary bazaar structures
 - Fortifying the worn out structure of the buildings
 - facade restoration
 - lighting planning and **emphasizing on the valuable plots** with light
2. Blighted and dismissed plots;
 - **accumulating the ruins**
 - **deciding new uses for inactive plots**
 - restoring the plot



31. Jouybareh quarter and the 2 main streets are defined in the old map of Isfahan (source: <http://www.imbf.ir>)



32. defined zones by the project: green zone, invaluable plots to be replaced by new residential development(yellow) .valuable context(pink) and the zone which is situated in new pedestrian plaza project. (blue) (source: <http://www.imbf.ir>)



33. Identifying and requalifying old neighborhood centers (source: <http://www.imbf.ir>)

3. Degraded:

- Fortifying the worn out structure of the buildings
- Renovating the facades: re organizing and coordinating the materials used on the facades of new and old preserved buildings in the area
- setting new uses for the plots according to sources and existing more general plans
- facade restoration
- providing basic lacking facilities for the residential units ;services,kitchen,parking

Infrastructure

- Pavement reconstruction, planning paths for pedestrians and cyclists
- Widening streets by destroying parts of dilapidated or degraded plots
- Providing greenery along streets
- replanting irrigation system in the area

the neighborhood

Organizing construction limits esp. for narrow streets;
Identifying and requalifying old neighborhood centers
balancing the skyline
organizing construction rules e.g. the length of cantilevered structure and projections

achievements

- increased the real estate values
- providing new services
- improving the perspective towards the area



34. and use plan of the project (source: <http://www.imbf.ir>)



35. a zoom in defined zones by the project (source: <http://www.imbf.ir>)



36. details of a quarter center re-planned (source: <http://www.imbf.ir>)



37. restoration of a quarter center in the area: facade and paving restoration-balancing skyline,proding arcades, building/adding new extensions (source: <http://www.imbf.ir>)



38. restoration of a quarter center in the area: facade and paving restoration-balancing skyline,widening the street (source: <http://www.imbf.ir>)



39. restoration of a quarter center in the area: facade and paving restoration-fortifying the structure (source: <http://www.imbf.ir>)



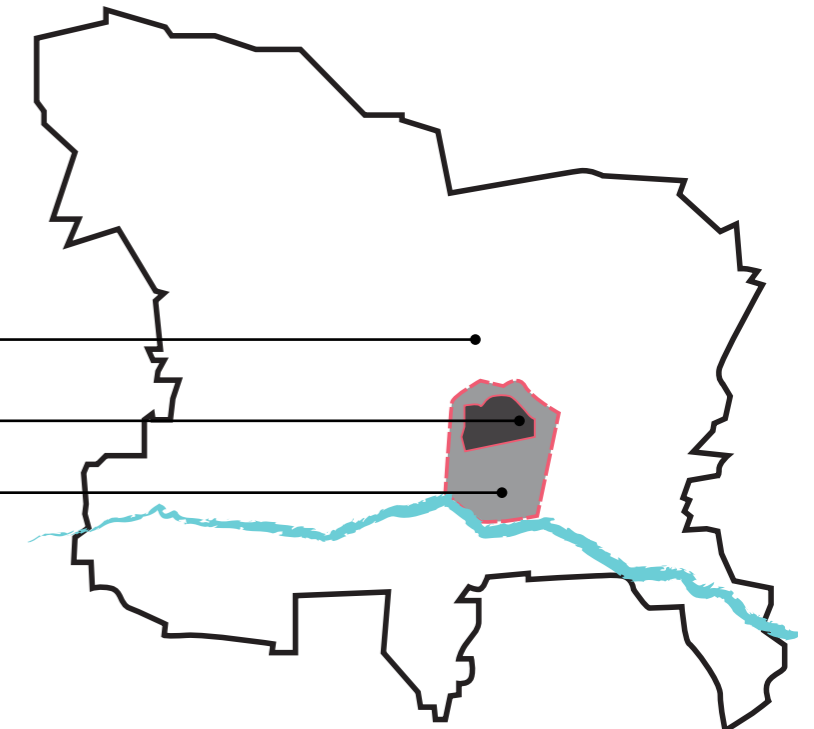
40. restoration of a historical monument: facade and paving restoration-fortifying the structure (source: <http://www.imbf.ir>)



41. restoration of a public green space: accumulating the ruins paving restoration, building/adding new extensions ,providing facilities and promoting the use of the area (source: <http://www.imbf.ir>)

5-Demographics

Isfahan city
project area
district 3



As there were no precise information about the exact area chosen for the pilot project the statistics of the IMR&RO project area and district 3 from 2006 census which includes the project area where used .An average of the 2 sets of numbers were used for a rough estimation of the population data in the pilot project. Although this estimation is not precise ,**what is important in this project is the process** (not the exact numbers), which is aimed to be generalized

especially in optimizing densities. All the proposed numbers would be variables in the process of optimizing g the densities and therefore could be replaced .Foe example if we according to a new census we discover that the population density in the project area is 75 people/hectare instead of 65 people/hectare all the proceed would be generated by the tool proposed just by changing 65 to 75 and the proposed solution w would be re-optimized.



42. diverse social classes and generations co-existing in the area (source: <http://www.panoramio.com/photo/54317958>)

location	population	Percentage of men/women	no. of family members/unit	average of no. of families/unit	Population density/hectare
IMR&ROproject	1110	142	4.1	1.25	34
District 3	111816	101	3.3	1.04	94.8
Isfahan city	1601025	104	3.0	1.05	91.1

43. Statistics from 2006 census (source: author's abstract from J.P (source: NAQSH, E, JAHAN-PARS) Consulting Engineers, 2010)

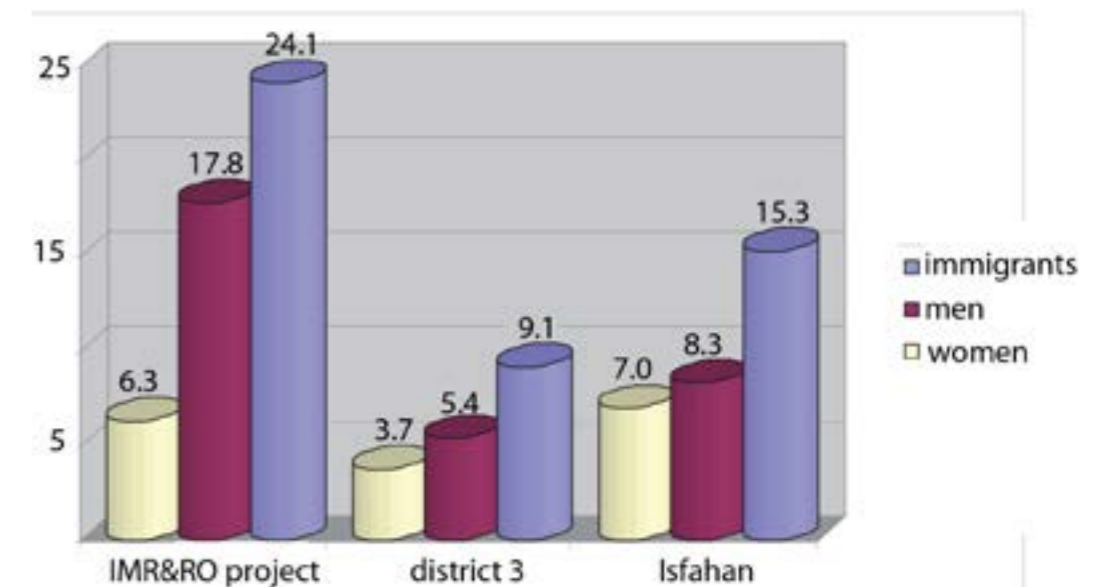
The population density in IMR&RO project area is lower than district 3 of Isfahan and the city, mainly because of the presence of bazaar in the area replacement of the original resident families with single foreign labor work. Population density in the IMR&RO project is 34 people/hectare, while .Population density in district 3 is 94.8 people/hectare. An average of the two numbers about 60-65 people/hectare is considered for the pilot project area.

However, according to the leading idea higher density is proposed for the area. To be rational, the same density of district 3 is proposed for the area.(about 95 people/hectare)Therefore the recommendation is adding 30 new people to the area to increase density. To revitalize area with new classes the project proposes. We should bear in mind that this 30 people/hectare would not be all new residents.25 out of 30 people would be suggested as non residents, people travelling to the area for new businesses and 5/hectare as residents from new classes to be added to the area. The project does not intend to replace the existing population to somewhere else and gentrify the neighborhood. It **intends to promote the people's lives. It attempts to improve the leaving standards to persuade the original residents of the neighborhood to stay and enjoy.**

The majority of the existing population in the area are low to low- middle classes involved in traditional business or labor work. The dilapidated context and low prices of real estate in the area has caused the replacement of the original residents of the old city with this class.(no. of family members and average of number of family members are relatively higher in the area.)

Lack of safety and attraction has contributed to the areas not absorbing more creative classes.

There is a considerable difference between the number of men and women and though the area is considered as a male dominated neighborhood .



44. Statistics from 2006 census .percentage of the immigrant population compared in IMR&RO project area, district 3 and Isfahan (source: NAQSH, E, JAHAN-PARS Consulting Engineers, 2010, p.17)

From the 80's the arrival of immigrants from less developed countries contributed to enhance the negative perspective of the area.

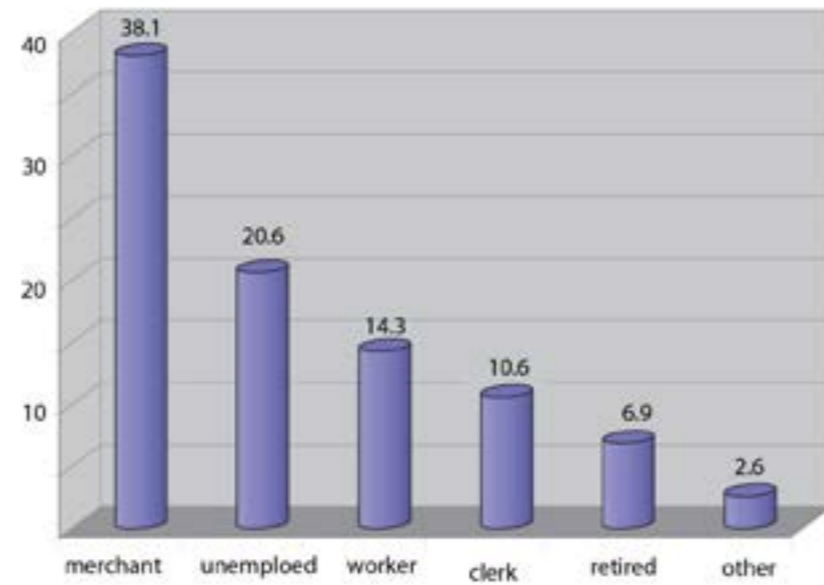
There is a significant but decreasing, large number of immigrants who live in the area most of them young Afghanian male labors who increase unsafety and the feeling of unsafety in the area

There is a growing risk of forming a "ghetto" by these immigrants in which there is a high level of micro criminality although in recent years the population has dropped as the result of the demolition of some old degraded residential buildings by municipality and also rules issued which has made the immigrant labors to leave the area.¹ Sexual proportions(male to female) is 142 in IMR & RO project area while it is 101 i district 3 and 104 in Isfahan.²

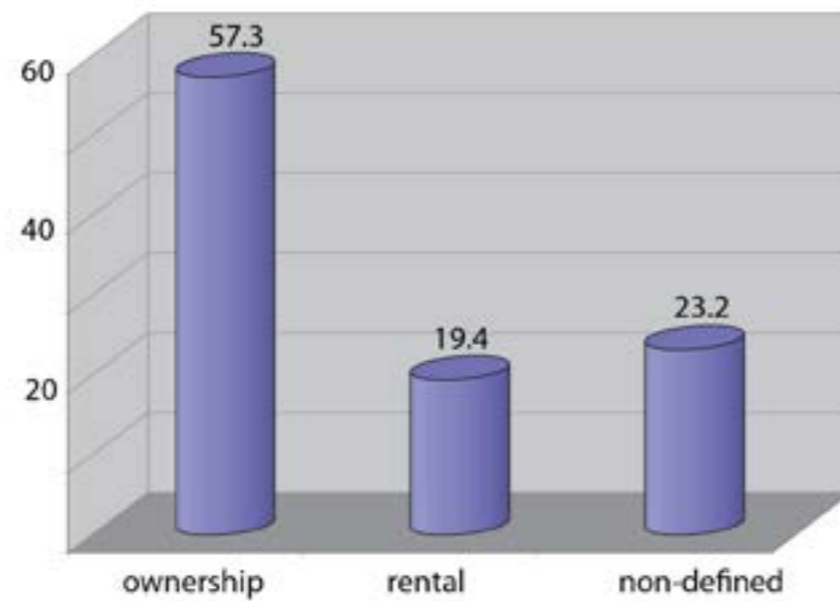


45. Afghanian immigrants in Iran (source: http://www.hazarapeople.com/fa/wp-content/uploads/2010/10/907103D6-0163-43C5-BCCC-A1B6EAA8E293_mw800_mh600_s.jpg)

1-NAQSH, E, JAHAN-PARS) Consulting Engineers, 2010
2-NAQSH, E, JAHAN-PARS) Consulting Engineers, 2010, p.21



46. Statistics from 2006 census .percentage of different occupations of the breadwinners of the families in IMR&RO project area indicate the prevalence of low-middle classes and rather high rate of unemployment(source.JNAQSH, E, JAHAN-PARS Consulting Engineers,2010.p.76)



47. Statistics from 2006 census .percentage of real estate status in IMR&RO project area states that most of the residents are the owners (source.JNAQSH, E, JAHAN-PARS Consulting Engineers,2010.p.74)

Residents in the IMR&RO has been surveyed by NJP in 2010 about their concerns in the neighborhood and their interpretation of the area. The following table of results has been translated from (NAQSH, E, JAHAN-PARS) Consulting Engineers,2010 .The results of this survey contribute to problem setting of the project to a great deal.

General issues	options	percentage	
Spacial problems	Noise pollution	23.3	
	Insufficient facilities	4.7	
	Poor condition of roads	27.9	
Satisfaction of infrastructure and access to the area	Non-satisfied	56.8	
	Satisfied-to some degree	21.6	
	satisfied	16.2	
Social safety	day	safe	48.6
		safe-to some degree	27.0
		dangerous	18.9
	night	safe	37.8
		safe-to some degree	18.9
		dangerous	37.8
Existence of places where criminals and the addicted gather	yes	59.5	
	no	40.5	
Sense of belonging	Very little	21.6	
	little	24.3	
	much	29.7	
	Very much	21.6	
Distinguished urban elements	path	22.6	
	edge	18.9	
	intersection	1.9	
	landmark	49.1	
	quarter	7.5	
Social interactions	Very little	37.8	
	little	45.9	
	much	13.5	
	Very much	2.7	
residence	local	59.5	
	immigrant	40.5	

47. In a research implemented in 2010 ,30% of the population of IMR&RO project have been chosen and used as specimen ; they have been surveyed and asked about their different concerns in the area. The results have been categorized in 8 main fields and the answers given are shown in the percentage.(source:NAQSH, E, JAHAN-PARS Consulting Engineers,2010.p.88)

The results

Most important problems according to the residents are indicated as"

- Poor road condition
- Noise pollution
- unsafety and feeling of unsafety especially during nights
- Lack of social communication and interaction between residents
- High percentage of non-local immigrants

Residents were also dissatisfied of poor cleaning system in the area, narrow streets, lack of green outdoor place, places where they can practice sport, new parkings and facilities for children.¹

Although the area suffers from insufficient facilities a few percentage of the residents have pointed that out. This could be related to the low social class of the residents and their scarce knowledge of the facilities they could be provided.

New social culturally higher class population could be introduced to the area to provide a flourishing social mix.

As positive aspects:

- Strong presence of landmarks which promote identity and navigation. Paths are also indicated as strong Distinguished urban elements
- Strong sense of belonging to the neighborhood

6-Bazaar of Isfahan



48.interior view of bazaar of Isfahan
(source:<http://www.stampiran.com/postal.htm>)

Bazaar is an ancient version of a shopping mall with a different physical and social structure .

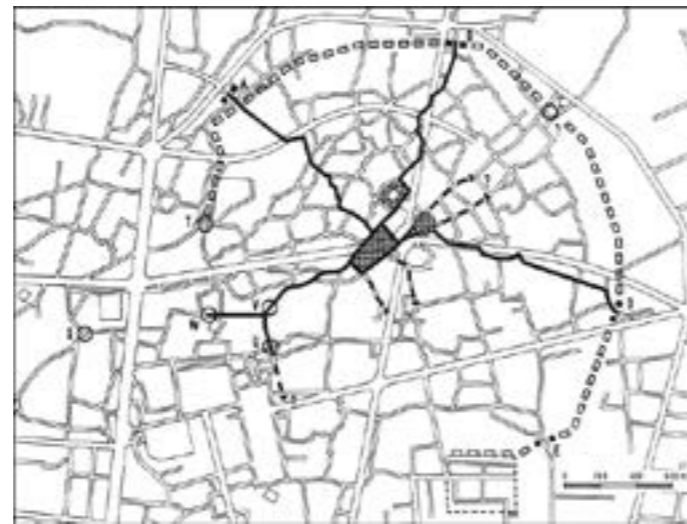
Isfahan Bazaar, one of the oldest and largest bazaars in the Middle East, dating back to the 17th century. The bazaar is a vaulted two-kilometre street linking the

old city with the new.

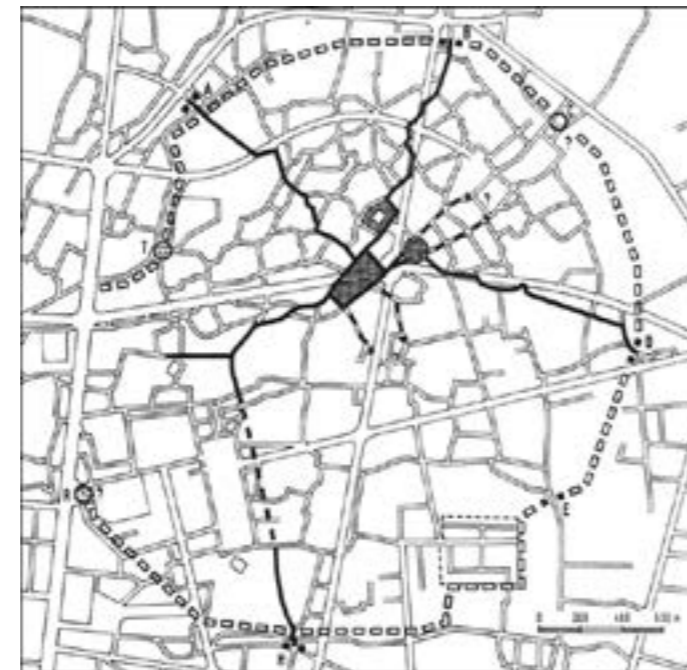
The main entrance called Qeisarieh in Naqsh-e Jahan Square and you can walk through it to the Jameh Mosque the oldest mosque in Isfahan.¹



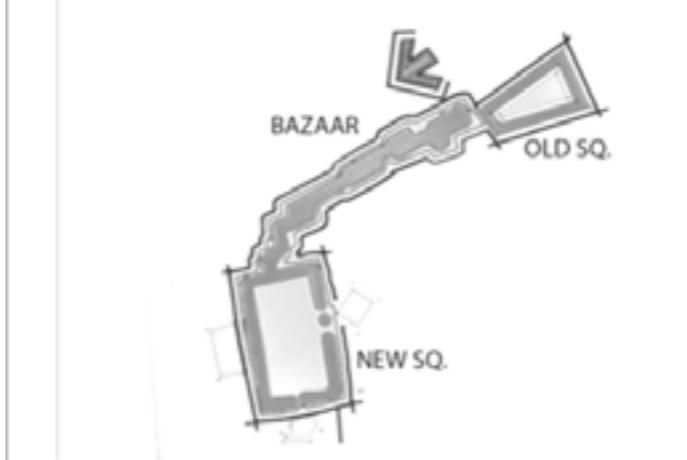
49.interior view of bazaar of Isfahan
(source:<http://www.panoramio.com>)



52. bazaar connecting old and new square
(source: Hamidi M. et al, 1987.)



51. City and Bazaar in 14th Century, expansion towards river, passing the edge of the new Safavid square
(source: <http://www.iranchamber.com>)



Today, much of the glamour of the bazaar is gone as modern times takes its toll. Most but the poorest local shoppers have abandoned the bazaars for modern downtown boutiques and department stores. Colonial occupiers of the 19th and 20th centuries crippled local craftsmen as cheap imports forced them aside. However still Bazaar presents Identity and turn-over in area. It is yet a point of attraction especially for tourists and visitors.

The major artery of the bazaar leads two mosques, baths, caravanserai (traditional motel spaces) and khan, much of which is lit by circular openings cut into the brick vaults, shafts of light dotting the passage at certain times of day. ¹

The Bazaar is consisted of two parts, the old section, which started from the old square and the new section, which started from Naghsh-e-Jahan square and connected to the old section. As a result, it became about 5 km (obvious shopping streets (raste), some with brick arches, some with poplar beams, over a hundred caravanserais and sarais, innumerable covered halls (timche) and connecting wings (dehliz). ² There were some peripheral markets along the main streets radiating from the old square .

53. old aerial view of bazaar of Isfahan (and Jameh mosque
(source: NAQSH, E, JAHAN-PAR) Consulting Engineers, archive, 2010.)

54. view of a Gheysaria in bazaar of Isfahan
(source: <http://www.iranchamber.com>)

1- http://www.iranchamber.com/architecture/articles/bazaar_of_isfahan3.php

1- Blair et al. (1994)

2- http://www.iranchamber.com/architecture/articles/bazaar_of_isfahan3.php



55. interior view of bazaar of Isfahan (source: <http://www.panoramio.com>)

The Bazaar of Isfahan, like other bazaars in Islamic cities, can be divided into three parts:

1. Raste and dehliz, which are the main and peripheral streets (forms a central linear circulation space) and corridors which lead to the larger spaces—caravanserais, religious schools, bathhouses, shrines, mosques and stores. Several peripheral rastes connect to the main street. The raste also connects neighborhood residential areas to the bazaar.
2. Caravansarai, is a hostel for guest merchants and individual travelers, with

provisions for trade. They were, large buildings constructed around a courtyard with rooms for merchants' sleeping upstairs and trading downstairs.

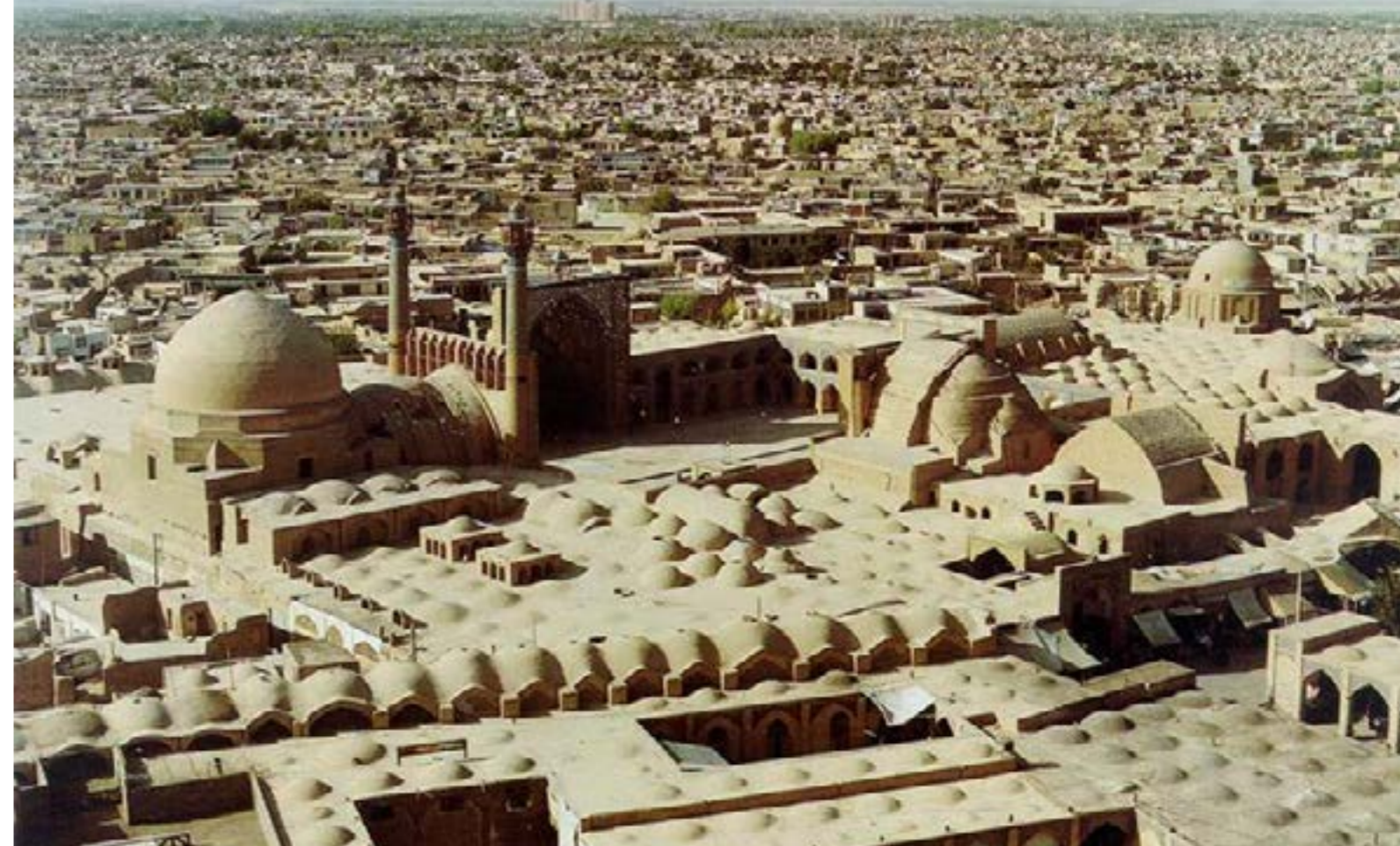
3. Qaisarya, timce and sarai, which are economic complexes without any residential possibilities.

"Qaisaria" was a long roofed corridors in which shopkeepers and craftsmen with the same business show their products. There are many goldsmiths' shops and other artistic shops in this qaisaria. One of the reasons of the design of such was to give animation to the streets.¹



56. interior view of bazaar of Isfahan (source: <http://www.panoramio.com>)

¹ http://www.iranchamber.com/architecture/articles/bazaar_of_isfahan5.php



57. old aerial view of bazaar of Isfahan (and Jameh mosque (source: NAQSH, E, JAHAN-PARS Consulting Engineers, archive, 2010.)

7-Old square

The oldest cultural and historical region of Isfahan is "Atigh square" which means old Square (now also called Imam Ali /Ghiam Square). It has been the backbone node of the city that in course of time has been ignored more and more and transformed negatively.

The old central square of the city lays beside the old Friday Mosque (Jameh Mosque) dating back to at least 1,200 years ago and is believed to have been built on the site of a fire temple.¹ (The previous religion of Iranians before Islam was Zoroastrian which worshipped in fire temples.)

The main development of the plaza was taken during Saljuk "dynasty in 11th century. At the time historical monuments were situated around the square: Jomeh (Which means Friday) mosque - and old Isfahan market, (bazaar), Khajeh nezamolmolk Tomb, the Saljuk palaces, governing palaces, Soltan Sanjar School, Ali minaret and school and Harounieh complex.

“

The Jameh Mosque of Isfahan is the grand, congregational mosque. The mosque is the result of continual construction, reconstruction, additions and renovations on the site from around 771 to the end of the 20th century. Zahan can be found towards the southeast

”

wing of the mosque.²



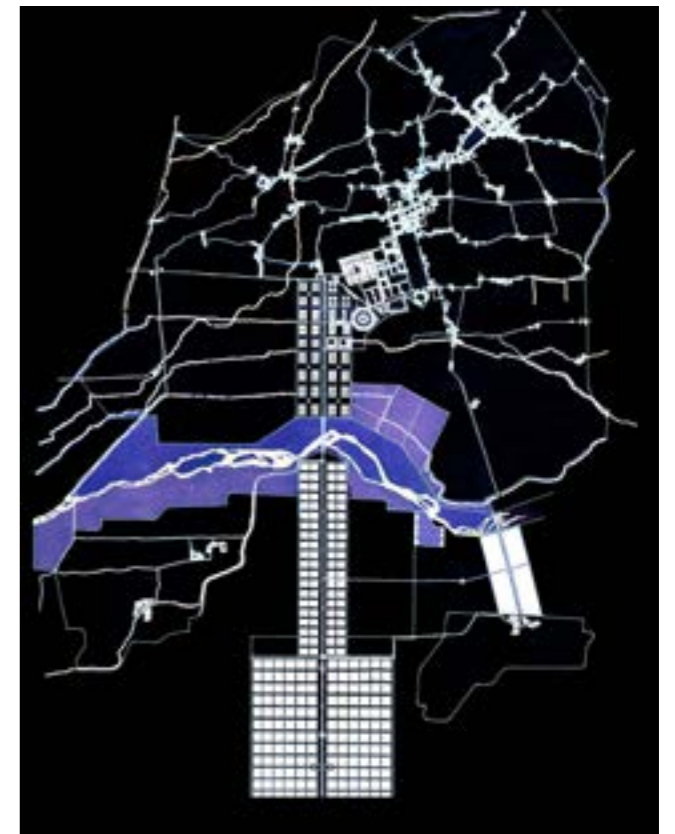
58. The Jameh Mosque of Isfahan (source: NAQSH, E, JAHAN-PARS Consulting Engineers, archive, 2010.)

1- Isfahan ,the second heaven, Irandaily, February, 16, 2012
2- http://en.wikipedia.org/wiki/Jameh_Mosque_of_Isfahan



The city's golden era began in 1598 when Shah Abbas the Great (1587–1629) decided to make it his capital in Isfahan and established new square (Naghsh-e-Jahan) replacing a part of the bazaar which was not viable and connects it to the old square and the old bazaar with a new bazaar. The new square would be accentuated socially and economically and gradually would have replaced the deteriorating old square.⁴

From then on, the urban budget has been spent for extension of the new part of the city to the south, and old square region has not take part in economic leaps and also because of lack of coordination. Old square has transformed to the residing place for poor people, immigrants and wanders after falling in physical, space and social decline.



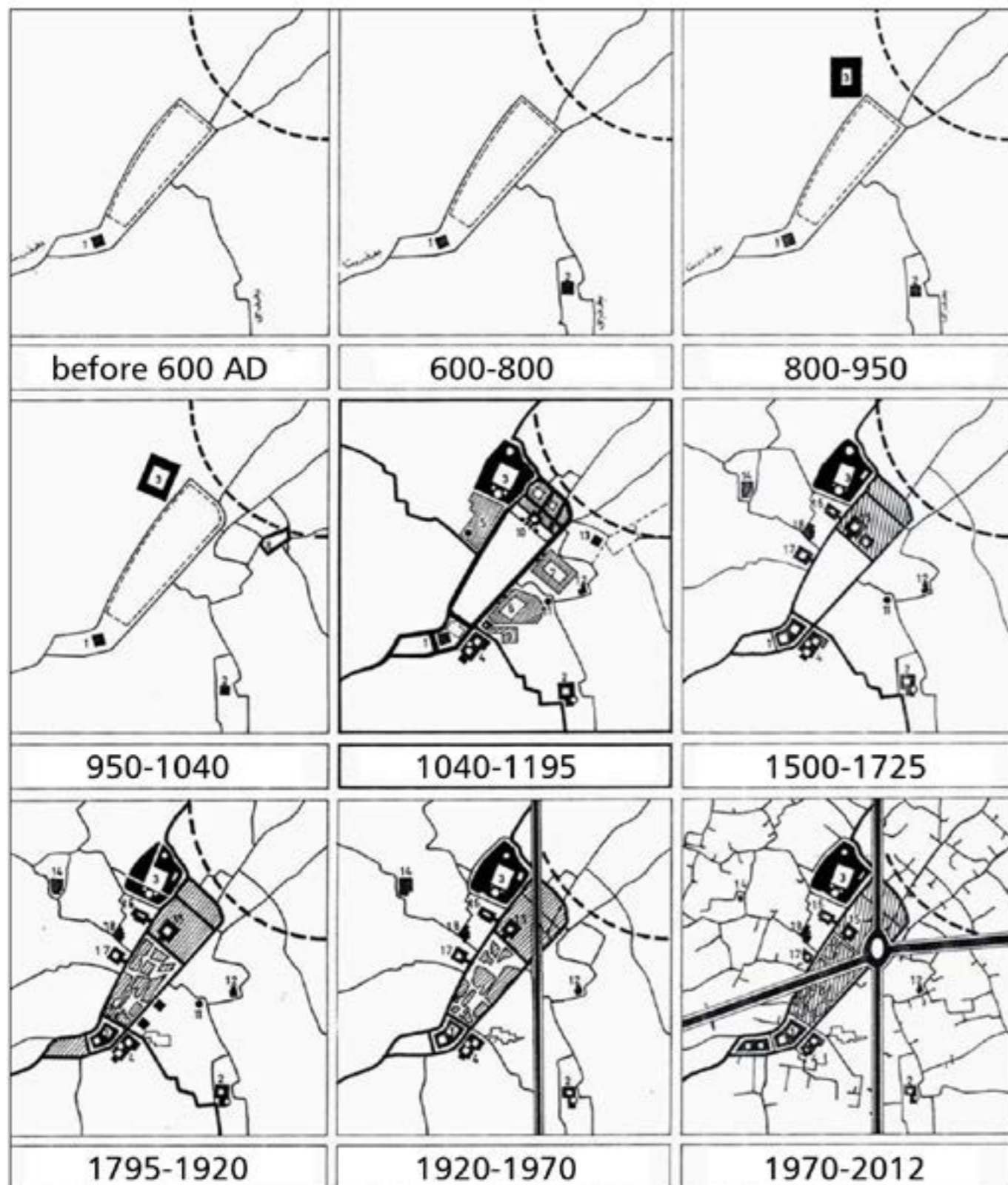
59. Structure of the city after growth towards south
(source: NAQSH, E, JAHAN-PARS Consulting Engineers, archive, 2010., p.19)

During Pahlavi era (1921–1979) the square was cut (and though the historical bazaar was cut) by constructing 2 street passing through it. Nowadays, a round

square with no identity is located at the intersection of the 2 streets in the neighborhood with the Bazaar of Isfahan cut in two parts of a square.



60. aerial views of Old square in 1920's (left) and 1970's (right) showing the transformation of the square since 1920 (source: NAQSH, E, JAHAN-PARS Consulting Engineers, archive, 2010.,)



61. The square transformation follow up since prior to 600 AD to present situation (source: author's translation from NAQSH, E, JAHAN-PARS Consulting Engineers, archive, 2010, p.36)

8-Historical valuable plots

Most of the historical valuable plots in Isfahan belong to Saljoughi and Safavid periods reflecting art and architecture of the period. Historical valuable buildings usually were concentrated along axes of bazaar, neighborhood bazaar and historical axes with the dominant architecture style of inward courtyards (atrium houses).

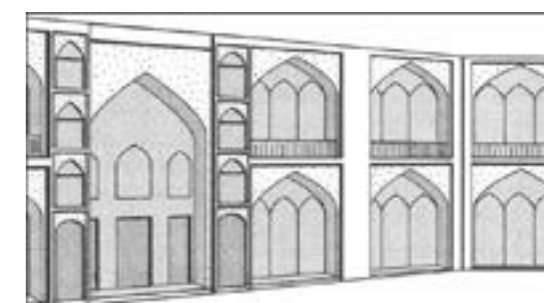
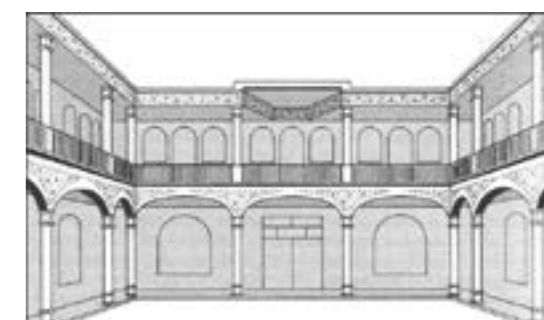
Different uses are recognized among the valuable plots in the project area:

The most common are religious sites and buildings with their own antiquity which annually attract so many pilgrims and tourists who have spiritual ties with them. Moreover, some of these sites, as invaluable and important memorials of the past, reflect great national, cultural and religious heritage of residents of this region in different historical periods; mosques, Imamzadehs, shrines and tombs are among these places.¹

Other common uses are religious schools, bath houses, Saray, carvansaray and historically valuable houses. Sarai is a double storied complex of shops with the same business, which are located around a non-roofed courtyard, usually containing a garden. The sarai is attached to the raste of bazaar through a narrow corridor, called dehliz or dalan. There are many shops located in both sides of the dehliz. These corridors act as mini-markets for the products, which are related to the sarai. Caravansarai, is a hostel for guest merchants and individual travelers, with provisions for trade. They were, large buildings constructed around a courtyard with rooms for merchants' sleeping upstairs and trading downstairs.²



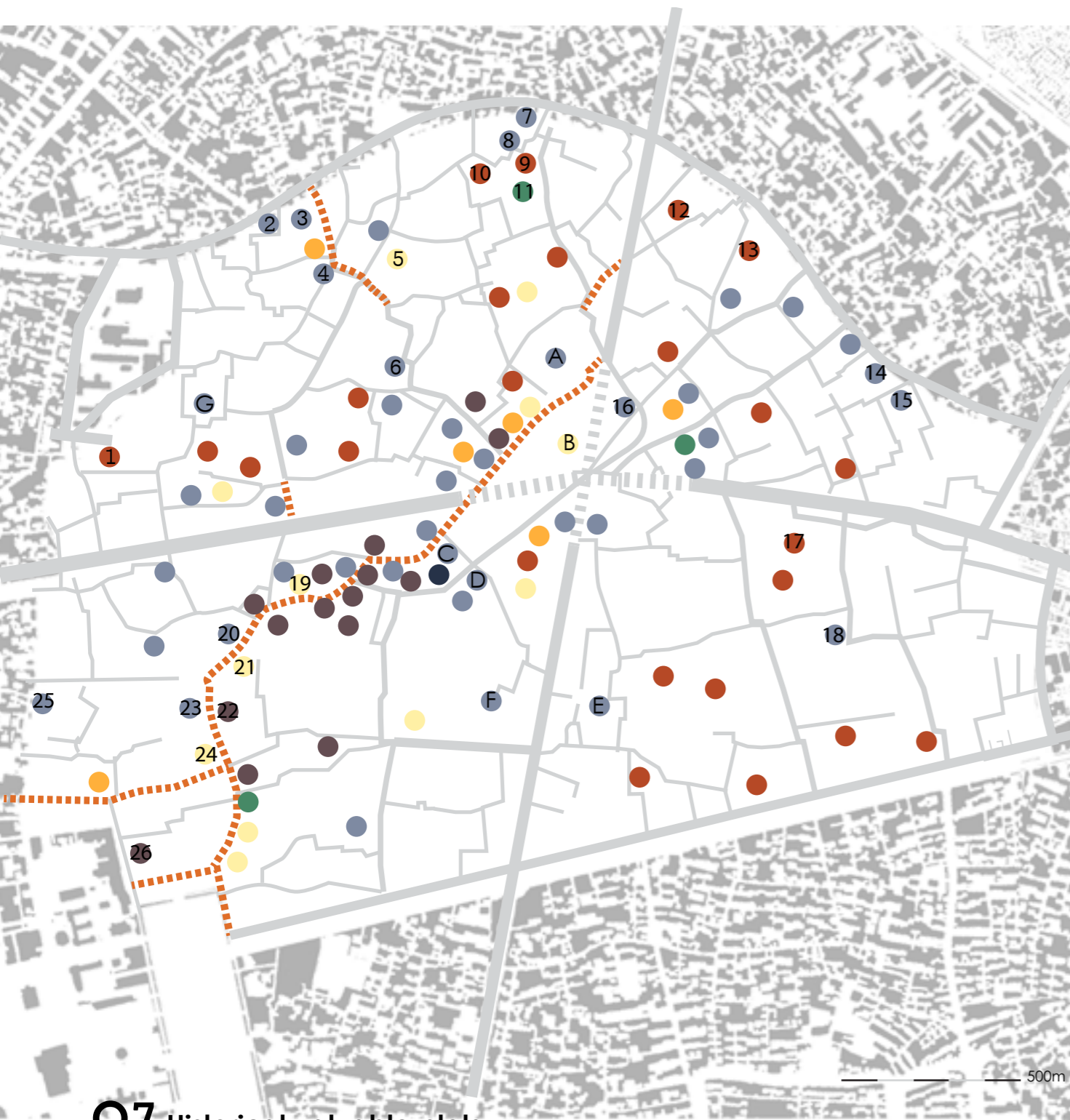
62. Isfahan traditional context around bazaar (source: <http://archnet.org/>)



63.2 Sarais around bazaar (source: http://www.iranchamber.com/architecture/articles/bazaar_of_isfahan5.php)

1-http://touranzamin.com/en/?page_id=1154

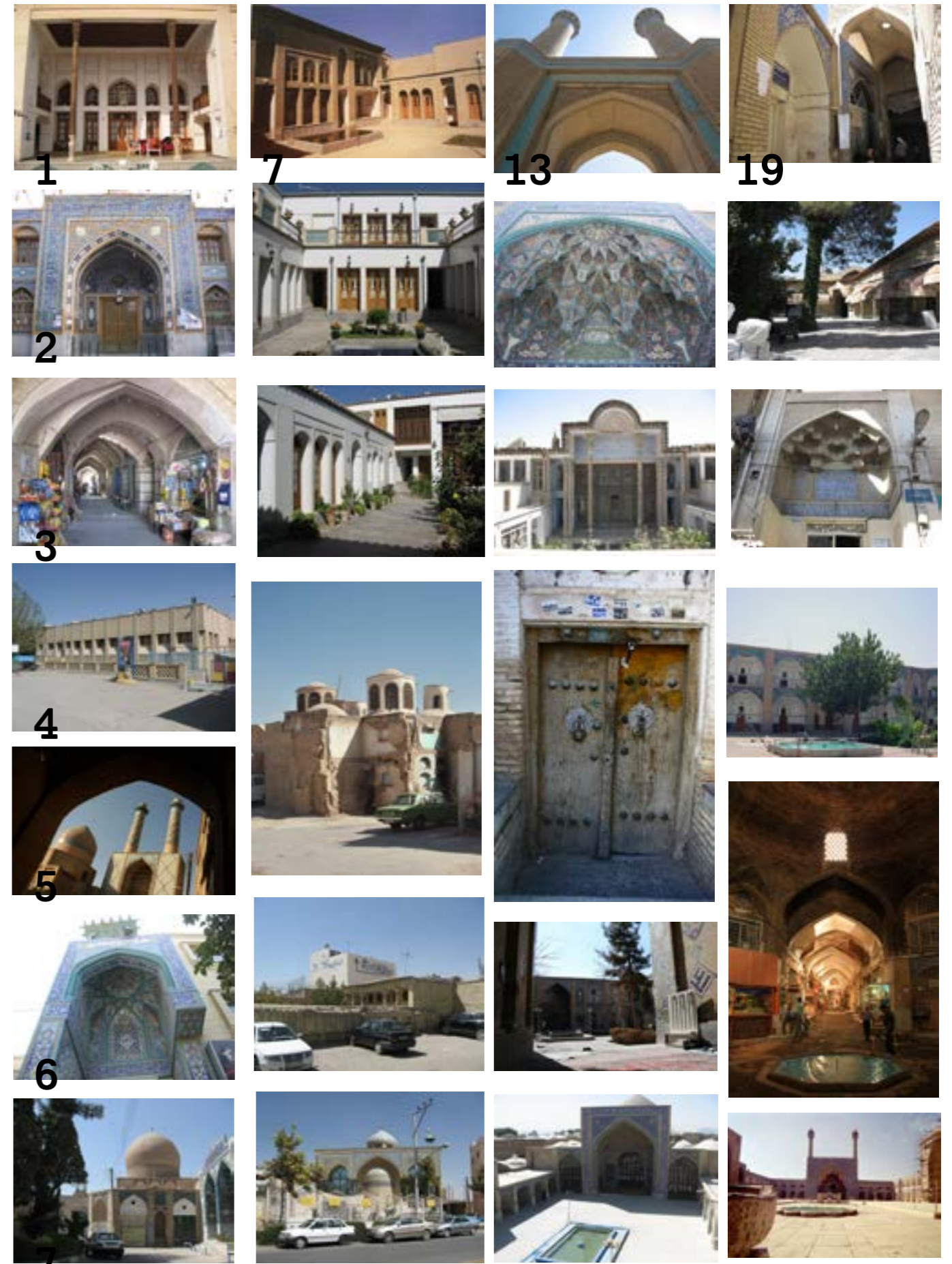
2-http://www.iranchamber.com/architecture/articles/bazaar_of_isfahan2.php



07 Historical valuable plots

Localization and uses of historical valuable plots are shown in the map. The most common use is religious use and bazaar axis has absorbed most of the valuable plots. Images of historical plots number 1-25 with diverse uses is presented on the following page. A-G are the most important heritage plots in the area.

- - - - - bazaar
- mosque-religious veanue
- historic house
- bath-house
- cultural-school
- inn
- retail
- clinic



64.view of historical valuable plots(source:www.panoramio.com)

The most important historical monuments

A-The Jameh Mosque of Isfahan

The mosque is the result of continual construction, reconstruction, additions and renovations on the site from around 771 to the end of the 20th can be found towards the south-east wing of the mosque.

B-Kasegaran mosque and (religious)school

The complex was built in 1726 in Safavid era.It is based on the four-iwan(balcony) typology and like others schools in Isfahan it is rectangular based with rooms on sides of the courtyards for the students.It is famous for ornamentals artworks of break,ceramic and plaster.

C-Harun-i Vilayat complex

The shrine reputed for its miraculous powers is venerated by some Armenian Christians and greatly influenced Safavid Isfahan's urban design in the sixteenth century. One of the earliest Safavid buildings, the building is Timurid in form but is dominated by the exterior tile decoration of its dome, a phenomenon further encouraged in later Safavid architecture. The inner shrine is now often used as a religious theatre for staging passion plays and thus is only accessible during performances. The continued reverence for the shrine has ensured its upkeep, though excessive traffic has taken its toll on the intricate tile panels.

D-The Ali Mosque and Minaret

The Ali Mosque was built during the mid-twelfth century. The minaret retains its Seljuk decorative brickwork while the mosque was largely rebuilt and redecorated during the rule of Safavid Shah Ismail I (1501-1524).

The mosque is based on the four-iwan(balcony) typology, with vaulted prayer halls with balconies on four sides of an open courtyard.

E-Imamzadah Ismaeel

The shrine of Darb-i-Imam is consisted of of an ancient cemetery, shrine structures, and courtyards representing different construction periods and styles. In the Seljuq period, the cemetery existed beyond city walls in the city's northwest quadrant, but in the tenth century, it was incorporated within the city in the Sunbulistan or Chumulan quarter. The complex is unusual in having two closely spaced domes, but is renowned for the excellence of the mosaic tile work on its balcony, portals and galleries.

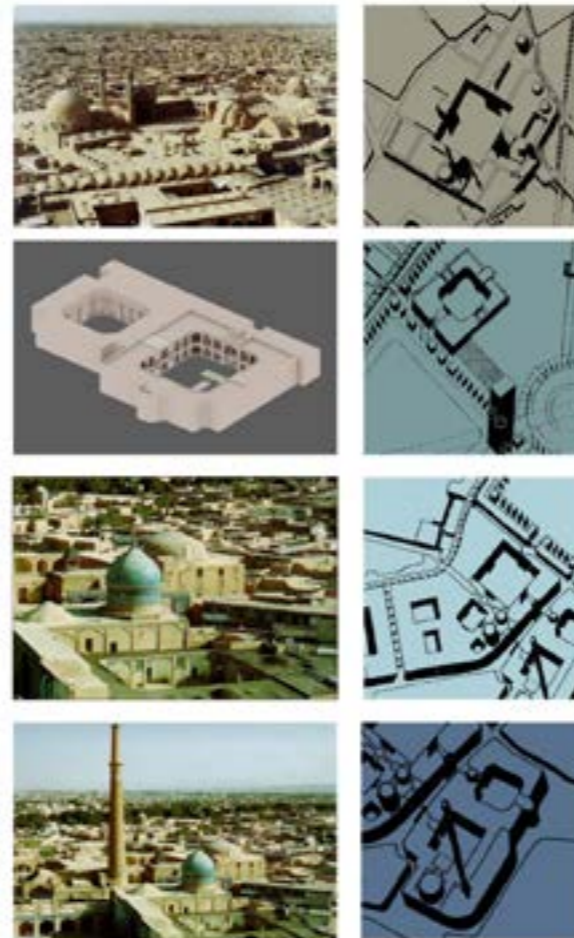
F-Imamzadah Ja'far

This freestanding octagonal tomb tower is built for a descendent of the fifth Imam in 1320's. The high quality of craft is noteworthy as well as the use of proportions which are more slender than those of earlier tomb towers.

G-Imamzadah Dar-be-emam

This venerated complex of buildings and a courtyard represents different construction styles from Seljuq till late Safavid rule. The complex largely consists of a Seljuq mosque and minaret, a Safavid period shrine to Ismail and an uncovered crossroad.

Today, the shrine also contains a gallery, a portal, a prayer hall, a balcony) and a beautiful large dome in addition to the mosque, courtyard. The shrine is notable for its decorative tile works, stucco ornaments, historic Safavid inscriptions, and an intricately adorned tile tablet.



65..perspectives of A,B,C,D(source:NAQSH, E, JAHAN-PARS Consulting Engineers,archieve,2010.)



66..perspectives of E,F,G(source:NAQSH, E, JAHAN-PARS Consulting Engineers,archieve,2010.)

1-http://en.wikipedia.org/wiki/Jameh_Mosque_of_Isfahan
 2-NAQSH, E, JAHAN-PARS Consulting Engineers,archieve,2010.
 3-http://archnet.org/library/sites/one-site.jsp?site_id=8381
 4-http://archnet.org/library/sites/one-site.jsp?site_id=2291

5-http://archnet.org/library/sites/one-site.jsp?site_id=8380
 6-http://archnet.org/library/sites/one-site.jsp?site_id=2301
 7-http://archnet.org/library/sites/one-site.jsp?site_id=8382

9-Facilities

In traditional context,the bazaar as the spine of the city fabric was supported by many public urban facilities of the day, such as caravanserais, mosques, madrasahs(schools), takehs(religious meeting points) bathhouses and etc. Those public activities, which used to take place along the bazaar, has significant role in supporting the bazaar's function, not only as the main city artery, but as the main public space of the city. If the social activities of bazaar are eliminated from it, its physical entity can not any longer survive as the city's spine. It was mainly what happened to bazaars and the historic city centers in Iran, during the urban renewal programs of the early twentieth century.¹

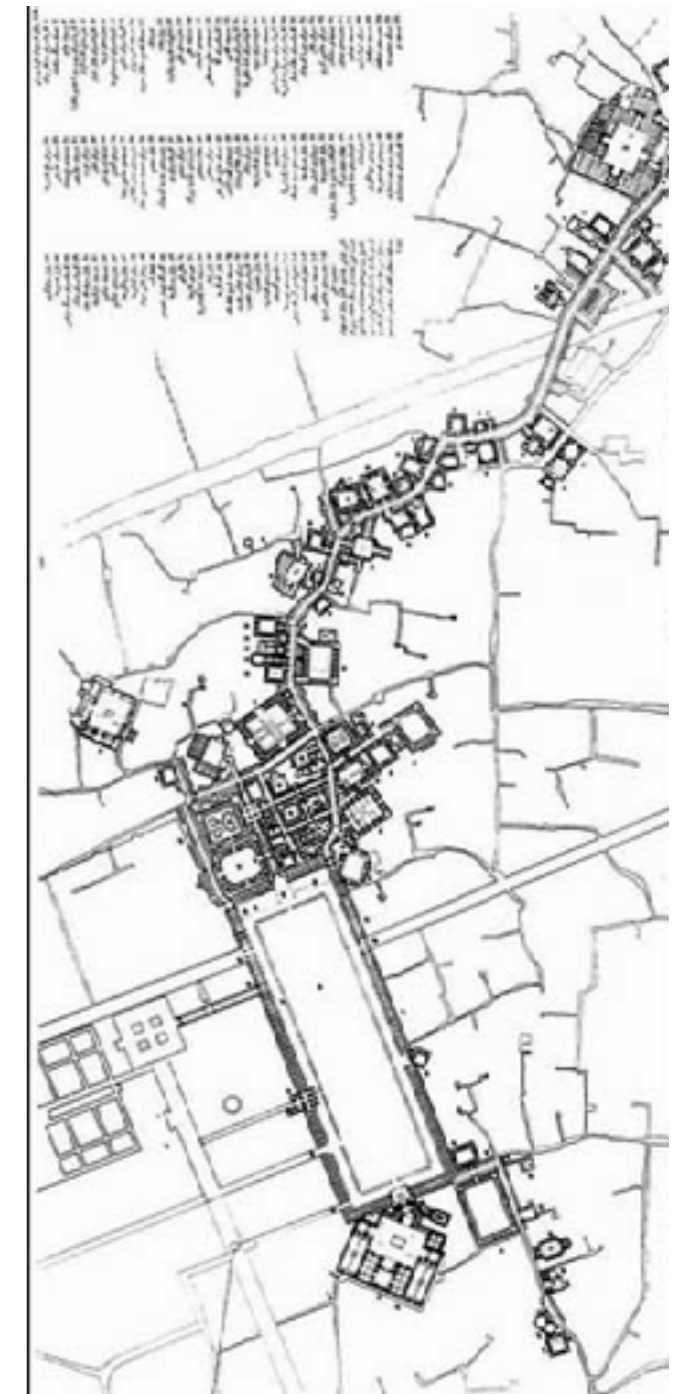
.At present situation,3 groups of facilities could be recognized in the old existing residential context:

- bazar and remaining active-disactive traditional retail facilities around
- socioreligious facilities:mosques-religious meeting points
- a few cultural,health, financial services such as banks,commercial center,clinic,library

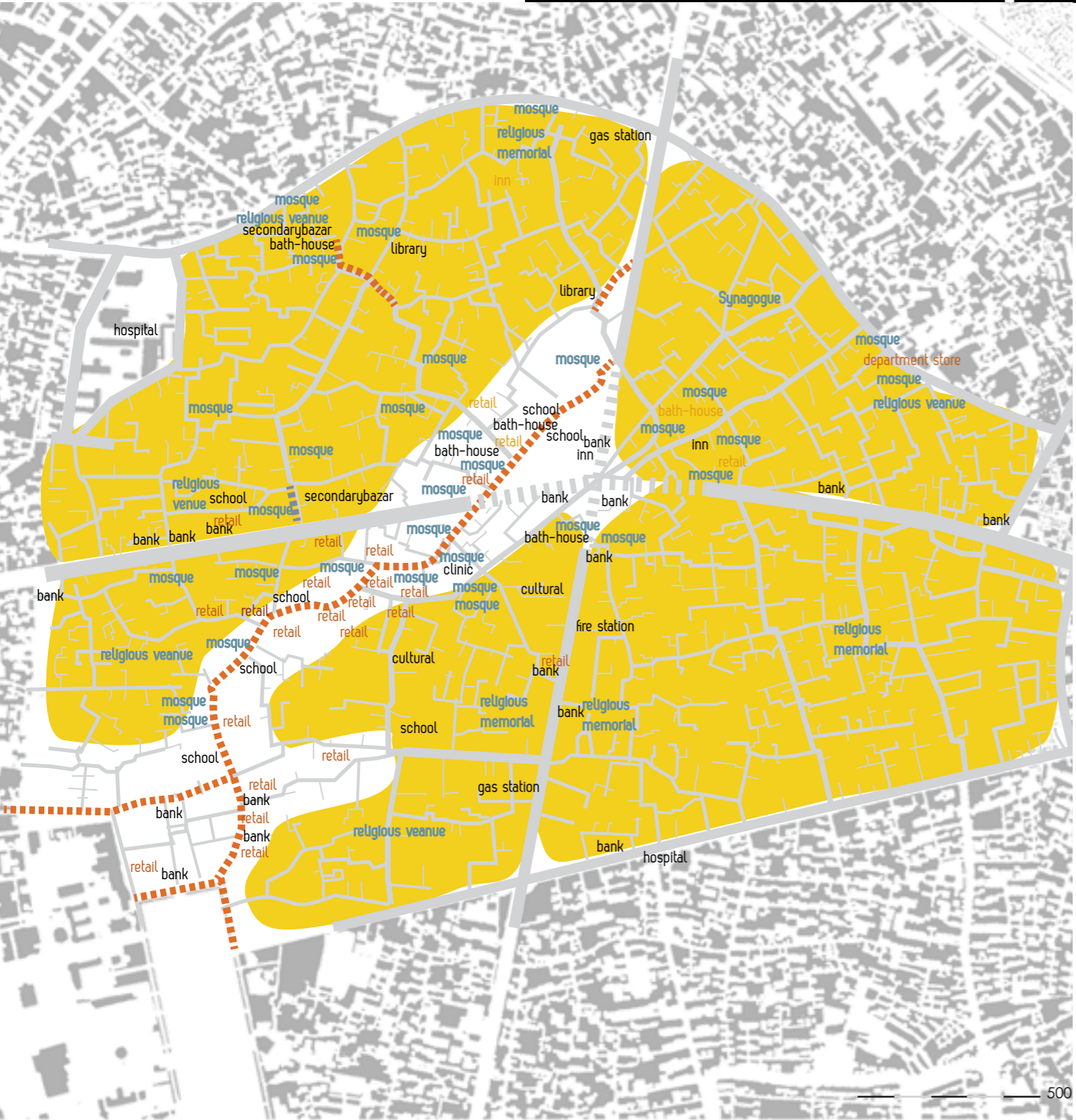
Comparing the old and present facilities and requirements,it is observed that the old structure used to fulfill the needs of traditional residents of the area properly. with the large number of sociocultural spaces which have been organized with the linear structure of bazaar,while **the present facilities do not meet all the modern needs, sociocultural and recreational needs. Still concentration of facilities is higher along axes of bazaar**

Moreover,Many of the old traditional facilities has lost their use gradually and became disactivated such as bath-houses and commercial courtyards around bazaar.

1-Sarraf(2010),P.117



67. concentration of old facilities along bazaar axe (source: http://www.iranchamber.com)



existing infra-structure bazaar residential facilities degraded facilities religious facilities valuable houses rel

08 present facilities in the area

religious and commercial facilities are dominant in the context. Still concentration of facilities is higher along axes of bazaar (source: author's drawings)

10-Isfahan IMR&RO project

Isfahan Municipality Renovation & Restoration Organization (IMR&RO) has decided to renovate this region because of its revival part in the historical axis in to the south and increase quality of life in heart of the city. The aim of the project is declared as restoring historical and cultural identity of the area in order to meet the modern life needs and surrounding context. The focus of the project is renovating the old Square which has been the main square in Isfahan has during the Seljuk period .The project proposes to replace Abdul-Razzagh Street (which has cut the bazaar) with a underway to regenerate pedestrian Seljuk Plaza. The project has planned a large parking under the surface of the plaza and new commercials around the new renovated plaza.

The project is programmed in 3 phases:

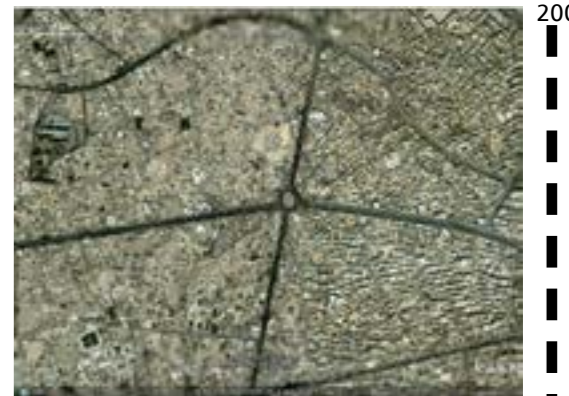
Phase 1-(already implemented in 14 months costing around 41043620 euro) underpasses 6meters under the surface connect the 4 streets 2by 2.(The 4main streets are:Majlesi on north,Valiasr on east,Hatef on south,Abdo-razagh on west.) Phase 2;the 800-year old 2hectare pedestrian square would be restored and get connected to the old bazaar of Isfahan. The underground parking would be built. ¹

At present situation the square space is getting free form the existing plots by negotiation between municipality and the owners almost all cheap retailers; the fruit and vegetable, second hand and cloth retailers and vendors .

The municipality is going to provide them new retail spaces along the 4,main streets.²

IMR&RO is going to build two stories under the surface of the Seljuk square. The 1st basement would provide a large multi functional hall with some parking spaces. The second basement would be a large off-site parking space .

Phase 3: The 32 hectare area would be renovated and revived with 20 retail,touristic,cultural and commercial projects. The dilapidated bazaar and residential would be restored³



2008

project under process

2012

68. conversion of the old plaza from 2008 to 2012 (soirce: google earth)

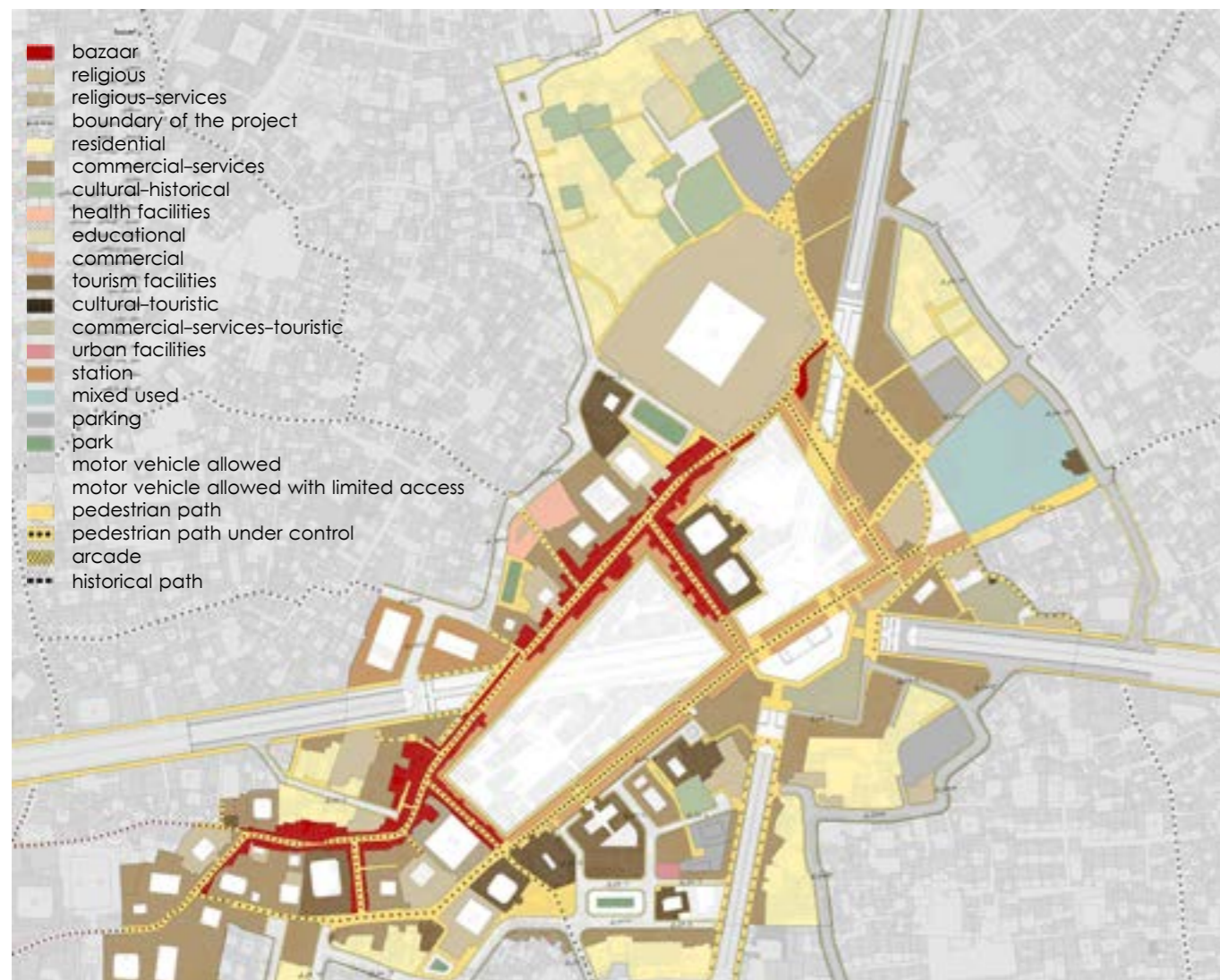
1-<http://www.jamejamonline.ir/newstext.aspx?newsnum=100886190048>
 2-<http://www.sepahannews.com/esfahan-news/cultural-heritage-and-tour>
 3-<http://www.sepahannews.com/esfahan-news/cultural-heritage-and-tourism/583-1388-08-28-17-15-47.htmlism/583-1388-08-28-17-15-47.html>



69. panorama view of old square after completion of phase 1 of the project (source: <http://www.panoramio.com>)

The responsible planner has been "NAQSH, E, JAHAN-PARS Consulting Engineers" office in Tehran.

The planning has started namely as "Revitalization of Antique Jameh Mosque in Isfahan and Kohneh Square, Esfahan-Iran" in 1991.



70. IMR&RO 32 hec. project (source: author's translation from NAQSH, E, JAHAN-PARS Consulting Engineers, archive2010., p.45)

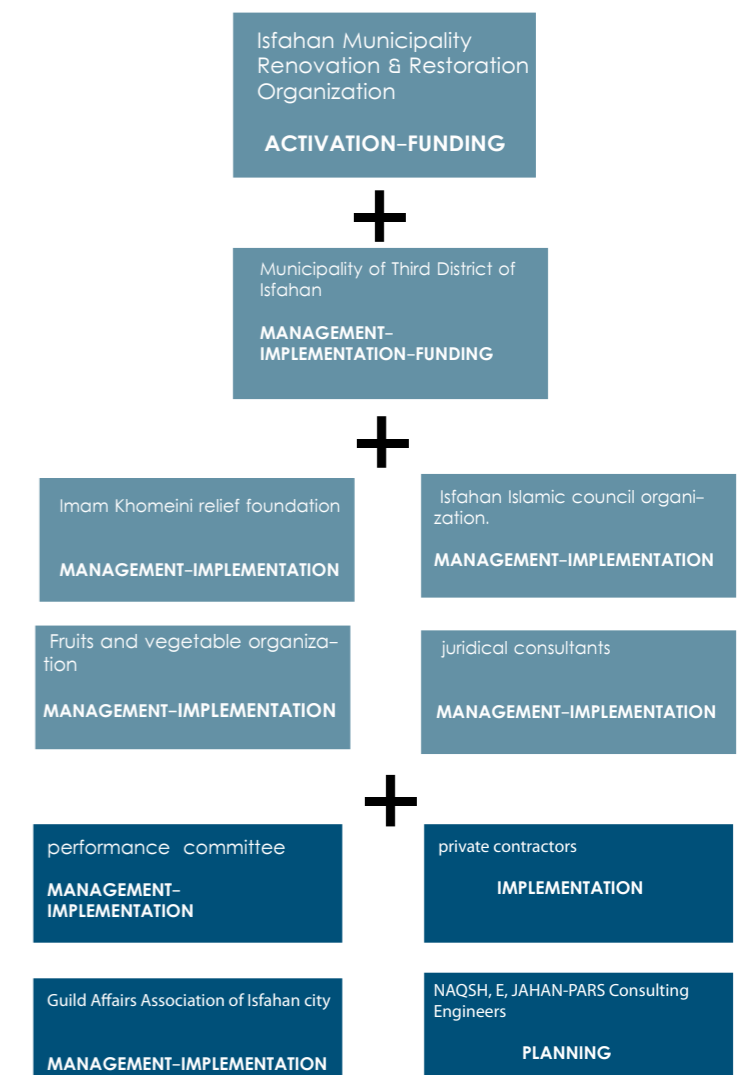
Partnership and management

The main actors of IMR&RO project are:

1. Isfahan Municipality Renovation & Restoration Organization
2. Municipality of Third District of Isfahan
3. Fruits and vegetable organization
4. Isfahan Islamic council organization.
5. mam Khomeini relief foundation
6. juridical consultants
7. Guild Affairs Association of Isfahan city
8. private contractors

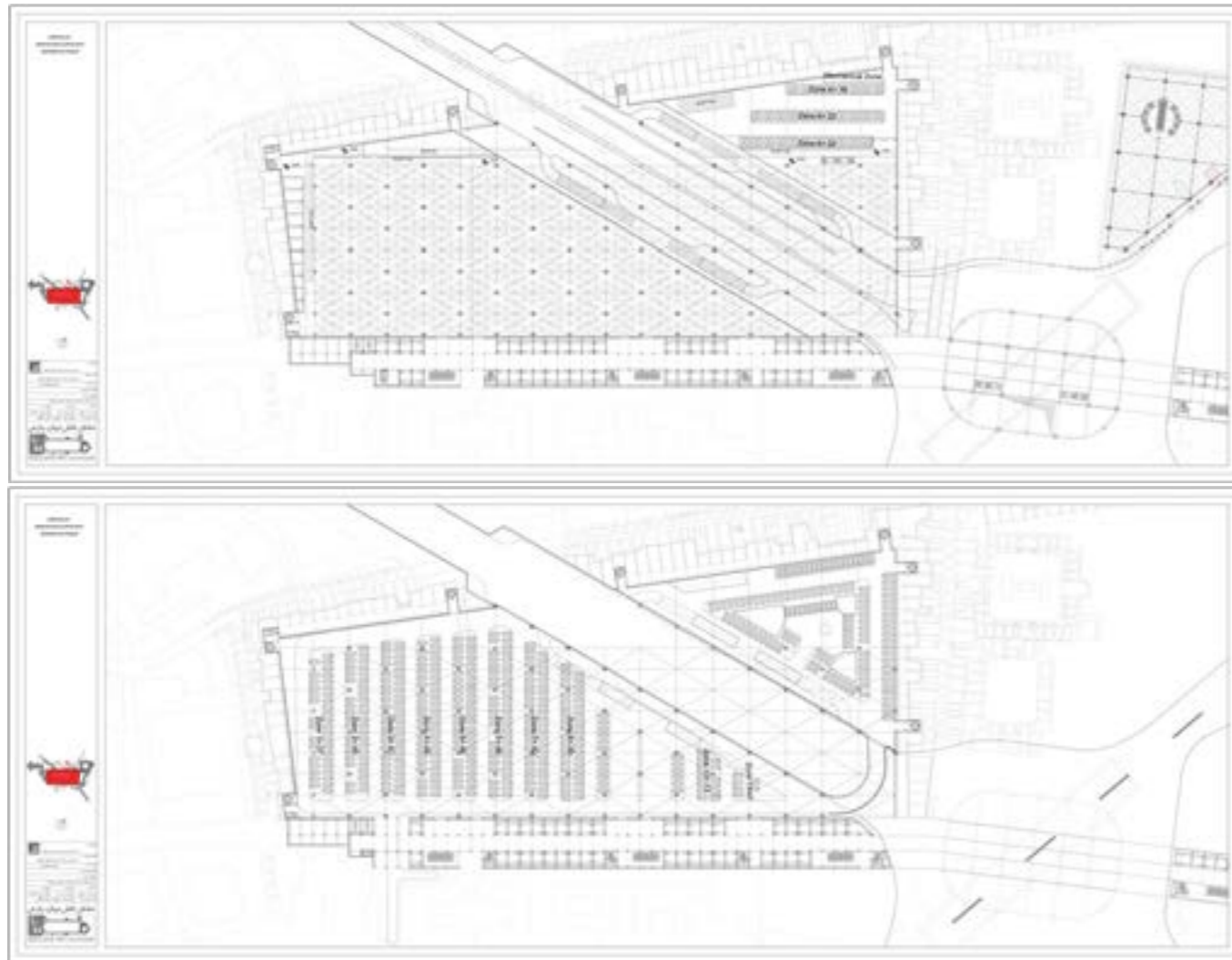
NAQSH, E, JAHAN-PARS Consulting Engineers is the urban planner.

9. Strategic management of the project was led by a committee which is formed once a month. The members of the steering committee were determined by the mayor and were consist of the following persons: Managing director of the fruit and vegetable organization as the project manager and recommender, mayor of the third district, one of the social relations experts and loans affairs of Imam Khomeini relief foundation, one first class attorney for juridical consults, the head of Guild Affairs Association of Isfahan city, director of public relations in (FVO&RCO) of Isfahan, and the head of (IMR&RO).¹



71. Partnership and management diagram of IMR&RO project (source: author's drawings)

1-<http://www.unhabitat.org/bestpractices/2008/mainview.asp?BPID=1905>



72. 2 story parking under the Saljuk Plaza (source NAQSH, E, JAHAN-PARS Consulting Engineers archive,2010.)



73. 3d perspective of IMR&RO project(source: <http://njp-arch.com>)



74. restoing the Saljuk plaza undredone(source:google earth)



75. presumed model of the project
(source NAQSH, E, JAHAN-PARS Consulting Engineers archive,2010.)

Evaluation

Strengths and deficits of IMR&RO project are considered as:

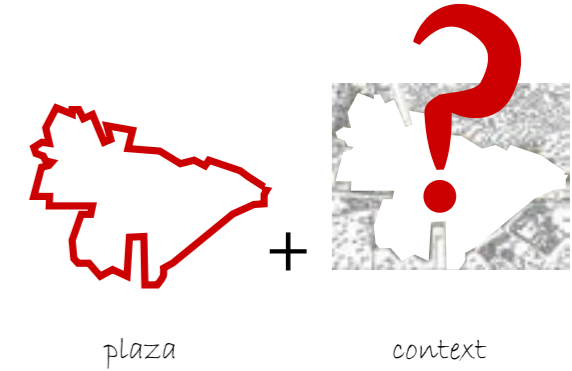
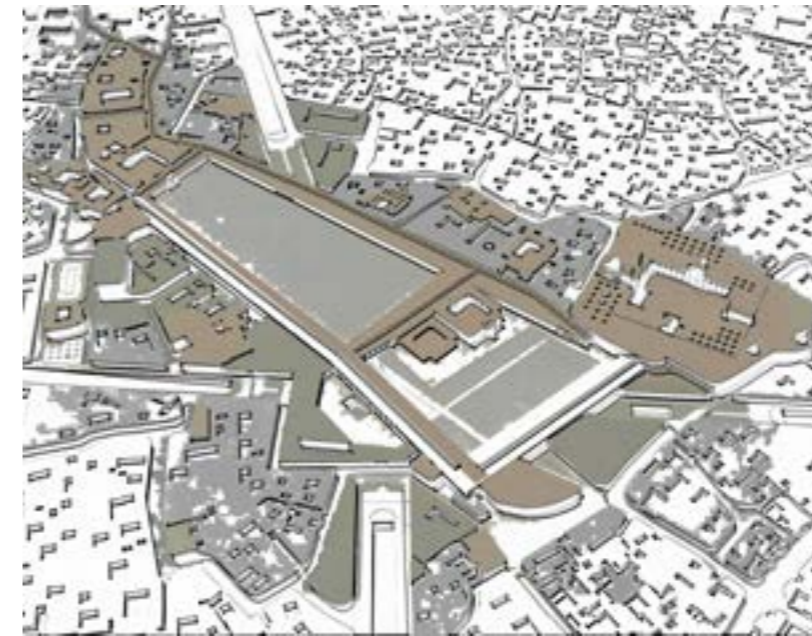
Strengths:

The developments is planned to dramatically improve the image of the plaza. It is expected to attract many new visitors and bring significant economic benefits.

- restoring the old Seljuk square
- reconnecting the bazaar
- infrastructure traffic improvement
- decreasing the air and noise pollution
- attempts to improve tourism; absorb tourists to the renovated plaza and neighborhood
- preservation and storing plans for valuable monuments in the 3 2 hectare area
- 20 new cultural an tail project(though questionable)
- taring policies to integrate residents(by municipality)



76 isolating of the square from the devastating neighborhood?
(source NAQSH, E, JAHAN-PARS Consulting Engineers archive,2010.)



77..Isolation or integration of the plaza and the urban fabric
:what have the planners planned for restoring the problematic context around the square?
source:author's drawing



78. contemplating drawbacks of IMR & Ro project(source:author's photo montage)

Deficits

The planners have defined their goals as:

- a) Functional revitalization of residential areas at the vicinity of the complex
- b) Improvement in social environment
- c) Preserving historical and architectural potential values
- d) Conducting new spatial configurations by organizing urban functions and activities
- e) Regulating the land use system and relocating appropriate functions to non-functional spaces
- f) Predicting economic procedures that would not only conduce to economic growth but also employ the potential advantages of the area in order to achieve the functional goals of the plan.¹

- The planners have mentioned the context and socio-economic improvements. **But there is a lack of proposing a strategic plan or promoting neighborhood "image" in these fields.**

As the planners mention: The focus of the project is

“

on the revitalization of the old Square- the city's main square in the seljuqian epoch. The pedestrian flow through the square is enhanced by cutting Abdol-

”

Razzagh Street and leading it beneath the square.¹

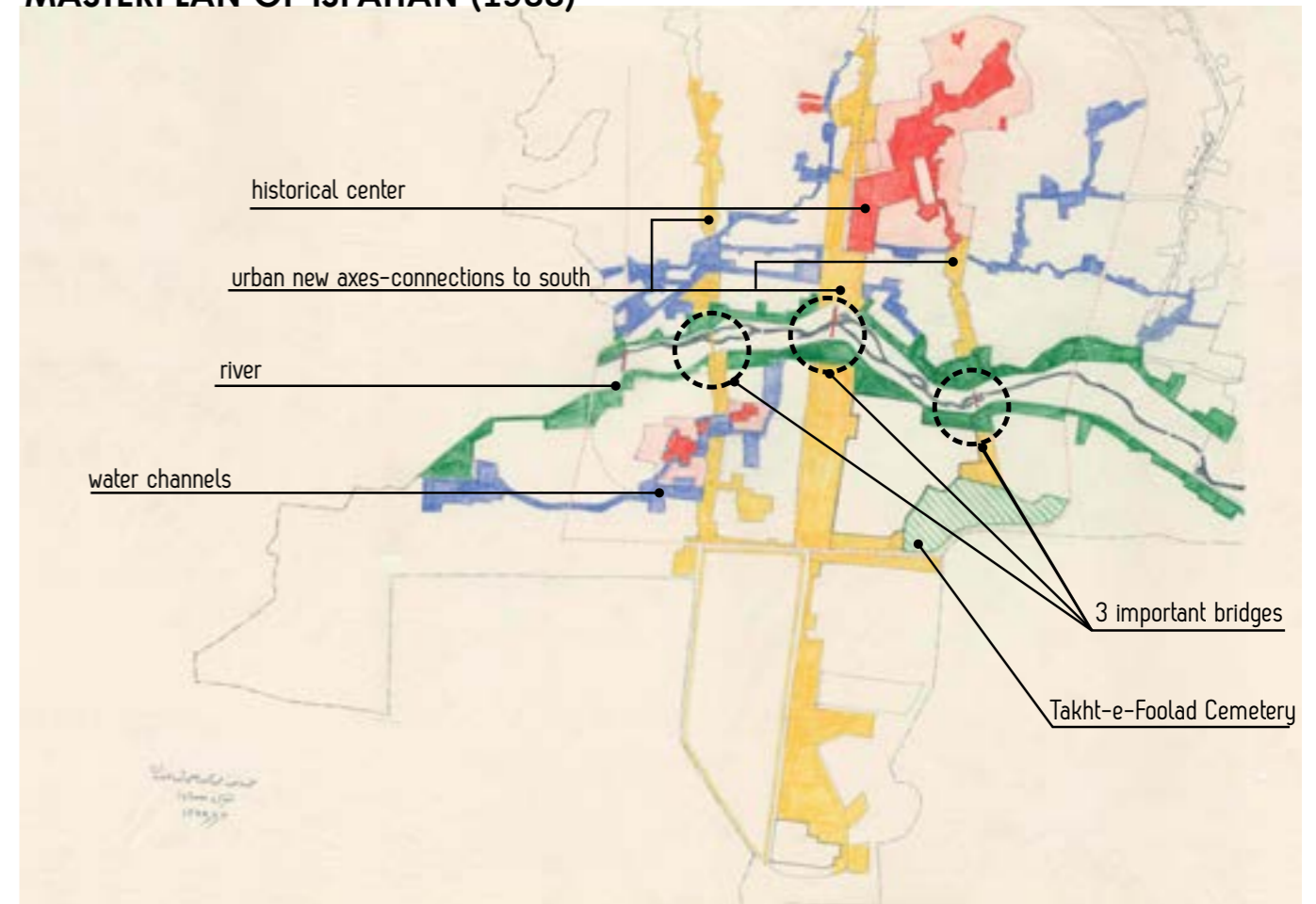
There is lack of sufficient programming for rehabilitating and integrating the context

- Restoring the old square surrounded by new retails and commercial use may emphasize on **isolating** of the square from the devastating neighborhood
- This huge 2 story excavation in proximity to historical heritage most significantly in proximity of 1400 year old mosque has been criticized by environmental and conservation foundations, although the planners claim that they are complying with required rules not to harm the heritage.

¹ Naqsh, E, Jahan-Pars/Projects
www.njp-arch.com/projects/p_c/C_07.htm

11-RELATED PROJECTS

MASTERPLAN OF ISFAHAN (1988)



79. master plan of Isfahan planned by NAQSH, E, JAHAN-PARS Consulting Engineers in 1988
(source: author's modification on a map from NAQSH, E, JAHAN-PARS Consulting Engineers, archive2010, p.45)

After the Islamic Revolution in Isfahan previous comprehensive plan was revised as "Revised Plan of the Comprehensive Plan" in residential and urbanism department of Isfahan by NAQSH, E, JAHAN-PARS Consulting Engineers

In 1988 it was approved by the Supreme Council of Planning and Architecture of Iran and in 1991 was renamed. to the "Master Plan of Isfahan"¹

The most important principals of the master plan are as follows:

1. The main structure of Isfahan is comprised of two axes that are perpendicular to each other; the river "Zayande-Rood" and the historical axis. This second axis, which has evolved

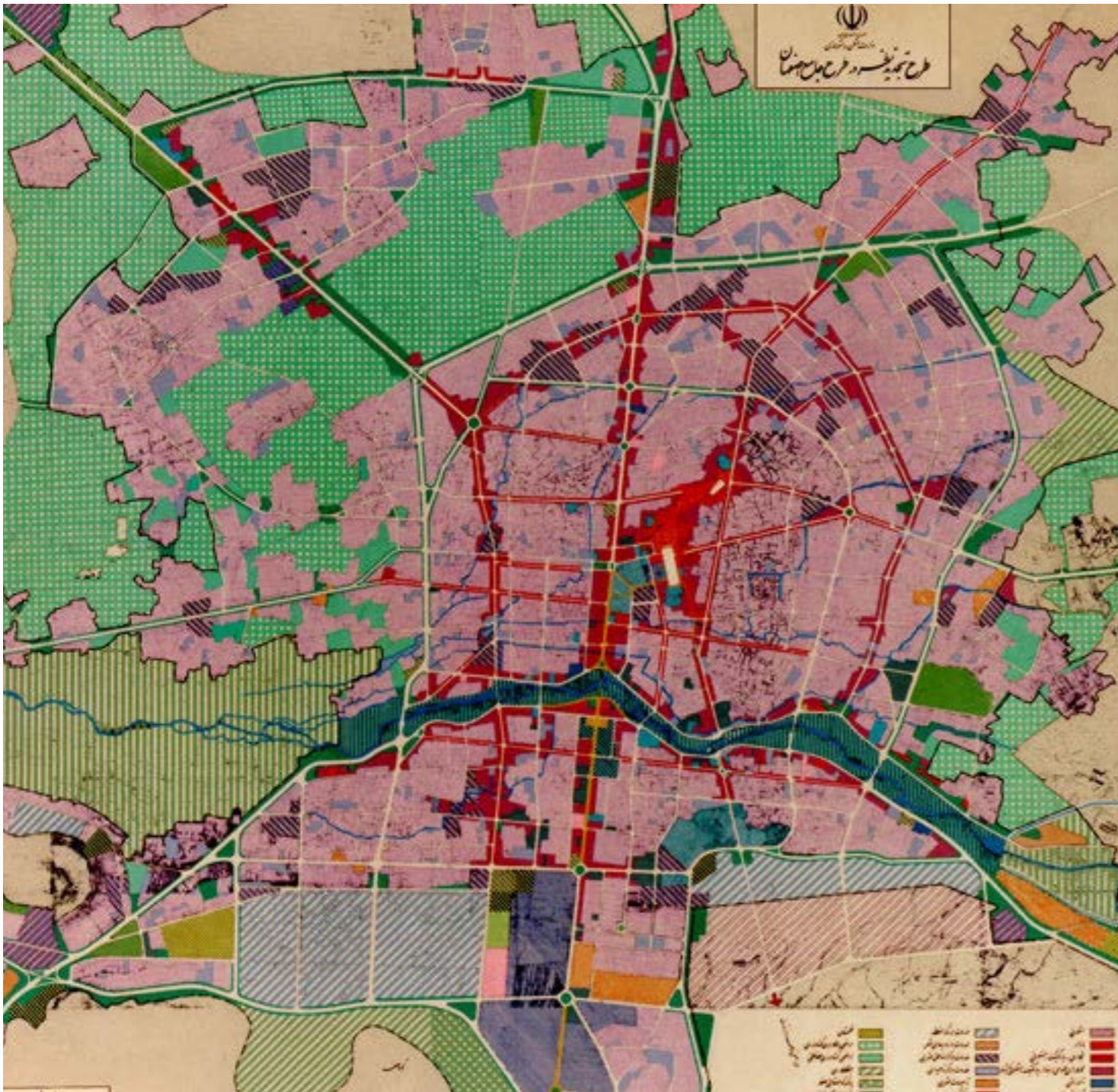
during 1000 years, flows from the Jami Mosque and reaches to the southern part of the city. This part is the most elevated site in Isfahan in which the hezar-Jarib Gardens were located.

2. Because of the prominence of preserving the city's urban configuration and the importance of the city's main structure, any proposed plan should be congruent with these two factors and should consider their organic evolution²

The main objective of the present plan is to prevent expansion of the city, navigate the concentration of population and services in the city, maintaining elegance and structure of the old town and to preserve the surrounding agricultural land.

1-<http://www.mimiran-arch.org/fa/content.aspx?pid=17>
2-http://www.njp-arch.com/projects/p_b/B_02.htm

However, The plan consists a chain of regulatory projects which in some cases have conducted superficial analysis of the social and economical dimension and though still the well-being of most of the districts relies on sporadic decisions the good will of the inhabitants for an ideal cooperation.



80. Master plan of Isfahan by Naghsh-e-Jahan consulting engineers-1991 (source: 1-<http://www.mimiran-arch.org/fa/content.aspx?pid=17>)

Revitalization of Cultural – Historical Axis of Isfahan



81. historical axe of Isfahan¹ (source: http://www.njp-arch.com/projects/p_c/C_04.htm)

The cultural and historical axe of Isfahan is core of the city. This axis begins from the Jameh mosque and old square), which forms the Seljukian city center and runs up to the location of Bagh-e-Hezar Jarib of Safavid period, in place of which today's Isfahan University stands. This axis passes across Bazar, the complex of Naqsh-e-Jahan Square, City's heart in Safavid period, and Char Bagh. The historical axis that has evolved dur-

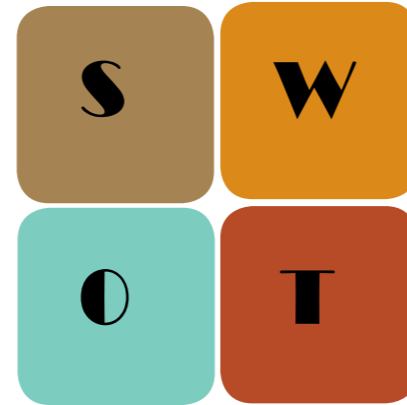
ing a period of more than 1000 years has always acted as the main structure of the city and comprises examples of architecture and urban planning of all different periods of Isfahan history.

The new urban plan of the city claims the identity, internal congruity, homogeneity and functional efficiency of this axis in compliance with Isfahan's architecture and urban values and will serve as Isfahan's main structure in the future

1-http://www.njp-arch.com/projects/p_c/C_04.htm
2-Sarraf,(2010),p.83

12-SWOT

This chapter is divided in 2 parts. First the strengths, weaknesses, opportunities and threats of the project are highlighted, considering the residents concerns in the area and the present situation studied in the previous chapters. Consequently, in the second part a general interpretation of the project area would be derived from the SWOT.



82.Bottom:a blighted plot adjacent to Jameh mosque
(source: <http://www.mehrnews.com/fa/newsdetail.aspx?NewsID=812331>)

STRENGTHS

- Presence of landmarks and historically valuable plots
- Strong sense of belonging of the residents to the neighborhood
- Fascination and Identity of historical context
- Valuable commercial uses in vicinity of residential context
- Presence of valuable architectural patterns in the context
- Presence of many redevelopable plots
- Possibility of setting an appropriate lighting system in the area to identify plots and the neighborhood and provide safety

OPPORTUNITIES

Specific attention of Isfahan managing system to redevelopment of this area
 Possibility of changing the social structure of the area
 Embedding budgets for the redevelopment project
 Presence of general policies to redevelop the dilapidated context in Isfahan
 Presence of policies to replace the foreign workforce with local workforce
 high percentage of owner residents whom can be negotiated with for redevelopable projects
 A traditional potential layout and pedestrian orientation which can create a highly cohesive urban environment

THREATS

- Inclination of the original residents to leave the problematic area
- The unbalanced sexual pattern in neighborhoods
- Presence of new residential neighborhoods –targets to move to
- No specific rules to control new constructions in the historical context
- Present risks for an area which is both socially and environmentally fragile. speculative pressure may soon result in a pattern of uncontrolled development paving the way for a total substitution of the traditional urban fabric.

WEAKNESS

1-Spatial problems

- Urban degradation
- Lack of required densities as a facilitated neighborhood
- Visual chaos and disorder
- Small existing plots sizes which lead to visual chaos and possession problems.
- Lack of required services and facilities
- Noise pollution
- Uncontrolled excavation and construction in the field of Antiquity
- Dilapidated infrastructure

2-Administrative problems

- Fragmentation of responsibility
- Lack of a cohesive vision
- Shortage of budget
- Restricting administrative rules

3-Social problems

- Degrading of the integrity of historical neighborhoods
- Degrading of hierarchial privacy embedded in the traditional life style.
- Degrading of different socio-spatial values in the fabric
- Social accumulation and isolation of low income and low social classes
- Illegal activities
- The area is a male dominated neighborhood
- Unsafe neighborhood
- Lack of livability in residential degraded context
- A "no flow" zone
- A "no go" zone for the middle and upper classes

4-Economical problems

- An inefficient state sector
- Reliance of economy on the oil sector, government mismanagement
- Private sector activity is typically limited
- Price controls, subsidies, and other rigidities weigh down the economy
- Presence of a significant informal market activity
- Rising inflation
- The international political and economical sanctions
- Unstable economical environment
- Poor welfare system
- An unreliable market for the foreign investors
- Banks are not very supportive
- Banking system with the high interest rates
- Lack of domestic production
- The low level of real business tax payer
- Bazaar's losing its economic role in the area
- Low prices of property in the area
- The tourist infrastructure of the city and province remains underdeveloped.

12-1 Strengths

- Fascination and Identity of historical context
- Presence of landmarks and historically valuable plots. Many historical heritage exist in the project area, promoting identity, attraction and economy if well fulfilled.
- Presence of many redevelopable plots; possibility of changing the uses of the plots—as many plots are disactivated, delapidated, dismissed or degraded and could be redeveloped presence of valuable commercial uses in vicinity of residential context
- Strong sense of belonging of the residents to the neighborhood (21.6% of the people surveyed have indicated to their very strong sense of belonging to the place and 29.7% have indicated to their strong sense of belonging to the place). residents view the neighborhood as their permanent home and are ready to invest their own resources to improve their living conditions.
- Presence of valuable architectural patterns in the context (the inward court (atrium) style which suit bests the climate condition of Isfahan.
- Possibility of setting an appropriate lighting system in the area to identify plots and the neighborhood and provide safety



83.map shows historical valuable plots (blue circles) among redevelopable plots (red plots) which could be potentials for new projects and revitalization at present situation (source: author's drawings)



84. valuable architectural patterns in the context (source: <http://archnet.org/library/images/>)



85. lighting system in Nagsh-e-Jahan Square, Isfahan, providing a sense of safety and attraction (source: <http://www.skyscrapercity.com/>)

12-2

Weakness

Drawbacks of the area could be recognized in four groups:

1. Spacial problems
2. Administrative problems
3. Social problems
4. Economical problems

Each unit is described in this unit in detail.

1-Spacial problems

- **Urban degradation;**the neighborhood has degraded spacially because of wrong policies and bombardments in the war of 80's. There is high percentage of dilapidated,dismissed and degraded plots in the neighborhood which also could be considered as opportunities for new redevelopment project to revitalize the context. Degraded neighbors would affect the use and function of valuable plots.

- Unsafe structures threatens the lives of the residents.

Low spacial and environmental qualities of the neighborhood is resulted of the degrading context.



86.blighted and degraded active plots in the area (source:<http://www.panoramio.com>)



87.a blighted plot in the area. (source:NAQSH, E, JAHAN-PARS) Consulting Engineers,2010.)



88.a dismissed plot in the area. (source:NAQSH, E, JAHAN-PARS) Consulting Engineers,2010.)



90.Sonbolestan Street-blighted residential plots (source:<http://www.panoramio.com>)



89.active degraded plots in the area.(source:NAQSH, E, JAHAN-PARS) Consulting Engineers,2010.)

- lack of required densities as a facilitated neighborhood

“

Population density is important because it encourages economic diversity and vital-

”

ity, and can increase the value of city neighborhoods, among other things. ¹

The population density in IMR&RO project area is lower than district 3 of Isfahan and the city, mainly because of the presence of bazaar in the area replacement of the original resident families with single foreign labor work. Population density in the IMR&RO project is 34 people/hectare, while .Population density in district 3 is 94.8 people/hectare. An average of the two numbers about 60-65 people/hectare is considered for the pilot project area.



92. low density context around Imam Ali square
(source:NAQSH, E, JAHAN-PARS) Consulting Engineers,2010.)

- chaos and disorder

Inconsistency in the urban fabric ;The modern constructions id inconsistent physically and functionally with the historical context as there have not been any general strategic plan,any serious restricting rule and sufficient attention to the existing context which have lead to spontaneous constructions.

Different heights,architecture styles materials,colors and uncontrolled signage in the area have caused a chaotic atmosphere.

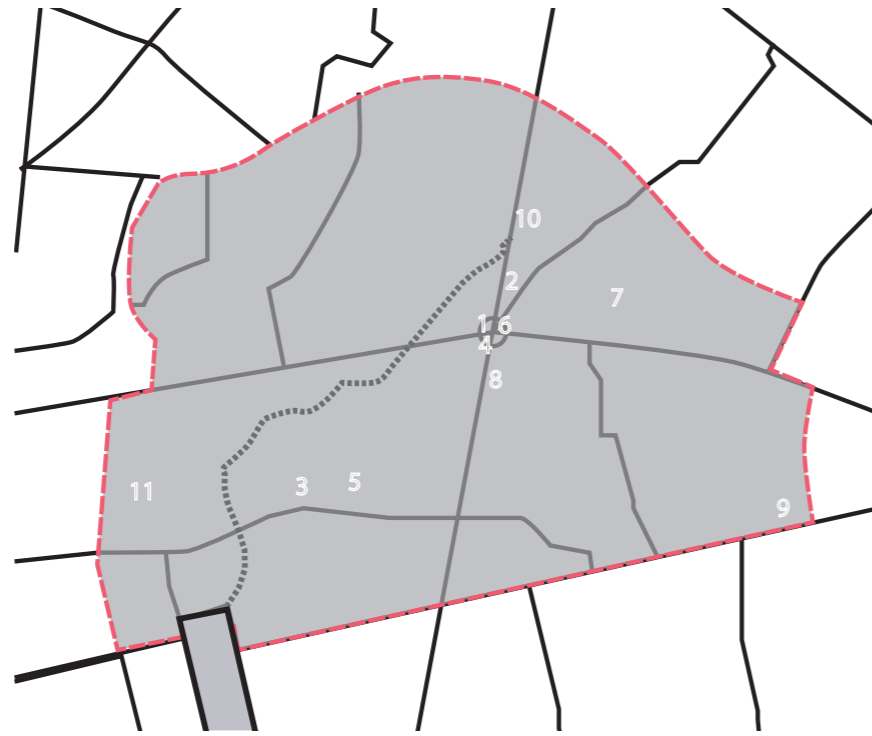
Transformation of the context to a traditional commercial context and lack of required attention to the residential problematic context is evident.

Air and noise pollution are other important problems of the neighborhood. Generally in Isfahan,roads are very crowded, and air and noise pollution are consistent problems.

A large percentage of the residents surveyed (23.3 %)have pointed out to noise pollution as one of the important disturbing aspects in the area.

Heavy traffic loads,Bazaar functions,misuse of loudspeakers and public announcements systems.,construction sites ,spacial disorder,and social problems are sources of noise pollution in the project area.

Un-insulated old degraded constructions pass high levels of environmental noise to indoor spaces.



93.localizaion of pictures taken in different parts of the project area depicting chaos and disorder (source of pictures :NAQSH, E, JAHAN-PARS, Consulting Engineers,2010.)

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- existing small plots sizes which lead to visual chaos and possession problems.

Small plots sizes devastate the chaos by their different heights, architecture styles materials and colors. Negotiation with the owners for achieving an agreement for the redevelopment projects is more tough when the number of owners increase.



94.spacial chaos around the square
source:www.panoramio.com



99.spacial chaos around the square
(source:NAQSH, E, JAHAN-PARS) Consulting Engineers,2010.)



100.spacial chaos, on Harounieh axe (source:NAQSH, E, JAHAN-PARS) Consulting Engineers,2010.)

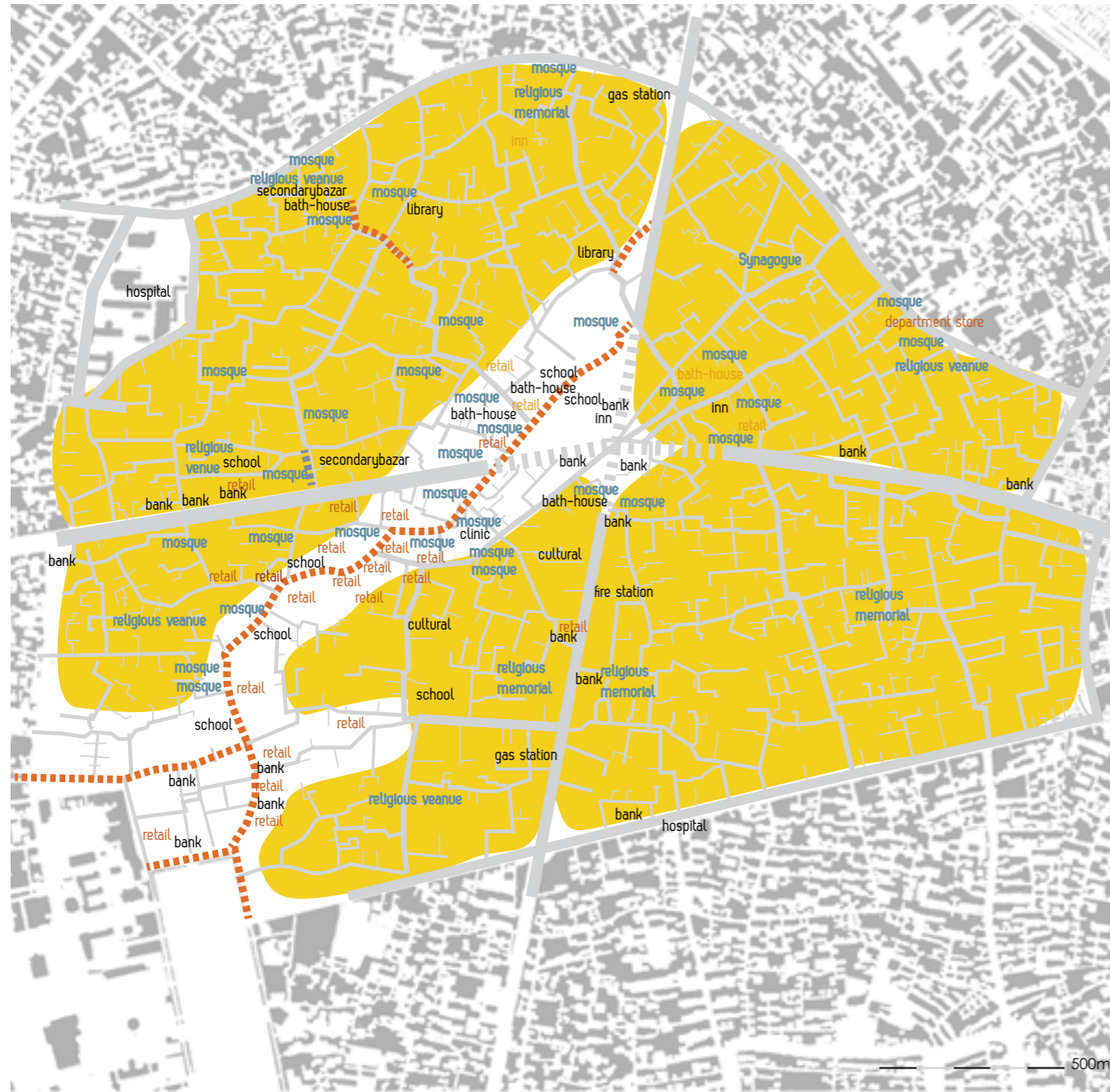


- Lack of required services and facilities

Comparing the old and present facilities and requirements, it is observed that the old structure used to fulfill the needs of traditional residents of the area properly, with the large number of sociocultural spaces which have been organized with the linear structure of bazaar, while **the present facilities do not meet all the**

modern needs of the residents especially service, sociocultural and recreational needs. Still concentration of facilities is higher along axes of bazaar

Moreover, Many of the old traditional facilities has lost their use gradually and became deactivated such as bath-houses and commercial courtyards around bazaar.



existing infra-structure bazaar residential facilities degraded facilities religious facilities valuable houses retail

9 present facilities in the area

religious and commercial facilities are dominant in the context. Still concentration of facilities is higher along axes of bazaar (source: author's drawings)

- Uncontrolled excavation and construction in the field of Antiquity

Two issues threaten the historical project site. One is Subway line 2 which is a west-east connection.

The construction is still under process and it has not joint the infrastructure system of Isfahan yet.

Line 2 passes from around 60-70 meters off Jameh Mosque foundations underground at "Majlesi" station.

Subway line's passing from a distance under 100 meter from the historical mosque has been criticized by archeologists and experts in preservation. However the main contractor who implements the project has denied this threat.

The second issue is tPMR&RO excavations in the place itself in a distance smaller than 100 meters off the mosque and other historical monuments to fulfill the two story parking and the underpass. Heavy drilling machines and the quakes their produce may harm the old historical constructions.



101 Majlesi station on subway line 02 would be situated in 60 meters distance from Jameh mosque³ (source: 1-<http://www.esfahanmetro.org/introduction.php>)



102 .excavation in proximity of the heritage mosque; heavy drilling machine trembles the old area and the heritage (source: NAQSH, E, JAHAN-PARS Consulting Engineers, 2010.)

• Dilapidated infrastructure



103 traffic congestion in Imam Ali square before 2008(source:google earth)

All over the city there is traffic congestion and air pollution. Influx of a large number of immigrants to the city in recent years, the number of 450 new vehicles added daily, construction of new commercial buildings with no prediction for their parking and traffic requirements and old dilapidated infrastructure has led to current crisis.¹

Superimposing a grid of streets and highways on the old organic infrastructure have not solved the problems of the dilapidated infrastructure which does not meet the needs of modern life.

The specific traffic problems in the project area are:

1. Traffic congestion
2. Irregular movement of pedestrian in Main Street toward the historic area
3. lack of presence of pedestrian crossing lines and bridges on the streets
4. no presence of sidewalks on many streets
5. narrow streets with turns and dead-ends

6. lack of bus and taxi stations
7. lack of enough space at existing bus stops resulting in the buses interrupting the traffic while stopping at station-revising bus stops
8. shortage of parking spaces
9. many residential and commercial plots lack required parking lots.
10. motor vehicles park opposite the entrance of heritage monument that has historic value and disturbing the easy movement of pedestrian.
11. Parking on sides of banned narrow road reduces the capacity of road networking and making difficult flow of traffic by occupation width of road
12. insufficient practical signage to important places in the historical context



104 people crossing Abdorazagh and Hatef streets (source:NAQSH, E, JAHAN-PARS) Consulting Engineers,2010.)



105.narrow organic allies in the context (source:NAQSH, E, JAHAN-PARS) Consulting Engineers,2010.)



106 & 107: no facilities for bus stop on Abdorazzagh street (source: NAQSH, E, JAHAN-PARS) Consulting Engineers, 2010.)



108: motorcycles occupying the bus station- the bus stopping on the street to pick up passengers (source: NAQSH, E, JAHAN-PARS) Consulting Engineers, 2010.)



109 & 110: no presence of sidewalks on many streets has led to pedestrians occupying the dangerous streets of the neighborhood (source: NAQSH, E, JAHAN-PARS) Consulting Engineers, 2010.)





111. motorcycles park opposite the entrance of Jame mosque
(source:NAQSH, E, JAHAN-PARS) Consulting Engineers,2010.)



112. motor vehicles park besides the streets and on the sidewalks
(source:NAQSH, E, JAHAN-PARS) Consulting Engineers,2010.)



113. banished parking beside the streets on Abdorazagh street
(source:NAQSH, E, JAHAN-PARS) Consulting Engineers,2010.)

2- Institutional problems

Success requires political will, a commitment to shared action, and a sense of urgency.

- The major challenge in administration field is the **fragmentation of responsibility** for redevelopment projects among different authorities. Lack of coordination between different authorities, lack of budget and prioritizing individual welfare to collective welfare, authorities' starting projects (for political purposes) and not finishing them, are major deficits in the system. Political life of the city is not determinant: the changing character of city councils and mayorships that may bring some policies to the front or ignore it, or may interrupt them.
- **Lack of a cohesive vision** authorities have tend to operate on a parcel-by-parcel basis—district-wide planning which usually are not in accordance with each other.
- The conservation administrative approach has been limited to the concept of historical monuments rather than the historical neighborhood.
- **Shortage of budget** for intangible assets: cultural affairs departments and offices have suffered relative resource losses in recent decades as taxpayer revolts and higher priority placed on everything from public safety to economic development have squeezed their shares of the public purse.
- Restricting administrative rules limit the project; an example could be artists' centers and live/work buildings, permits for art fairs and festivals, and urban redevelopment plans that include cultural space and facilities must be compatible with current land use and zoning ordinances or receive variances, because of strict zoning laws that do not permit the mixing of commercial and residential use. In Iran it is not forbidden to build artists' live/work buildings

3- Social problems

- the socio-spatial integrity of the historic neighborhood which was formed over centuries of evolution, was mostly neglected by modern policies and master plans. The superimposition of new streets onto the Isfahan's fabric **damaged**

- the integrity of historical neighborhoods**
- hierarchial privacy embedded in the traditional life style.**
- different socio-spatial values in the fabric;**in modern urban plans of Isfahan, all the proposed streets have relatively the same socio-spatial value in the fabric¹ which is in contrast to traditional context and life style

- social accumulation and **isolation** of low income and low social classes is recognized in the area.

- Illegal activities** regarding drug and illegal goods and drug deals by low social classes

- the area is considered as a **male dominated neighborhood** because of the significant number of male foreign labors residing in the degraded context and the traditional bazaar structure and male dominated businesses in the area

- Unsafe neighborhood** especially during the night ; an increase of insafety and the feeling of unsafe in the area

- lack of livability in residential degraded context**



114. poverty and unemployment (source: <http://www.ncr-iran.org>)



115. Drug Addiction, one of the concerns in low social classes in the area (source: <http://addictedtodrugsandalcohol.webs.com/>)

- the area is considered as a **"no flow zone"** "Because of lack of safety and attraction, lack of necessary hard and soft infrastructure, spacial, social and cultural degradation of the neighborhood, the area does not absorb the potential flow of people, information and money and more creative classes which are drives for improvement
- consequently the area has turned to a **"no go zone"** for the middle and upper classes except for meeting their commercial purposes



116. ,117. lack of livability in the residential district (source: NAQSH, E, JAHAN-PARS) Consulting Engineers, 2010.)



118. Hatef Street, lack of livability (source: google earth)



1-Sarraf(2010),P.118

2-NAQSH, E, JAHAN-PARS) Consulting Engineers, 2010.p.91

4. Economical problems

Iran's economy is marked by an inefficient state sector, reliance on the oil sector, which provides the majority of government revenue.

Private sector activity is typically limited to small-scale workshops, farming, and services. Price controls, subsidies, and other rigidities weigh down the economy, undermining the potential for private-sector-led growth. **Significant informal market activity.**

Rising inflation all over the world and international sanctions has been worsening the economical status of Iranians more and more.

Expansionary fiscal and monetary policies, government mismanagement, the sanctions, and a depreciating currency are fueling inflation, and GDP growth remains stagnant. Iran also continues to suffer from double-digit unemployment and underemployment.¹

Isfahan as one of the major cities of Iran suffers from the same impediments. **The economic infrastructure of the province remains fairly underdeveloped.**

Unstable economical environment and Unstable political climate has contributed in the creation of an **unreliable market for the foreign investors** and therefore their not showing interest for investment.

- **Poor welfare system** which offers less than symbolic assistance to the ones in a desperate need is relevant
-
- In general the **banks have not been very supportive** due to very strict conditions in order to protect their self from unstable condition Banking system with the high interest rates prohibit the advent of many projects.

- Lack of domestic production has resulted in high rates of import, high rates of unemployment and low life quality
- **The low level of real business tax payers** has negatively impressed the economy. Only a symbolic percentage pay the taxes regularly.
- **Bazaar's losing its economic role** in the area: If the social activities of bazaar are eliminated from it, its physical entity cannot any longer survive as the city's spine. It was mainly what happened to bazaars and the historic city centers in Iran, during the urban renewal programs of the early twentieth century.
- **Low prices of property** because of the degradation of the context.
- Isfahan is a famous historical city and its economy can benefit from tourism industry. However, **The tourist infrastructure of the city and province remains underdeveloped.** In 1993 there were 26 hotels and 43 guest-houses in the Isfahan district, with a total of more than 4,500 beds. Foreign sightseers are few, despite the fairly inexpensive cost of vacationing in Isfahan. because of the limitations imposed by Islamic Law coupled with security and safety concerns for foreign travelers.²

12-3-

Opportunities

In spite of many weaknesses there are opportunities for fulfilling a revitalizing redevelopment project in the area as :

- Specific attention of Isfahan managing system to redevelopment of this area. The project has been ratified and a budget is set in Iran's parliament and a redevelopment project (IMR & RO) is under process in the area.
- Possibility of changing the social structure of the area. By providing new facilities and fascination the original residents of the neighborhood who have left it and new social classes may refer to the area as a mixed used neighborhood both for residing and businesses
- Embedding budgets for the redevelopment project. Municipality have already embedded a budget for redeveloping the neighborhood, although not sufficient and there is strong need of economical cooperation of other actors.
- Presence of general policies to redevelop the dilapidated context in Isfahan. Presence of policies to replace the foreign workforce with local workforce
- high percentage of of property owners whom can be negotiated with for redevelopable projects (57.3% of the people surveyed were property owners 23,2% were non defined)
- A traditional potential layout and pedestrian orientation where housing, public spaces, commerce, mosques and places of social gathering are integrated and can create a highly cohesive urban environment

4574714 euro credit for regenerating the degraded context in Isfahan in 2012 has been supported financially by

- Infrastructure and Urbanism Ministry of Iran
- Province of Isfahan
- Municipality of Isfshsn.

This credit would be spent to provide loans to property owners to improve, renovate or reconstruct their property if they are considered as "dilapidated plots" according to the rules.

(source: <http://www.ebtekarnews.com/Ebtekar/News.aspx?NID=102380>)

1-<https://www.cia.gov/library/publications/the-world-factbook/geos/ir.html>

2-<http://www.iranicaonline.org/articles/isfahan-xiv-1-modern-economy-of-the-province>

12-4-

Threats

Some threats are distinguished in the area and implementing a redevelopment project:

- Inclination of the original residents to leave the problematic area
- The unbalanced sexual pattern in neighborhoods. (Sexual proportions(male to female) is 142 in IMR & RO project area while it is 101 i district 3 and 104 in Isfahan.)
- Presence of new residential neighborhoods which the original residents of old problematic context choose to move to
- no specific rules to control new constructions in the historical context
- present risks for an area which is both socially and environmentally fragile. Unless held in check and properly channelled through a conscious planning effort, speculative pressure may soon result in a pattern of uncontrolled development in the area, leading to the expulsion of both the current residents and the existing activities, and thus paving the way for a total substitution of the traditional urban fabric

12-5

Main interpretations of the project area

considering the SWOT an interpretation of the area is set up.

The old plaza has been filled by invaluable constructions and later the integrated neighborhood has been cut by modern streets cutting the old bazaar of Isfahan as well.

The neighborhood has been ignored by urban principles and has degraded spacially and accordingly socially and economically. The area could be considered as 4 mono-functional residential quarters around a dilapidated bazaar separated from each other with modern streets which are not embedded in the context.

Although having potentials and strong background in usage of public spaces; bazarrs, quarter centers, the main Saljuk plaza and local squares the present users do not find sufficient public spaces to use and interact with each other. The central part of the neighborhood becomes free of population during the night time when the bazaar is closed

The area, the "no flow zone" does not seem consistent, beautiful, safe and comfortable neither as a historical-cultural center for the visitors, nor as a residential neighborhood for the residents.

This project area lacks the necessary hard and soft infrastructure and capacity to foster the activities and fluxes.

Residents, mostly from low social classes, do not tend to be present in the urban space and social interaction is low

There is not required livability as there is no diversity and interaction between classes of people and the neighborhood.

However the residents have deep sense of belonging. They need more interaction, more safety, more prosperity more diversity and more vibrancy.

119. Imam Ali square under construction-IMR & RO project
(source: NAQSH, E, JAHAN-PARS) Consulting Engineers, 2010.)



Once upon a place

I. THE PROJECT

After investigating the present situation, this section is focused on the redevelopment project. First the objectives of the project are set, considering the SWOT and requirements of the residents and the context.

13-Objectives

Objectives pursued in the redevelopment project are as follows:

- revitalization the inert neighborhood
- restoring the historical identity of the neighborhood;
- Providing consistency and re-connection of the totality of the plaza, neighborhood and the city centers
- provision of necessary hard and soft infrastructure and capacity to foster the activities and fluxes.
- Contemplating and revitalizing the economical importance and function of the neighborhood
- Developing opportunities for a social-inclusion, interaction and participation
- Implementing new approaches and tools to assist the planner to generalize and optimize solutions

14-Resources

Historical,spatial,social and cultural resources in the area are recognized. They shall trigger a positive development process in urban quality and quality of life of inhabitants. These resources should be networked and mobilized t.

Historical context

Historical context could be taken advantage of in several ways:

- historical heritage is the major source of tourism absorption and though important sources of revenue.
- The ideas of embedded historical planning orders can spur the current project .e.g. the concept of neighborhood centers, secondary bazaars as public mixed use districts,old historical cultural axes,ghysariehs... which are major references of the strategies of the project

2. spatial resources

- organic versatile context which provides more variety, attractiveness and sense of place
- old bazaar as a unique attraction and still revenue source
- vacant blighted or dismissed lands; although a negative aspect in the present situation but spaces for new mixed use developments

Presence of many redevelopable plots

3.Social resources

- Residents feel a strong sense of belonging to the historical context although faced with many problems
- high percentage of property owners
- Possibility of changing the social structure of the area. By providing new fa-

cilities and fascination; the original residents of the neighborhood who have left it and new social classes may refer to the area as a mixed used neighborhood both for residing and businesses

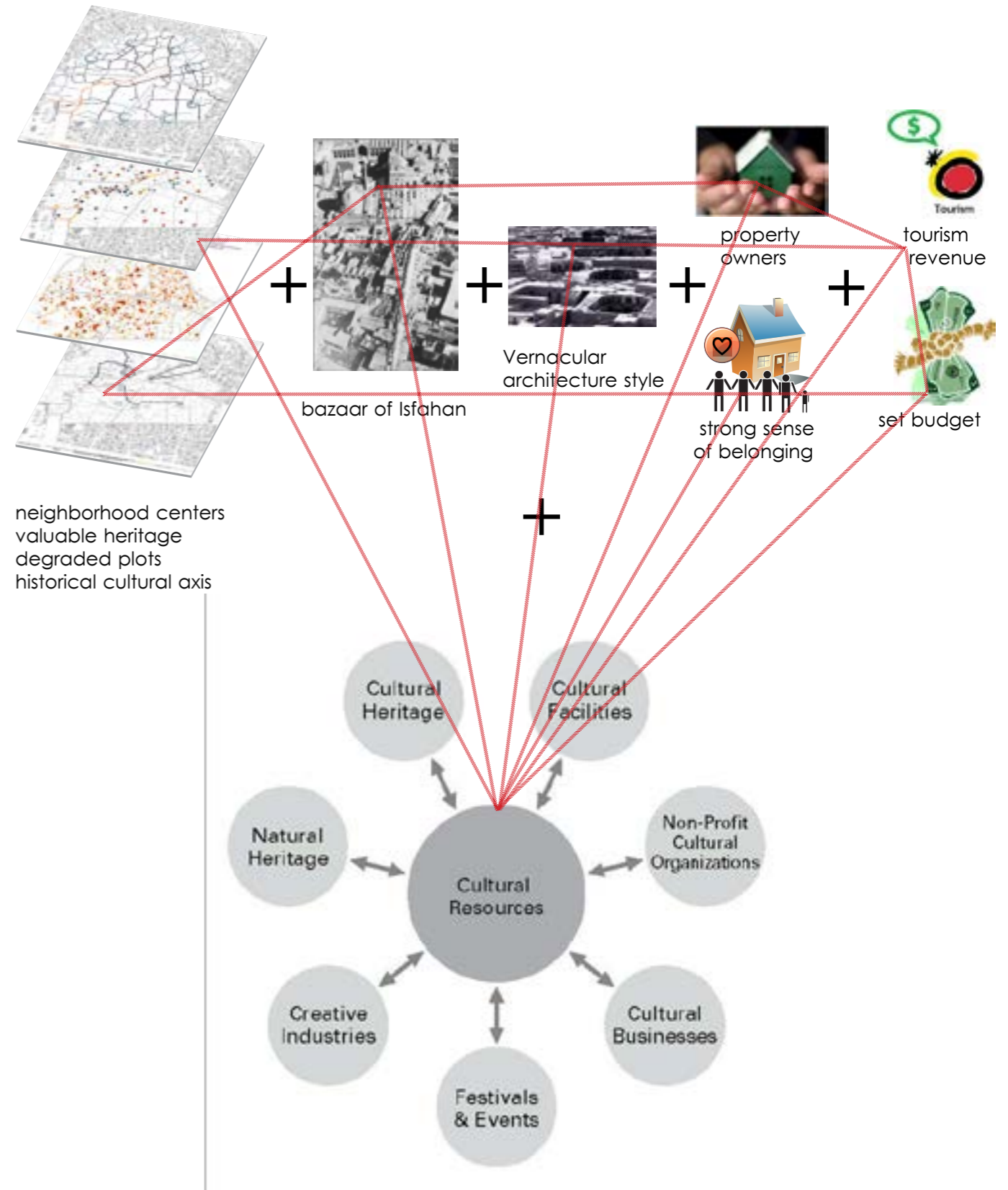
4.economic resources

- Specific attention of Isfahan managing system to redevelopment of this area. The project has been ratified and a budget is set in Iran's parliament and a redevelopment project(IMR & RO) is under process in the area.

- Presence of general policies to redevelop the dilapidated context in Isfahan.574714 euro credit for regenerating the degraded context in Isfahan in 2012 has been supported financially by public organizations to provide loans to property owners to improve,renovate or reconstruct their property if they are considered as "dilapidated plots"according to the rules.

4.Cultural resources should be introduced to the area)

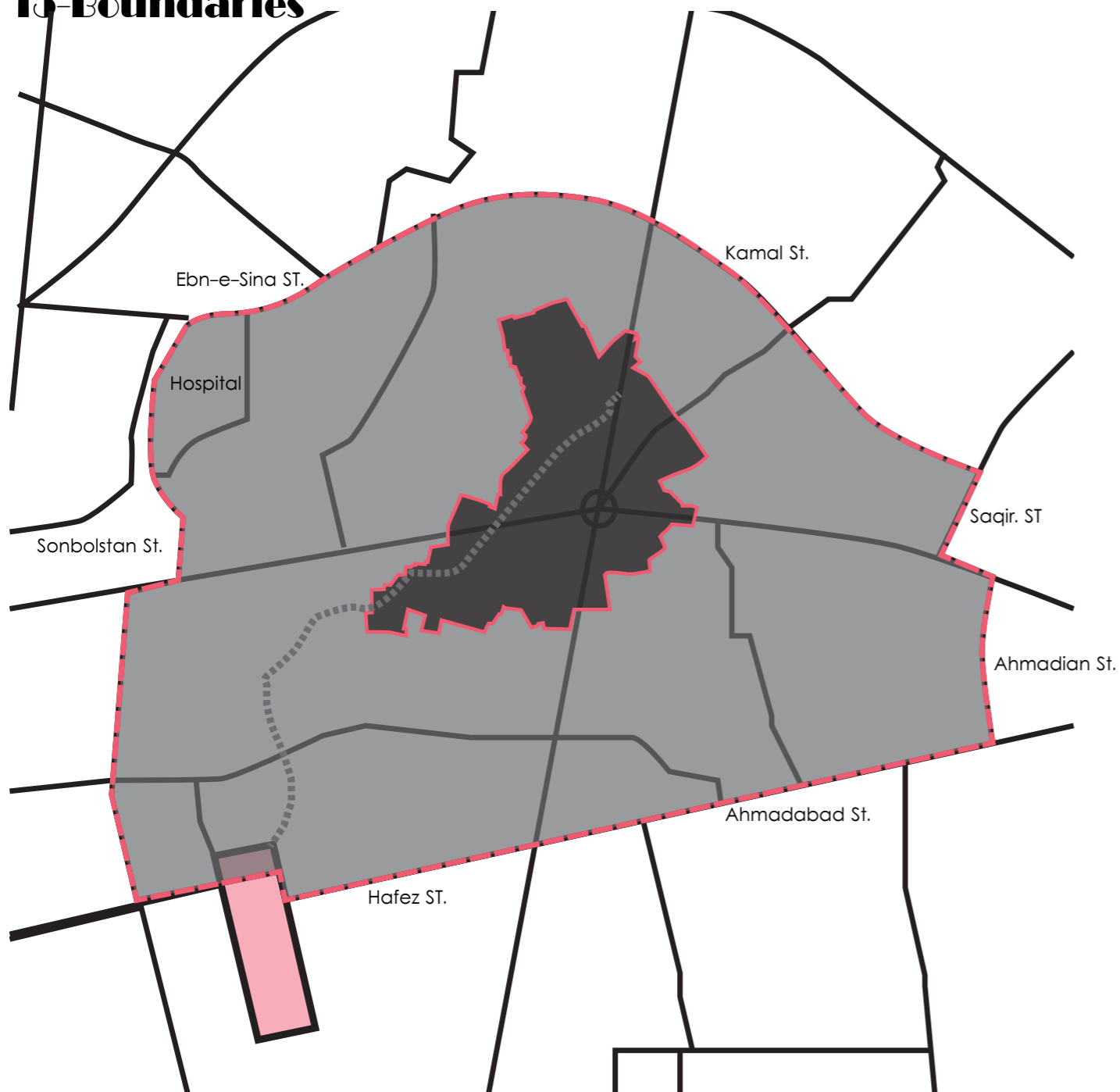
There is existing cultural heritage and customs which are neglected. This heritage among with **introduction of modern sources of cultural resources**: cultural facilities,non profit organizations,cultural economy,festivals and events,creative industry and natural heritage be **mobilized,networked and taken advantage of** to uplift and revitalize the are according to project's targets.



10 map of resources

Historical context , spatial,social , economic and Cultural resourcewhich should be networked and mobilized t. source: author's drawings)

15-Boundaries



120. boundaries of Isfahan redevelopment project IMR&RO boundary(souece:author's drawings)

The analysis of the IMR&RO project and the identification of problems, challenges and Targets has led to the "redevelopment project" concerning a wider boundaries than IMR&RO 32 hectare project focusing on the context as well as the regeneration of the plaza. Wrong, hasty ,un-organized policies along with the old context's degrading has turned out to almost the same problems in the old adjacent neighborhoods as Jouy-bareh on east of bazaar, Shahshahan and context encompassing bazaar on

west although the context is rich in cultural aspect and resources. The boundaries of the project area would be expanded to the adjacent old neighborhood of the city "Joubareh", on north-east to the Hospital and on south along bazaar and to Naghsh—Jahan square. Though the area is framed by Hafez and Ahmadabad Streets on south, Hakim and Sonbolstan street and the hospital on west, Ebn-e-Sina and Kamal Streets on north, Saqir and Ahmadian Streets on east.

16-Approaches

3 possible general approaches could be proposed for the redevelopment project:

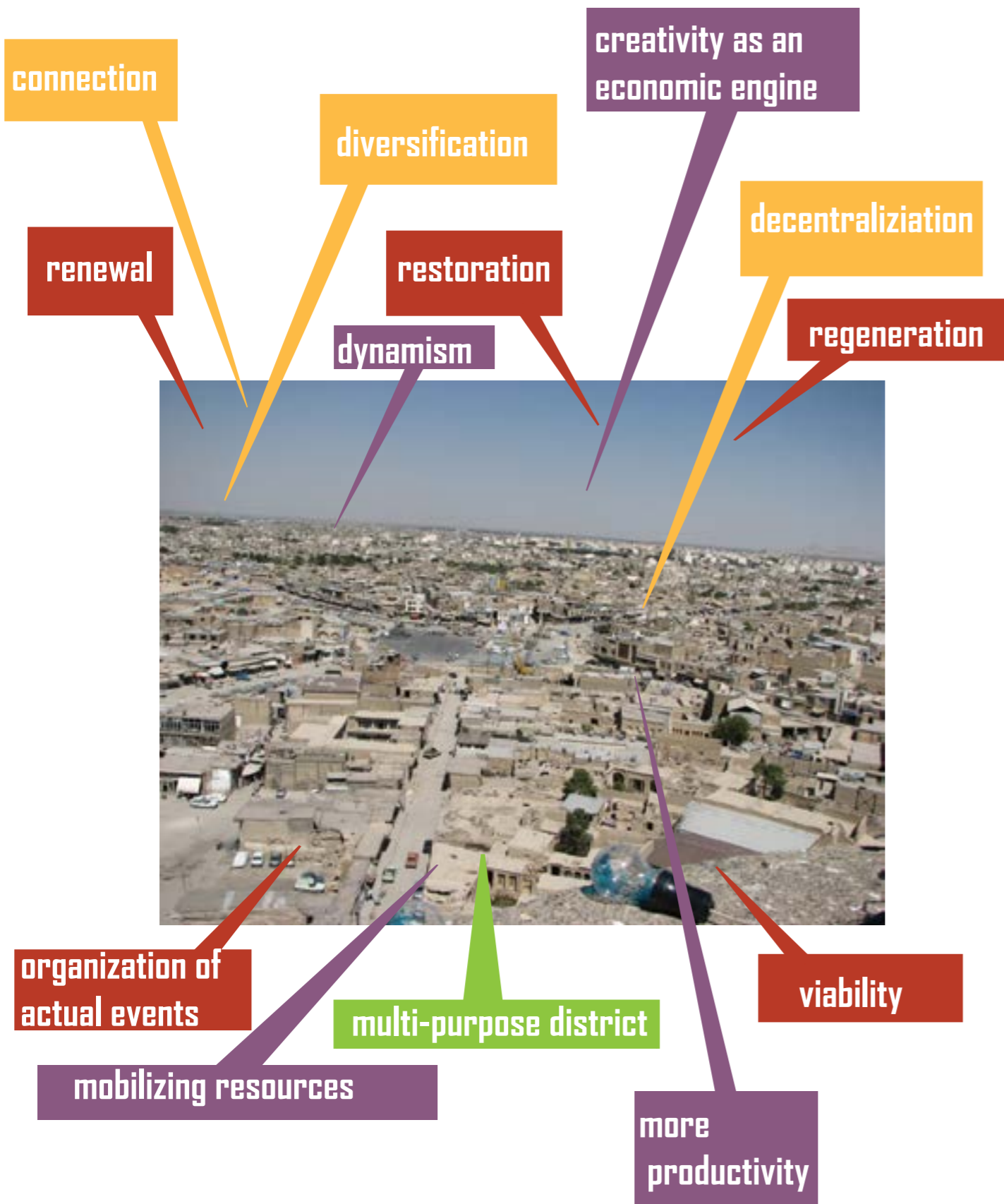
1-modernization of the historical context ;solving the transportation problems and providing better connectivity and circulation by superimposing a modern network, grid on the existing organic infrastructure; removing the loops, deadends, widening the streets... Modern, high density uses replace the dilapidated and degraded context promoting new economy and more prosperity.

2-conservation;The oldest backbone of Isfahan is considered as a precious heritage.A memorial of the history of the city.conservaion,restoration and preser-

vation are the motives.Users should comply themselves with the traditional structure of the old heritage.

APPROVED
3-rehabilitation, moving from the city of zones Towards the city of communities There is need to conserve the old heritage and identity of the city. However the project deals with the problems degrading the context, economy and life. The redevelopment project promotes connectivity,diversity,integration and mixed uses to flourish life and economy and **to revitalize the old identity.**

We need



17-Leading idea

CRITICAL MASS, ACCESSIBILITY, INTEGRATION, CONNECTIVITY, SAFETY, QUALITY



120 a blighted plot in the project area (source:NAQSH, E, JAHAN-PARS) Consulting Engineers,2010.)



121.Neal's Yard Salad Bar, London,renovated in 1980's(source:http://pinterest.com/pin/42362052714759582/)

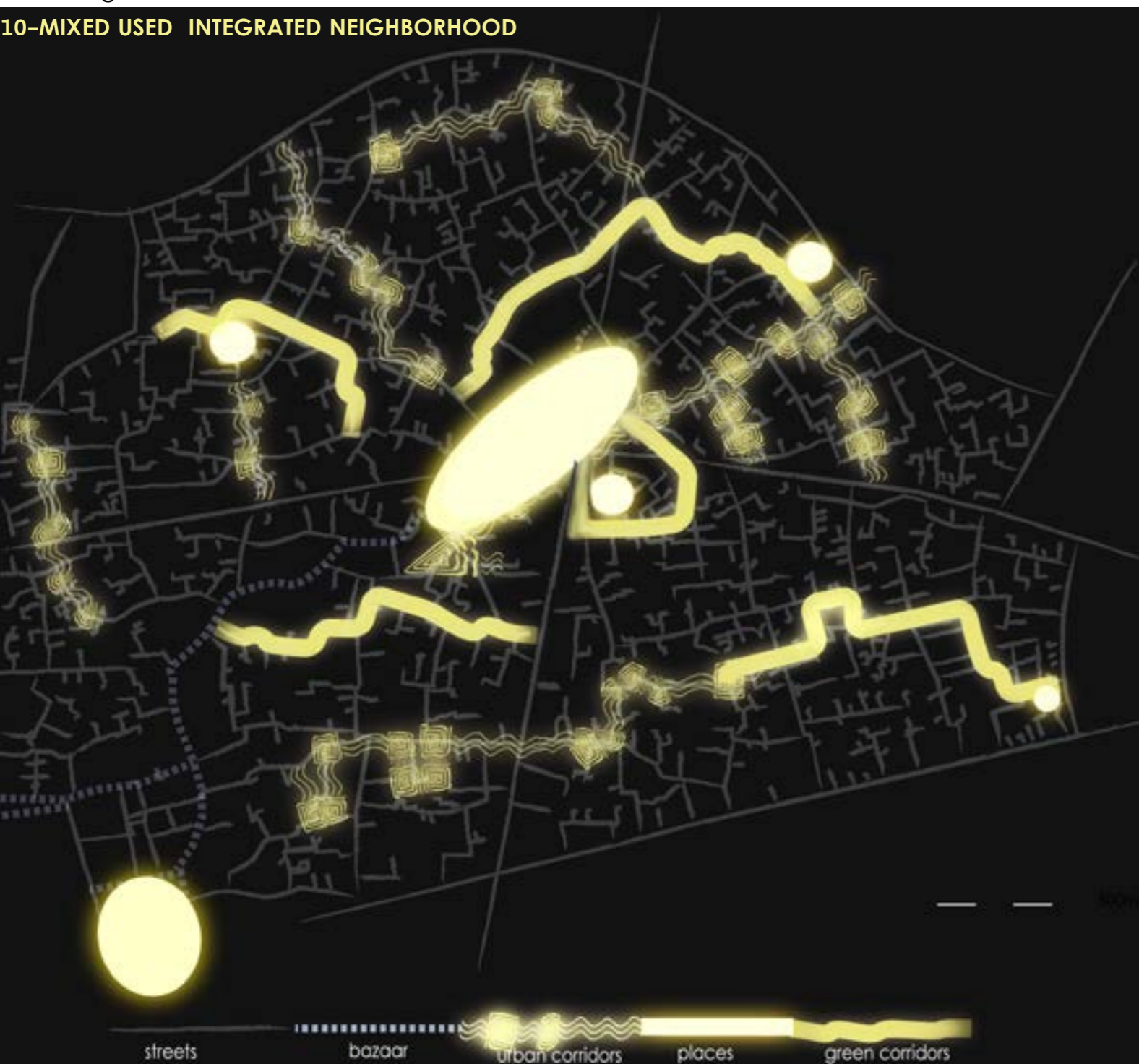
INTEGRATED VIBRANCY

MIXED USED INTEGRATED NEIGHBORHOOD

CONNECTED THROUGH A DECENTRALIZED URBAN MOSAIC OF MIXED USED PLACES ON URBAN AXIS, GREEN CORRIDORS, AND PLACES

Project starts from the evaluation of available resources in the territory and focuses on opportunities to improve economic and social conditions. not to intrude the identity of the context, the urban corridors seek more diverse, livable and safer usage of the historical context by proposing connection(phisically and socially),regeneration and higher mixed densities

10-MIXED USED INTEGRATED NEIGHBORHOOD



“

Vibrancy starts with a very simple decision: is there some interesting or necessary

”

activity that draws me out of my home? Work? Shopping? Socializing?

More options increases the likelihood of drawing me out. And I have to weigh-up those interesting options against the barriers to going out, particularly mobility: how much time, effort, and money is required to go do this activity? A good, cheap restaurant is an easy choice when it's right down the street, but a harder one in heavy traffic with unpredictable parking or with some long walks and subway rides in possibly unpleasant weather.

The flip-side perspective is that of the business owner: what kind of **reasonable customer base** will I be able to draw on? The more barriers between me and them, the less likely they are to patronize my business. **The more people—and the more money**, the better my prospects. That means a larger diversity of businesses can be supported.

“vibrancy means a buzz of people interacting and transacting in win-win exchanges – both economic and social”(Tory Gattis)¹

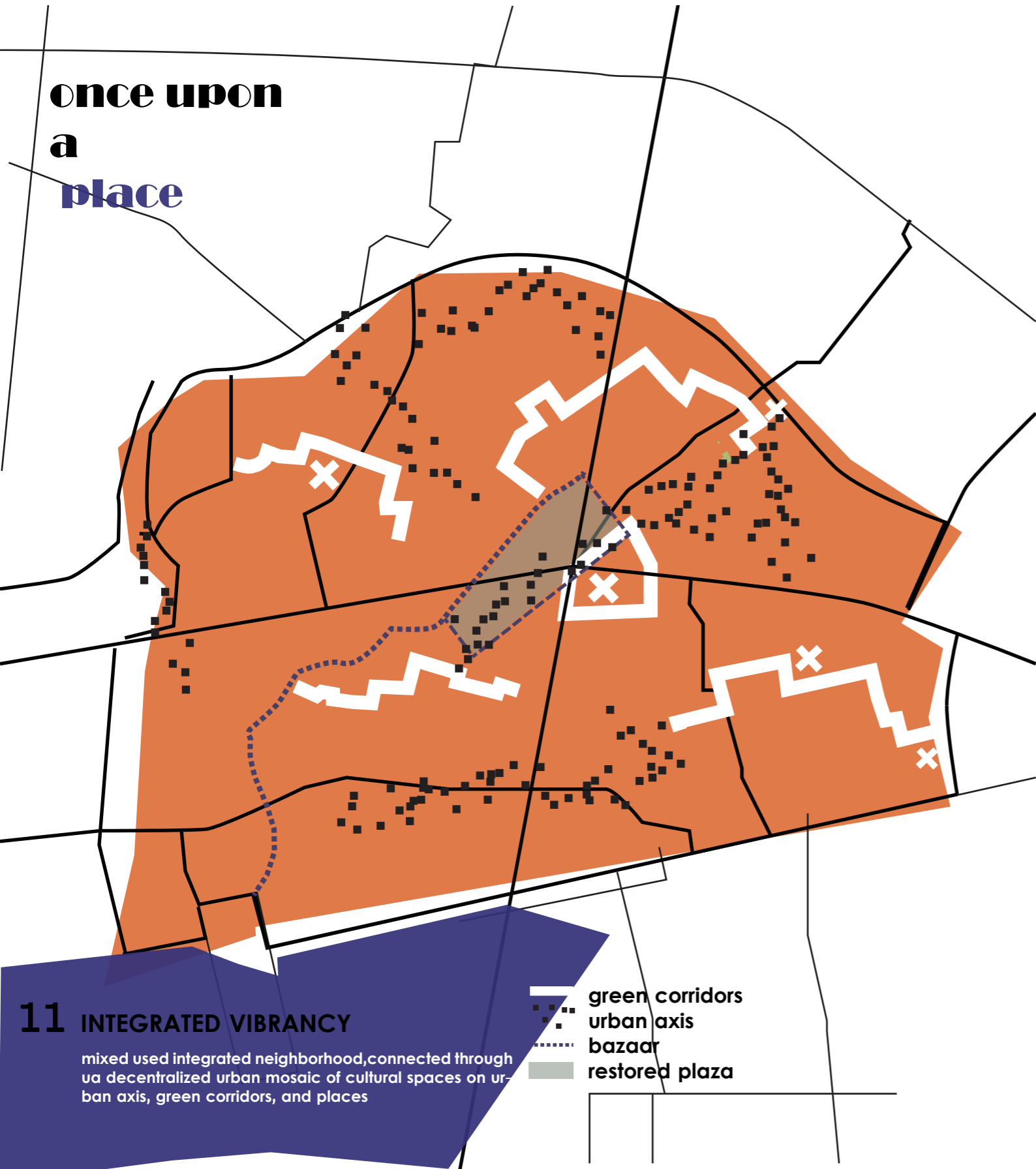
Jane Jacobs four tenets of vibrant neighborhoods are, in short form:

1. Mixed primary uses that create traffic/vibrancy throughout the day
2. Short blocks to make neighborhoods more walkable
3. Mixed age and overhead buildings to enable a diversity of businesses
4. Population density

Ms. Jacobs formed these tenets while observing her Greenwich Village NYC neighborhood (and similar ones) during the 1950s. It was an urban world in the midst of a major transitional upheaval, as the car moved from a luxury to a standard household item for the middle classes. Cities at the time had been built around walking and mass transit, and accommodating the car was traumatic: too narrow streets, not enough parking, and freeways plowing through neighborhoods.¹ This characteristics of Greenwich Village in 50's are very similar to those of present traditional context of Isfahan project. A traditional potential layout and pedestrian orientation where housing, public spaces, commerce, mosques and places of social gathering are integrated and can create a highly cohesive urban environment.

¹<http://www.urbanophile.com/2012/03/27/applying-jane-jacobs-tenets-of-vibrant-neighborhoods-to-car-based-cities-by-tory-gattis/>

once upon
a
place



The target is improving welfare and uplifting the life of not only the citizens but also the potential city users by increasing quality of life and place, consequently prosperous economy through strategic thinking and careful use of resources.

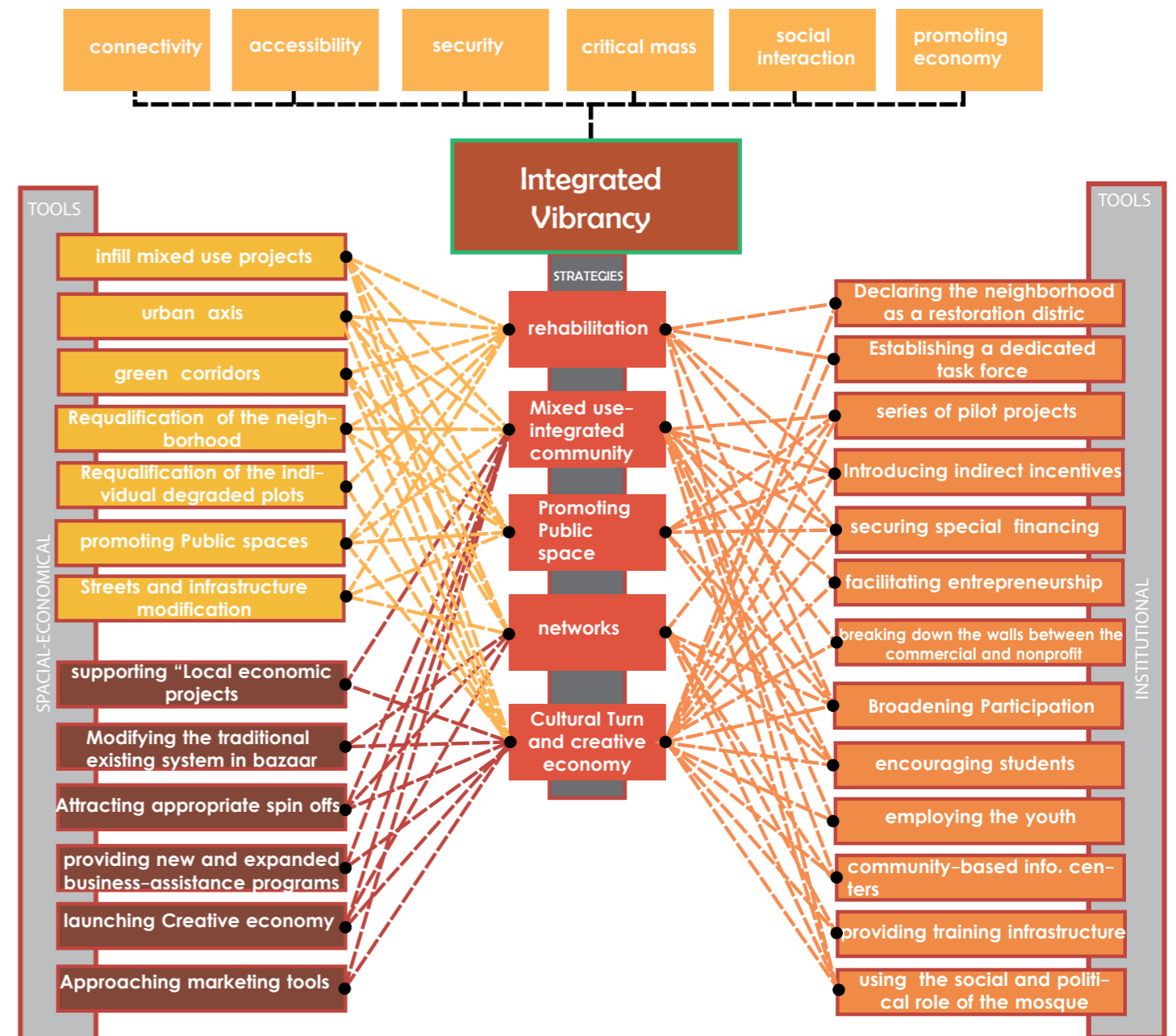
Integrated vibrancy

Integrated Vibrancy is based on six main urban planning principles: Connectivity, accessibility, security, critical mass, social interaction and promoting the economy, which are explained in the first unit.

Five general strategies for Isfahan project are derived from the principles: rehabilitation, mixed use integrated community, promoting public spaces, networks, cultural turn and creative economy which would be realized by strategic tools and actions.

The diagram explains the relations between different strategies, tools which contribute to realize them and the problems (defined in the previous section) which they intend to solve.

The implementation of the various initiatives, however meaningful in themselves, will only be of limited consequence to the district unless they are accompanied by an institutional framework. **Institutional co-ordination and community involvement** within a gradual process of economic improvement and physical rehabilitation must be viewed as the necessary ingredients through action plans and the pilot interventions.



18-PRINCIPLES

Integrated vibrancy encompasses 5 main themes connected with each other:

1. Connectivity

“

Connectivity describes the extent to which urban forms permit (or restrict) movement of people or vehicles in dif-

”

ferent directions.

Connectivity or Permeability are often used interchangeably. However Stephen Marshall has differentiated the concepts of “connectivity” and “permeability” He believes that “connectivity” refers solely to the number of connections to and from a particular place, whereas “permeability” refers to the capacity of those connections to carry people or vehicles.¹

The project approach is towards more connectivity and pedestrian permeability in the historical context through urban axis, green corridors and infrastructure modification.

Vehicles permeability is restricted through filtering out motorized transport (in the re-generated plaza and some paths around bazaar) and increased in other cases of widening the streets and linking some of the culs-de-sac.

2. Accessibility

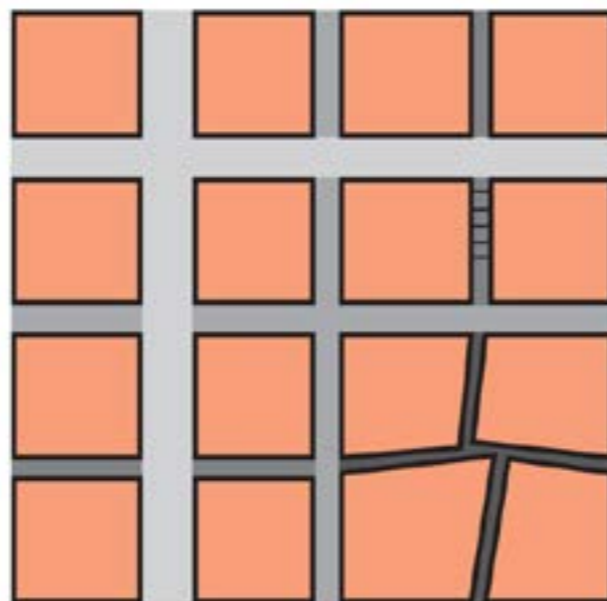
“

Enable the widest spectrum of people, regardless of age or ability, to more easily participate in their community life by increasing the proportion of areas that are

”

usable by people of diverse abilities ²

The distance of a service from the location of its user is directly proportional to the cost of the service and the degree of safety it has.



Connectivity versus Permeability

123-urban connectivity versus permeability (source: <http://en.wikipedia.org>)

A diagrammatic illustration of the distinction between connectivity and permeability: From light gray to dark, streets become less permeable to an increasing number of transport means such as trucks, busses, cars and bikes until only pedestrians have access to the narrowest, steep or stepped streets. Connectivity remains identical. (source: <http://en.wikipedia.org>)

Therefore with regards to the delivery of services, the location of the residence from a desired service needs to be taken into consideration.

The project provides easy access through walkable/cycling paths. One of the most important characteristics for the neighborhood would be the presence of many services, such as shops, cultural and leisure activities located at every 350-400m, reachable in 10-15 minutes on foot.

What is important for the user is not just the walking distance but to use public spaces and to have safe, easy and pleasant pedestrian routes. Therefore the idea of accessibility is interconnected with provision of safety, and integration.³ and sensorial abilities, psychological and cultural personal approach:

1-[http://en.wikipedia.org/wiki/Permeability_\(spatial_and_transport_planning\)](http://en.wikipedia.org/wiki/Permeability_(spatial_and_transport_planning))

2- LEED for Neighborhood Development Rating System, Congress for New Urbanism, 2007

3-Tiziana Steffan

3. Security

Practitioners believe that maximizing the accessibility of an area to people with different abilities, practicing the notion of “inclusive design,” to anticipate criminal behavior and consequently to “design-out crime” and to consider “traffic calming” or “pedestrianisation” as ways of making urban life more pleasant would provide the urban safety required.

Jane Jacobs’ “eyes on the street” concept is notable in this project. She believes that by **improving ‘natural surveillance’ of shared land and facilities of nearby residents, by literally increasing the number of people who can see it,, residents can more easily detect undesirable or criminal behavior.**

Another theory; “broken-windows” argues that small indicators of neglect, such as broken windows and unkempt lawns, promote a feeling that an area is in a state of decay. Anticipating decay, people likewise fail to maintain their own properties. The theory suggests that abandonment causes crime, rather than crime causing abandonment.¹ Moreover, stress and lack the comfort of feeling “at home” causes some crimes and some use of illegal drugs.

The project area’s being in state of decay, low densities and no presence of “eyes on the streets” especially during the night, insufficient facilities for pedestrians and cyclists and low social classes and immigrant workers with stressful lives threaten the safety of the neighborhood. Regeneration of degraded context, Creates busier and safer streets through animation and related strategies and modifying the infrastructure and social structure would provide more security.



124.The project area’s being in state of decay (source: NAQSH, E, JAHAN-PARS) Consulting Engineers, 2010.)



125.broken windows, dismissed plot in the area. (source: NAQSH, E, JAHAN-PARS) Consulting Engineers, 2010.)

1-http://en.wikipedia.org/wiki/Urban_planning#Safety_and_security
http://newcity.ca/Pages/social_sustainability.html

4. Critical mass



Population density is important because it encourages economic diversity and vitality, and can increase the value of city neighborhoods, among other



things. ¹

Density should not be confused with overcrowding. Jane Jacobs notes that overcrowding is not necessarily connected to density. Rather, too many people can be crowded into dwellings in low density areas.²(as in case of this project where more than average members are in families)

“Proper city dwelling densities are a matter of performance. Densities are too low, or too high, when they frustrate city diversity instead of abetting it.”³

Richard Florida also believes that one of the false statements is that density and skyscrapers are the key ingredients to urban vitality and innovation. He states that this rush to density, is wrong.

“It's the creation of real, walkable urban environments that stir the human spirit. Skyscraper communities are vertical suburbs, where it is lonely at the top. The kind of density we want is a 'Jane Jacobs density.’”⁴

The project is situated in a low density area(max:35units/acre).Higher density is essential to revitalize the area.However density should not be confused with overcrowding.

In this project by density we mean a localized densification;density which does not upset the identity of the context as well;mid-rises that support street life, not crush it.

1-<http://provocationutah.wordpress.com/2012/03/21/jane-in-the-jungle-jane-jacobs-and-density-101/>

2-<http://provocationutah.wordpress.com/2012/03/21/jane-in-the-jungle-jane-jacobs-and-density-101/>

3-Jacob,,P.217

4-<http://pricetags.wordpress.com/2012/06/01/jane-jacobs-style-density-it-may-not-be-what-you-think/>

5. Social interaction

A community is more than its physical form. A community is composed of people as well as the places where they live; it is as much a social environment as a physical environment. Thus, communities must not only be environmentally sustainable, but also be socially sustainable.

There is much that can be done on the “design” of the soft infrastructure of the community to ensure its social sustainability, the physical design of the community can make it either easier or more difficult for communities to be socially sustainable.

The systems and processes that we put in place to achieve social sustainability, can be thought of as the “soft infrastructure” of the community, a term used by Len Duhl, Professor of Public Health and Professor of Urban Planning at the University of California at Berkeley, to describe those elements of the community that contribute to social well-being. This “soft” infrastructure includes formal human services (health, education, social services, recreation and culture, information.) as well as the community's informal structure the web of voluntary organizations and social relationships that comprise community. Urban planning needs to integrate these elements into all its work, giving as much weight to the soft infrastructure as to the hard infrastructure if we are going to create communities that work.¹

1-http://newcity.ca/Pages/social_sustainability.html

6. Promoting economy

During recent years the economic role of the main Bazaar has been decreased. The main reason is the import of goods from foreign countries and establishing many economic complexes out of the Bazaar, which have provided possibilities in all parts of the city to provide their needs without referring to Bazaar. The project aims at improving business development through:

- **“Local economical projects”** shall be planned and taken advantage of in the redevelopment project.
- **Modifying the traditional existing system in bazaar** Intensification and renewal ;replace the financially under-performing and non-performing commercial elements
- **Attract appropriate business types** to attract number of support businesses to create a more comfortable business climate for the existing ones including research and testing facilities, office and tech support, supply stores, pharmacies, senior transportation services, and shipping services.
- **providing new and expanded business-assistance programs and financial incentives**(refer to finance chapter)
- **Creative economy** reflect the basic shift in the structure of the global economy from one based on the production of goods and services to a knowledge based economy focused on the creation, transfer and use of intellectual property in all its forms.”¹

1-Authentic City (2008),p.24

19-STRATEGIES

Five general strategies for Isfahan project are derived from the principles:rehabilitation,mixed used integrated community,promoting public spaces,networks ,cultural turn and creative economy

rehabilitation

Urban rehabilitation goes beyond simply carrying out restoration work and encompasses ways of reviving areas to best advantage.

Reconciling conservation and development is a prerequisite for achieving improvements in the quality of life in environmentally and culturally sensitive places. It calls for the **introduction of appropriate new functions, i.e., the re-use of historic structures, in order to generate income for the buildings and for the local community**. It also requires the improvement of services and public open spaces, community supported.

rehabilitation of historic housing districts and open spaces,creation of employment opportunities and promotion of local crafts.

Public awareness can be increased through the very process of project implementation itself, once proper participation mechanisms are established.

It is through the interaction of such goals and activities that it becomes possible to capture the impulses emanating from individual restoration projects and to generate fresh development impulses forces and multiply the effect of positive change and transformation.¹

This strategy is a comprehensive physical,social and economical rehabilitation process. Physical rehabilitation projects are interrelated with social and economical relevant activities.

In this project,rehabilitation policies would be presented by requalification at both neighborhood and plot scales and proposing activities and participation mechanisms.

Restoration of the individual degraded plots would be implemented on:

1-valuable plots

2- Degraded plots

3-dismissed and Dilapidated plots.

The restoration of the neighborhood and urban environment goes hand in hand with urban and green corridors. They would insure more viability,dynamism safety connection and prosperity.

Different policies: adaptive re use ,improvement,rennovation and reconstruction would be utilized upon the requirements of the case.

The Aga Khan Historic Cities Programme (HCP) promotes the conservation and re-use of buildings and public spaces in historic cities in the Muslim World. HCP undertakes the restoration and rehabilitation of historic structures and public spaces in ways that can spur social, economic and cultural development. Individual project briefs go beyond mere technical restoration to address the questions of the social and environmental context, adaptive re-use, institutional sustainability and training. The Al-Azhar Park project is one example of local Aga Khan Cultural Service Companies that have been formed to implement projects under the supervision of the HCP headquarters in Geneva.
(source:http://archnet.org/library/documents/one-document.jsp?document_id=8613)

1-THE AGHA KHAN TRUST FOR CULTURE.P.7 & p.8

MIXED-USED NEIGHBORHOODS PROMOTING MIXED-USED INFILL PROJECTS WHICH PROVIDE MORE INTERACTION, SOCIAL AND ECONOMICAL VIABILITY. PROVIDING AND PLANNING CHANCES OF SOCIAL AND CULTURAL MIX.

2. Mixed used-integrated community

Mixed-use development is the use of a building, set of buildings, or neighborhood for more than one purpose. Since the 1920s, zoning in some countries has required uses to be separated. However, when jobs, housing, and commercial activities are located close together, a community's transportation options increase. In addition, mixed-use developments often have higher property values. The variety of uses allows for people to live, work, play and shop in one place, which then becomes a destination for people from other neighborhoods

Mixed-use development provides a range of commercial and residential unit sizes and options. In planning zone terms, this can mean some combination of residential, commercial, industrial, office, institutional, or other land uses. .1

Howard Blackson defines mixed-use walkable neighborhoods as a combination of both vertical and horizontal mixed-use buildings within a 5 to 10 minute walking distance from each other..²

A successful mixed use community is one that combines businesses, housing, retail and recreation amenities. which are easily accessible within walking distance of one another. The availability of combined real estate needs to be diverse enough to attract various groups of people and to do so at different times of the day to be successful. Jane Jacobs wrote about this need in The Death and Life of Great American Cities:

“

Any primary use whatever, by itself is relatively ineffectual as a creator of city diversity. If it is combined with another primary use that brings people in and out and puts them on the street at the same time, nothing has been accomplished. In practical terms, we cannot even call these differing primary uses. However, when a primary use is combined, effectively, with another that puts people on the street at different times, then the effect can be economically stimulating: a

”

fertile environment for secondary diversity 2



126.Suter Brook Village, Port Moody, British Columbia(source: <http://www.theurbn.com>)

1-http://en.wikipedia.org/wiki/Mixed-use_development
2-<http://www.theurbn.com/2012/07/a-lesson-on-mixed-use-neighborhoods/>

3. Promoting Public space

Public spaces allow people to meet in planned and unplanned ways, to interact with others within the context of the whole community. People seek engagement, activity, tranquility and privacy within the public domain

These include family relationships, cultural groupings, local social connections , and groups meeting through common interest. By facilitating this mixing, public spaces can contribute to the cohesion of communities.

Public spaces can be divisive as well as inclusive. The public spaces in the town centre provide locations where different groups within and between different age groups co-exist and observe each other even if they have little direct interaction.¹

Public spaces improves the cohesion of communities.

and functional quality of the area, insure effective security , interaction and sense of care of inhabitants.

The few existing public spaces are poorly maintained and deteriorating throughout the area due to a lack of planning and investment in public infrastructure. Improving the existing public places e.g. the existing public spaces such as neighborhood centers,periferial bazaars,ghysarriahs would be improved and rgenerated.

New public spaces along green corridors,urban axis and in reused redeveloptable plots woul d be provided.



127.provision of public events and interactions (source:author's photography-Chicago)

1-Holland et al.(2007)

4. Networks

Creative activities, various businesses, artists, scientists and entrepreneurs could converge to produce new ideas, products, services, art and designs when sufficiently networked.

Networking could be formed formally as the network of public and private actors managing a project or to be an informal network in the community. The roles of informal community networks in public participation in traditional context of the project areas is inevitable.

Informal networks can help **residents** to build a power to negotiate and to access information and resources that can support their ideas. Residents can engage in many activities in alliance with NGOs, other communities, academics, activists, individual researchers, some private organizations and the media. **Those actions range from organizing rallies and protests, writing letters and petitions, using media, using violence, and developing alternative proposals to negotiate with formal actors.** The informal networks in communities are based on mutual interdependencies, networking capacity, a strong sense of place and of community identity. The informal networks sometimes would transform to formal structures and their capacity and power get acknowledged,¹

To establish networks in the project the proposal is

- Creation of networks with both public and private presence
- **to introduce the concept of a Community Development Corporation (CDC) in the area. This body, which will gradually become an independent, locally based entity, will facilitate co-operation between the government, local NGOs and the private sector**
- **to establish intermediary cultural development corporations to support creative enterprises through better networking of people, knowledge and resources**
- **to propose creative incubator, to support the establishment of new creative businesses (e.g. start-up grant) and to develop existing companies to be more competitive and connected**

5. Cultural Turn and creative economy

Using the creative city impetus as a vehicle for promoting tolerance, diversity and neighborhood resources

Since the mid-1990s, when "creative city" ideas heralded a new revitalization strategy for older industrial cities, urban and economic development planners have increasingly turned to arts and culture as development tools.

Festivals, public art, artist live/work buildings, artists' centers and community cultural centers have been planned, invested in and built as ways to revitalize emptying downtowns, attract tourists, preserve historic buildings and cultural traditions while celebrating new ones, stabilize communities and solve community problems.¹

Young, culturally diverse, and intellectual property owning class **bring with them the 'potential for economic growth.'** These workers and also significant consumers who are increasingly populating urban centers for work, residence, and play are attracted by certain features which the economist Richard Florida has called 'and which he defines as' "the social structure of creativity".²

For this diverse group, quality, range, mix, and diversity of amenity in urban areas are crucial determinants in their decisions to locate – and stay – there. **Quality of life and place** is also crucial to **decisions of their employers**.

Though the arts and broader cultural resources, amenities and facilities – are coming to be seen as a strategic urban asset.³

If cities celebrate the many and distinctive neighborhood cultural venues available to residents, they can also encourage cross-neighborhood visits, encouraging local spending with high local multipliers and increasing understanding and cohesion across the city.

One basic argument is that city residents may divert income that they would have spent on goods and services originating from outside the region to local cultural spending that in turn supports other local incomes. An example would be encouraging residents to patronize live performances in their communities and to buy art from local artists. Though it builds the local consumption base, encouraging and recycling local spending that increases overall growth and development.⁴

1-Mercer, 2006, p.8

2-Florida, 2002

3-Markusen et al., (2006), p.20

4-Markusen et al., (2006), p.23

Culture can play powerful roles in stabilizing and revitalizing neighborhoods and in generating greater participation by diverse groups.

Since artists gravitate to inner city areas, their growth may revitalize areas that previously have lost population and spur other retail investments and tourism.¹ (the case of Isfahan)

Culture has the potential to:

- provide Social Inclusion, cultural diversity
- enhance the quality of life and place – culture and art Influence personal/career and business location decisions
- Establish a distinctive sense of local/regional identity and brand of product
- Provide the elements of urban critical mass, the occasions and venues for **creativenetworking**. Create non-functional

and informal networks such as “First Tuesday, and “Café Culture “initiatives which bring together creators, producers, consumers, and investors to develop the industry base and market

- Create busier and safer streets through animation
- Encourage renovation of industrial/heritage/historical districts
- Enhance retail and the potential of the evening/24 hour economy
- restructure the **business community**

128. employing culture and art for urban revitalization
(source: <http://art-on-wires.org/f12/location/>)



An important question is should we develop a “cultural district” where cultural activities are clustered together or should they encourage a decentralized mosaic of cultural activities throughout the neighborhood.

City planners have a tendency to divide urban space into distinctive use patterns, because zoning and subdivision regulations are among their strongest tools. Economic developers’ site-specific , aggravates this approach to redevelopment. “Downtown development interests and urban arts coalitions often jump on the cultural district bandwagon “. Although dissident voices, from Jane Jacobs in the 1960s to the new urbanists in the 1990s have argued **for finer-grained urban development patterns that mix uses**, the dominant trend is still the larger-grained separation of industrial, retail and cultural space from residential space.¹

The tension between concentration and dispersion of cultural spaces continue, especially **in the bid for resources**. When large arts organizations dominate cultural policy advocacy in regions, they tend to reinforce this pattern, focusing philanthropic and public resources on specific institutions or cultural districts dissociated from a large vision of cultural pluralism and decentralization.²

And what about this large organizations viability or impact on neighbors or competitors? Mostly plans from outsiders that have no after-life, since they are not generated through the efforts of local coalitions.

a decentralized urban mosaic of cultural spaces

This is the proposal of **minimal clustering and dispersion** on the grounds that artistic space can play powerful roles in stabilizing and revitalizing neighborhoods. Natural not enforced clustering districts: a single cultural space might **prompt the emergence** of several others nearby—a theater, for instance, might encourage the creation of cafes and bookstores.

¹-Jacobs,1961

²-Markus et al.,(2006),p.25

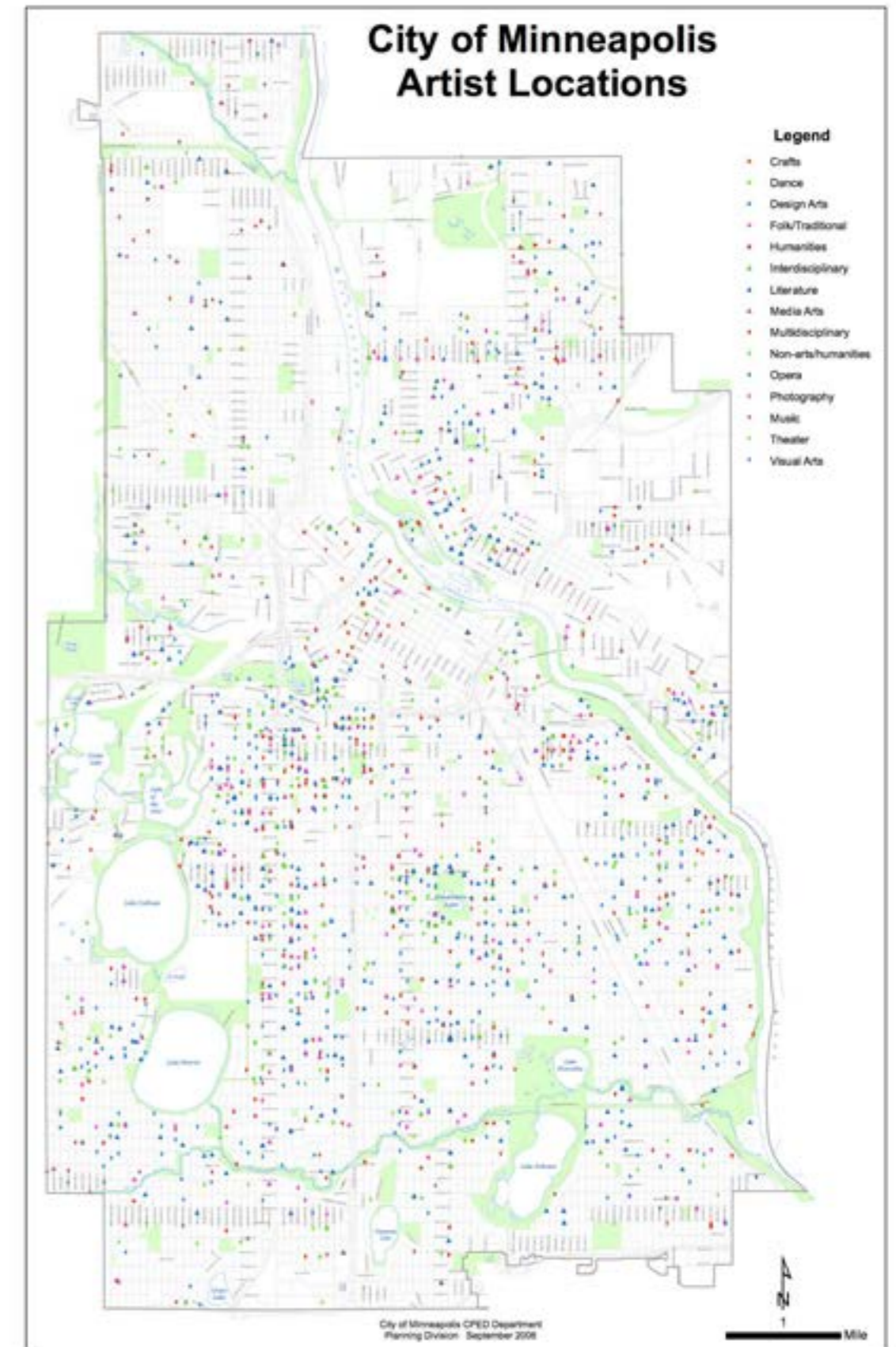


129. Little Italy, NY city. (source: en.wikipedia.org/wiki/Little_Italy,_Manhattan)



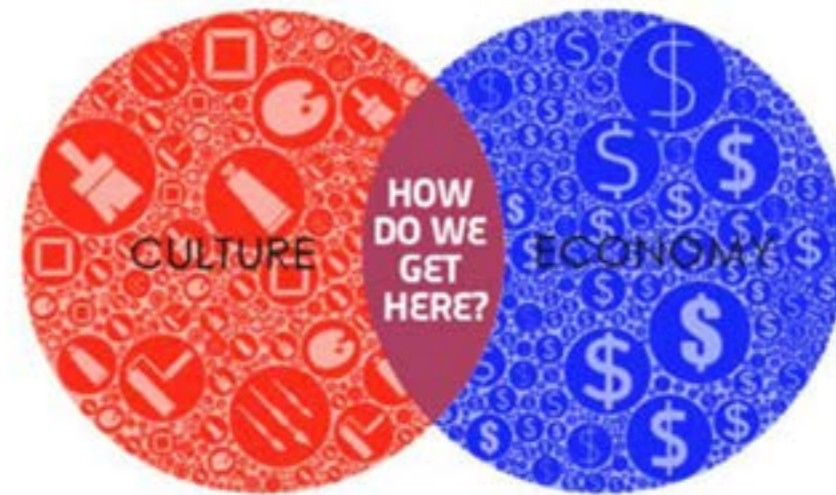
130. China town, NY city (source: en.wikipedia.org/wiki/Chinatown)

In 1960s, Jane Jacobs criticized large-scale urban renewal and celebrated instead the distinctive cultural neighborhoods of New York City. She pointed out how SoHo, Little Italy, Chinatown and Greenwich Village each had its distinctive character, yet invited city residents to cross over the porous boundaries to spend a day or evening taking in a performance eating ethnic food, and walking the streets for their novelty and ambience. (source: Markun et al., (2006), p.25)



131. decentralized urban mosaic of cultural spaces practiced in City of Minneapolis, USA (source: Markun et al., (2006), p.21)

Culture and economy



Today's post-industrial world faces two new forces: globalization and the "new economy".

In a post-industrial context, the knowledge economy and the information superhighway are becoming as important as physical transport systems.

Culture provides the soft infrastructure for the new economy.

Culture "as a strategic asset" can reconstruct the business community :

- culture generates jobs and incomes.
- Help to develop new marketing and branding practices for existing/traditional businesses.
- Works in partnership and synergy with existing/traditional businesses to enhance productivity, offer branding and opportunity for consumption and diversity of experience.

Cultural industries

Which industries are recognized as

The industries include architecture, design, media, advertising, publishing, recording and movie, TV and radio, though some definitions are more expansive than others. The commercial cultural sector also includes art markets (galleries, art fairs, on-line websites) and for-profit performing arts spaces (theaters, music clubs, restaurants). It also includes artists who directly sell their work on commission, to the public, or on the web, those these artists will not be counted in firm based tallies of employment.

5 phases of cultural industry

In his work for Comedian Charles Landry believes that cultural industry phases are as follows and all should be taken care of:

1-Beginnings: The stage which is concerned with 'ideas generation'.

2-Production: the transformation of ideas into marketable products

3-Circulation: This concerns the availability of agents and agencies, distributors and wholesalers or middle persons, packagers and assemblers of product.

4-Delivery Mechanisms: These are 'platforms' which allow cultural product to be consumed and enjoyed: the places they are seen, experienced, consumed or bought.

5-Audiences and Reception This concerns the public and critics and other 'gatekeepers' and involves activities such as marketing, advertising and publicity.

"The moment of consumption is often the one which most economists ignore but it is, crucial to the viability of cities in a

number of ways

Patterns of behavior in consumption are increasingly important in strategies planned. Consumption behavior affects the form and nature of street life in both negative and positive ways – outdoor cafes, interaction with retail outlets, number of standardized fast food outlets. Diverse consumption patterns and culturally aware consumers can add vitality and diversity and also enhance environmental awareness."¹

Therefore, although most focus is usually is set on the beginning phase, providing a training infrastructure; appropriate skills for production; classes and workshops, circulating enterprises as middle persons; IT processing enterprises, delivery platforms like exhibition and exposition and meeting places, the users and how they receive the products should be considered as well. Educating and informing the residents and providing a mix with other classes as well (students, artists) in the area would affect this target positively.

Local cultural economy, could be categorized into three separate spheres: the commercial "cultural industries," the nonprofit arts and cultural sector, and the community sector, where unincorporated, often informal cultural activities take place.¹

1-Commercial sector

For-profit cultural industry activity is driven by bottom-line concerns. The entrepreneurs, who can be artists themselves, and owners, organize production and marketing to maximize the returns .

2-Non-profits sector

Non-profits are involved in public sector cultural policy and planning, which are essential for their financial survival and visibility.

The nonprofit format has allowed artists and art patrons to create spaces and support systems that do not aspire to make profits and that avoid a considerable tax burden. Most museums, orchestra halls, opera houses, artists' centers, theatres, and community arts facilities are non-profits, as are some artists' studio and live/work buildings. So are the many foundations that engage in arts and cultural philanthropy.

Religious organizations and institutions of higher education can be considered nonprofit cultural industries. (in the case of Isfahan)

Cultural non-profits are governed by self-perpetuating boards of volunteers rather than by owners or paid board members and may encompass a mix of artists, relevantly skilled people and donors. They cover the costs of their operations with a mix of contributed income (from donors, foundations, individuals) and earned income (e.g. memberships, performances, sales of artwork, work for schools or community groups, and fees for classes, events or studio and equipment rentals)

3- Community sector

The community sector is variously called informal, traditional, or folk art. They are lead by small groups of people working informally. It can consist of gatherings for artistic sharing and performance in people's homes or parks; community networks of bartered artistic services, lessons or products; informal, ongoing support groups of artists themselves. A desire to preserve community, to help under-served and low income groups, or to bridge across communities may motivate organizers and artists to spend time and energy on community arts activities

1-Markusn et al.,(2006)

2-Markusn et al.,(2006)

Actions

- re-establishing urban design standards

Design guidelines should be adopted to ensure any repairs or new construction that occurs is consistent with the current architectural forms and massing, which will lead to overall greater density.

Local ordinances specifically prohibit franchise architecture .Organizing construction limits esp. for narrow streets; the length of cantilevered structure and projection

- **supporting cultural events other than pieces of visual art**

- Investment in public art and cultural amenities as tools

- **create a network of areas for the artistic activity**

- Supports locally-based individual artists and arts organizations sector, improve nonprofit artists' centers, theatres, studio and live/work buildings

- Joint cultural programs; consists of a partnership of other (inside or outside Iran-political confirmations involve) who will be working together over a predefined period of time in order to capitalize knowledge and culture resources

- Promote public philanthropic partnership for improving the neighborhood

- Pilot project to integrate design and creativity considerations into the planning process – to 'build and reflect the neighborhood's creative capabilities'

- Increase internship and apprenticeship opportunities for youth in the area>absorb creative class to the area

- offer learning courses for young professionals in the design, architecture, arts and graphic ,construction

- planning a competitive atmosphere; competition brings up higher quality and higher prosperity .e.g. competing cultural and art facilities or centers .This could be achieved by holding local competitions

- offers technical spaces and offices as far as spaces dedicated to the research and the continuous occupational training

- Explore Experiences with Video, Music Recording Studio Program, Studio for Photographic Arts with focus on local culture and heritage. For example, Youth would be encouraged to document their community as they are taught photographic skills and develop their own work on site. This program also works to develop multimedia works interpreting local culture and experience.

- providing micro-credits for small enterprises in local community to improve themselves
- Tax incentives: Tax incentives will offer incentives for future entrepreneurs to locate within the area. This program should be utilized as a means to provide financial assistance to businesses currently located here as well as attract new businesses. • Providing loans, equity, grants and tax incentives to support heritage preservation and cultural turn
- launch a local Newspaper/radio
- Providing direct incentives for the residents in the form of investment in the upgrading of public spaces and infrastructure
- providing micro-credits for small enterprises in local community to improve themselves
- Tax incentives: Tax incentives will offer incentives for future entrepreneurs to locate within the area. This program should be utilized as a means to provide financial assistance to businesses currently located here as well as attract new businesses. • Providing loans, equity, grants and tax incentives to support heritage preservation and cultural turn
- Providing direct incentives for the residents in the form of investment in the upgrading of public spaces and infrastructure



132. Cairo, historical center rehabilitation; A recipient of micro-credits for small enterprises has opened a tea kitchen and meal catering service for the local community. (source: THE AGHA KHAN TRUST FOR CULTURE, p.48)



133.a mixed used neighborhood (source: <http://www.constructionenquirer.com/2012/07/03/land-deal-kick-starts-110m-greenwich-scheme/>)

20-TOOLS

This unit proposes tools to accomplish the five main strategies in the project and solving the deficits and problems considered in previous chapter. The tools are categorized in spacial, institutional and economical categories. However, they provide an integrated tool-kit interlinked and overlapped at cases, spurring remedies for different problems.

A list of the tools which would be illustrated accordingly is presented below. Examples of similar/practical interventions in Isfahan, Iran and all over the world are introduced wherever they contribute to describing the cases.

1. Spacial tools

- Infill mixed used projects
- urban axis
- green corridors
- Requalification of the neighborhood
- Requalification of the individual degraded plots
- Promoting public spaces
- Streets and infrastructure modification; an integrated network

2. Institutional tools

- Declaring the neighborhood as a restoration district
- Establishing a dedicated task force (steering committee)
- Introducing indirect incentives i
- securing special financing
- facilitating entrepreneurship
- breaking down the walls between the commercial and nonprofit sector.
- Broadening Participation
- encouraging students to provide assistance to old people in exchange for facilities;
- employing the youth,
- establishing community-based multimedia centers
- providing training infrastructure
- using the social and political role of the mosque and religious venues

3- .Economic tools

- supporting "Local economic projects
- Modifying the traditional existing system in bazaar
- Attracting appropriate business types
- providing new and expanded business-assistance programs and financial incentives
- launching Creative economy

TOOLS	PROBLEMS	Urban degradation	lack of required densities	chaos and disorder	existing small plots sizes	Lack of required services and facilities	Uncontrolled excavation	dilapidated infrastructure	fragmentation of responsibility	lack of a cohesive vision	Shortage of budget	integrity of the neighborhood	violation of hierarchical privacy	different socio-social values impaired	accumulation and isolation of low social class	illegal activities	a male dominated neighborhood	Unsafe neighborhood	lack of livability	a "no flow zone"	a "no go" zone for the middle and upper class	economic infrastructure being fairly underdeveloped	Unreliable market for the foreign investors	Poor welfare system	banks not being very supportive	tourism infrastructure remains underdeveloped	low percentage of real business tax	Bozqaar's losing its economic role	Low prices of property
		infill mixed use projects		✓	✓	✓	✓			✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
urban axis		✓	✓	✓	✓			✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
green corridors		✓			✓			✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓				
Requalification of the neighborhood		✓	✓	✓	✓			✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	
Requalification of the individual degraded plots		✓		✓	✓	✓				✓			✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	
promoting Public spaces		✓		✓	✓	✓				✓			✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	
Streets and infrastructure modification		✓	✓	✓			✓			✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	
Declaring the neighborhood as a restoration district		✓	✓	✓	✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	
Establishing a dedicated task force		✓	✓	✓	✓	✓			✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	
series of pilot projects		✓			✓			✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	
Introducing indirect incentives		✓	✓		✓				✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	
securing special financing		✓	✓		✓								✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	
facilitating entrepreneurship			✓		✓								✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	
breaking down the walls between the commercial and nonprofit					✓								✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	
Broadening Participation				✓	✓				✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	
encouraging students		✓	✓						✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	
employing the youth		✓	✓										✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	
community-based info. centers		✓			✓								✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	
providing training infrastructure			✓	✓	✓								✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	
using the social and political role of the mosque			✓		✓				✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	
supporting "local economic projects		✓	✓		✓				✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	
Modifying the traditional existing system in bazaar		✓	✓	✓	✓				✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	
Attracting appropriate spin offs			✓		✓								✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	
providing new and expanded business assistance programs			✓		✓								✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	
launching Creative economy			✓		✓				✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	
Approaching marketing tools			✓		✓				✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	

The table presents the links between the problems of the project area and the tools proposed to solve them. Each tool would be subject to several problems. (source:author)

20-1. Spacial tools

1-1-Infill mixed used projects

The dilapidated and vacant plots are an eyesore and negatively affect the social economic vitality of the area.

They are targeted for mixed used new densities fulfilling the requirements of the project. They serve as cultural-commercial uses on ground floors and offices and residential at upper floors. Old and new plots should be reconciled and harmonized by urban design standards established.



134.a blighted plot on Sonbolestan Street
(source: <http://www.panoramio.com>)

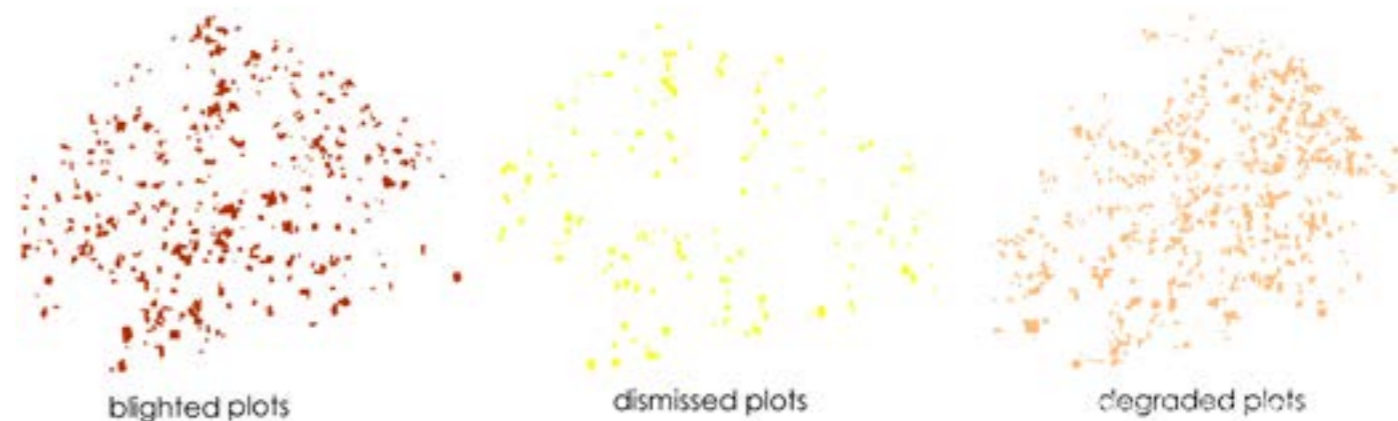
Decentralised urban mosaic of mixed used spaces would be provided in the mixed use development.

Mixed used places proposed for the project would be:

- Pilote courtyards ;public shaded places in harsh summer and winters accommodating meeting points ,places for live performances and events,expositions and exhibitions.
- Live/work building;other than the public courtyards,work places would be planned at ground/1st floor level. These work places would accommodate:
- support businesses like: research centers,offices,studios
- network of areas for the artistic activity
- residents' data banks
- community-based multimedia centres
- delivery platforms like exhibition and exposition
- temporary accommodation; hostels,hotels,bed and breakfast. shops
- institutes and foundations
- restaurants and cafès
- permanent accommodation; on upper floors would be provided for transferred existing and new residents

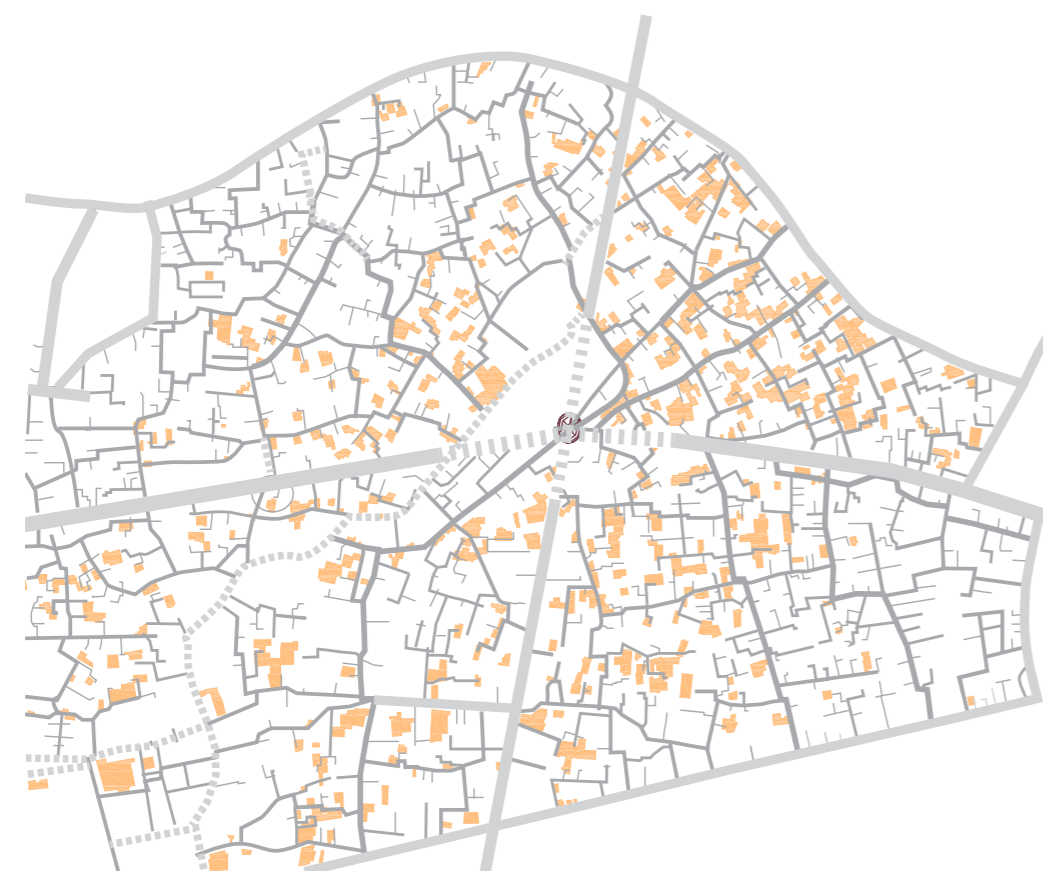
- schools and educational centers would be emphasized
- INCUBATOR offers scholarships for young professionals in the design, architecture, arts and graphic communication fields
- greenery;would be provided through sporadic landscaping in mixed used developments,green corridors,orchards and promoting existing greenery
- delivery platforms like exhibition and exposition and meeting places

New in-fill mixed used projects prescribe higher densities and adaptive re-use. The 1st priority for in-fill projects are blighted plots which should be reconstructed. The second priority are the invaluable dismissed plots. which should be renovated. Degraded plots as the third alternative should be decided upon to be replaced with new uses or to be conserved. It would be notable that in case that degraded plots are replaced there should be accommodation for the existing residents already living in.



12 POTENTIAL REDEVELOPTABLE PLOTS

Potential redevelopable plots for new in-fill mixed used projects is are blighted plots ,dismissed plots and degraded plots recognized in the area.



13 PLOTS DECIDED FOR REDEVELOPMENT IN-FILL PROJECTS

The 1st priority for new in-fill mixed used projects is are blighted plots and the second priority are the invaluable dismissed plots. Degraded plots as the third alternative should be decided upon to be replaced with new uses or to be conserved.

2-Urban axis

This idea proposes building replacement rules to preserve and link the neighborhood, generate a variety of functions, increase density and a change in the relation of each building with the public space.

Redevelopable plots have the potential to be converted to meeting points, places for the people to gather and do various activities.

Urban axis propose networks of in-filled intensified mixed used projects to establish integrated continuous places as a forum for commercial activity and social interaction .

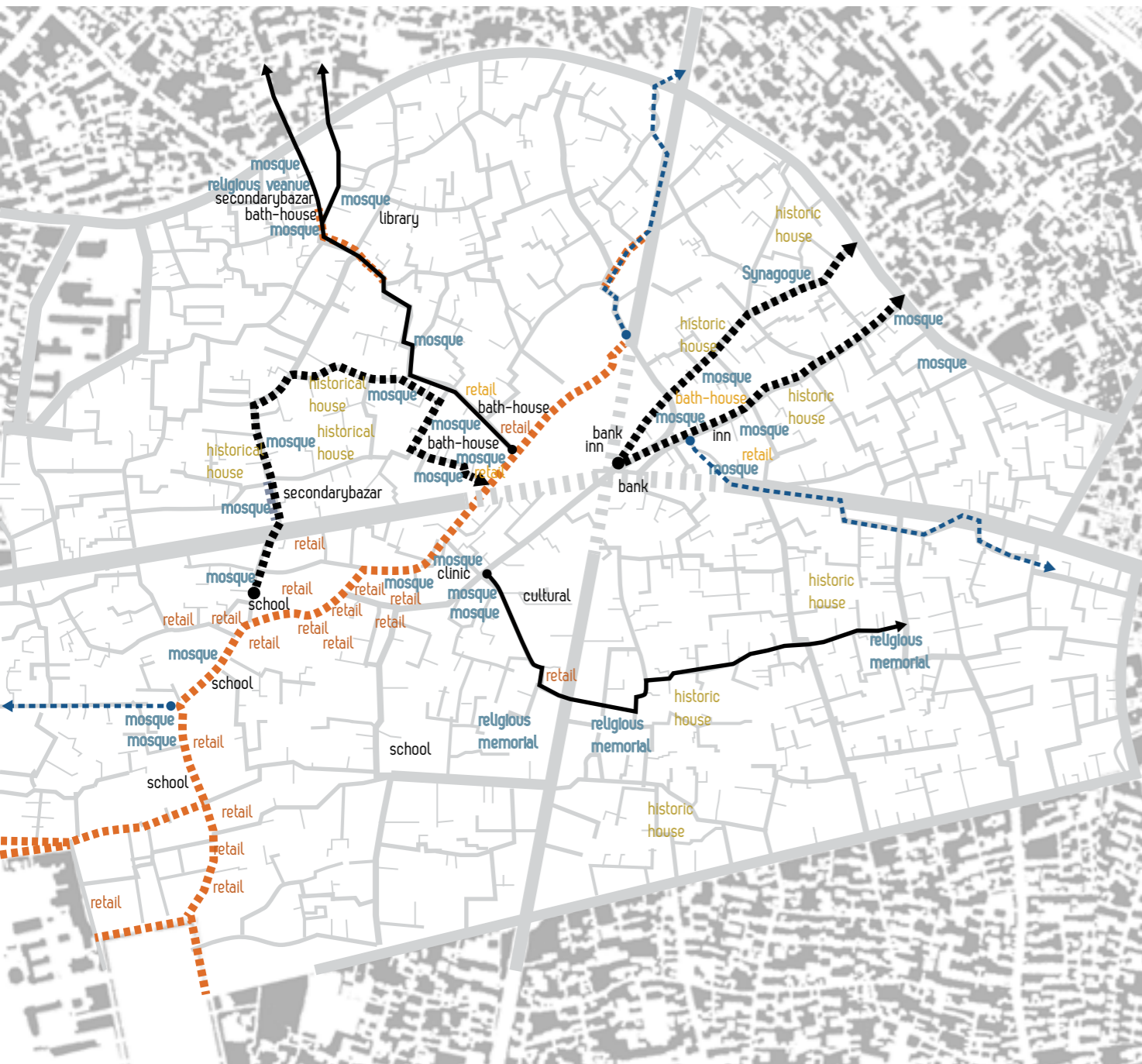
The idea i reflects existing lack of facilities in the neighborhood and is based on promoting connectivity . It roots back in historical planning in the area;the 18th century neighborhood bazaars,historical-cultural axis in the area,and "Qaisaria"s which gave animation to the old context.

Historical-cultural axis in the area,public axis connecting different neighborhoods and serving dynamic meeting and public spaces,providing required services to the residents.

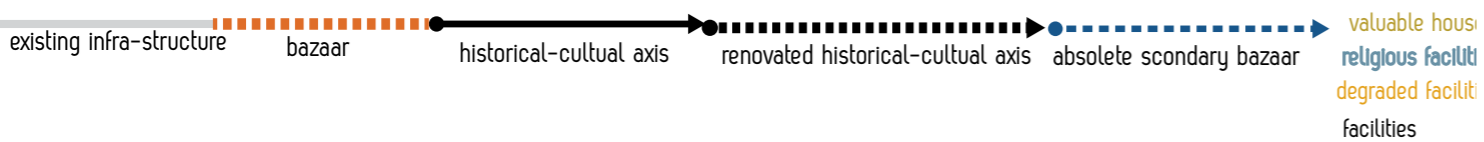
The 18th century neighborhood bazaars, acted as quarter centers .The neighborhood bazaars consisted of a set of facilities, such as shops, Bathhouses, maktab (schools) as well as commercial activities. They served as large public centers for gathering all of the people to participate in social activities such as religious festivals and making decisions about the quarter.

"Qaisaria" was a long roofed corridors in which shopkeepers and craftsmen with the same business show their product in bazaars. There were many goldsmiths' shops and other artistic shops in this qaisaria. One of the reasons of the design of such complexes was to give animation to the streets. The urban corridors are defined ,considering:

Urban axis intend ro revitalize these axes according to the needs of the present context.



500

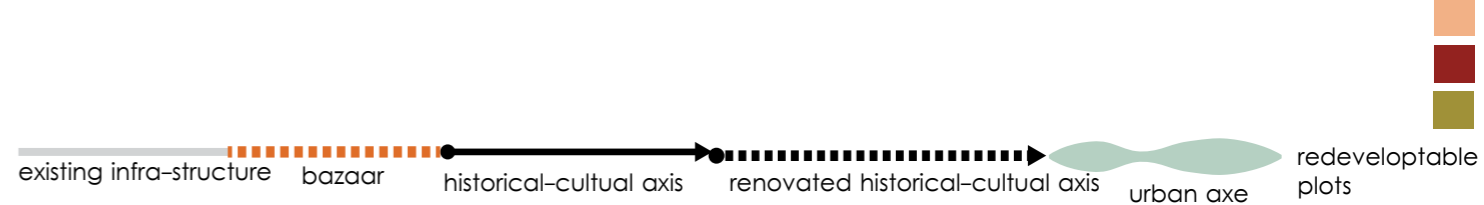


14 HISTORICAL AXIS

historical axes in the area: historical-cultural axes, renovated and abandoned, bazaar and obsolete secondary bazaars inspiring the idea of "urban axis"



500m



15 LOCALIZATION OF URBAN AXIS

localization of urban axis in relation to historical axes and redevelopable plots

Intensified mixed used projects set free more land for interaction. Public and private, residential and service activities and the green are not rigidly separated but laid upon the other, interlocked, suggesting new planning and creative opportunities, new people, new mixes and new experiences that can vitalize the local neighborhood.

In-fill projects emphasize on the use of the abandoned and vacant plots as locations for recreational as well as family, educational, community services, social and cultural satellite activities including the theater, library, institutions, schools, various meeting places, creative learning centers, temporary accommodation, orientation and exhibition spaces, rooftop cafés. Some of the activities and services will produce revenue for the future operation and maintenance of the community centre

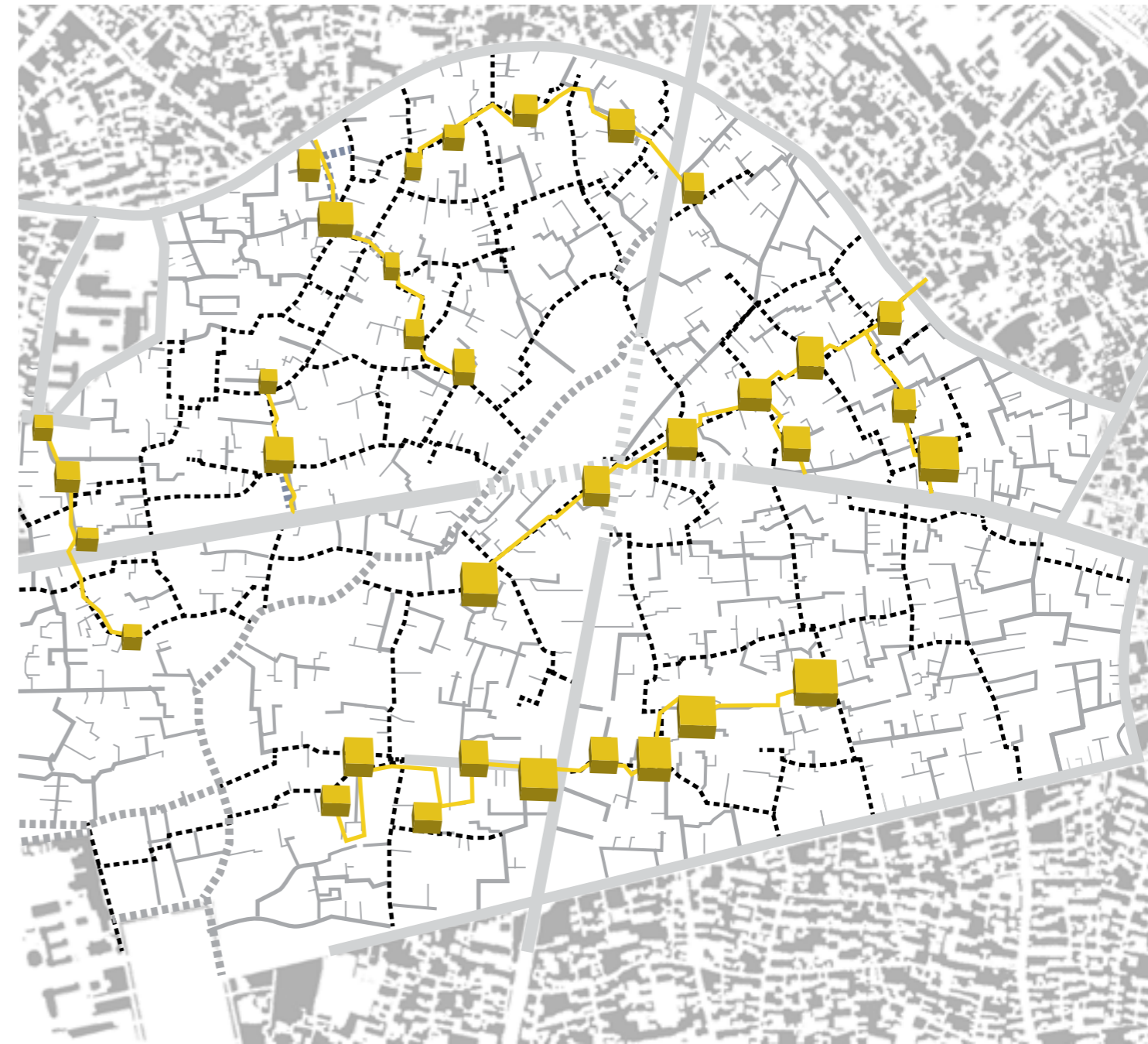
These activities get interlinked, support and improve each other. Accordingly, life condition would be improved.

Improved living conditions will promote a stable population and the kinds of productive activities that come with a steady demand for goods and services, promoting the economy

It promotes "street life" to occur all hours and during most hours of the day and night infusing vitality and security.

135-Urban axis propose networks of in-filled mixed used projects networked, revitalizing the area

Barcelona's creative scene is full of projects and programmes in various fields. CREAMEDIA PROGRAM (BARCELONA ACTIVA) offers learning courses on business plans and management, as well as personal tutorship, BARCELONA/CATALUNYA FILM COMMISSION helps to coordinate film shoots in Barcelona's city and in all over Catalonia, CREATION FACTORIES (INSTITUTE OF CULTURE OF BARCELONA) **create a network of areas for the artistic activity** and ensures that it is distributed along all the districts of the city, FAD INCUBATOR **offers scholarships for young professionals** in the design, architecture, arts and graphic communication fields in order to **facilitate their beginning in the professional life**, public-private initiative focused on media sector BARCELONA MEDIA PARK **offers technical spaces and offices as far as spaces dedicate research and the continuous occupational training**, BARCELONA DESIGN INNOVATION CLUSTER (BDIC), launched by BCD Barcelona Centre de Disseny and 22@Barcelona, pools innovative companies seeking or offering design services, as well as supports organizations and public bodies in order to increase competitiveness in sectors where design is a strategic element and a driver for innovation (source: <http://www.creativemetropoles.eu/city/barcelona>)



main old streets secondary streets deadends bazaar urban corridors 500m

16 URBAN AXIS

The urban axis propose networks of in-filled intensified mixed used projects to establish integrated continuous places as a forum for commercial activity and social interaction .

3-green corridors

One of the problems of the existing context is lack of greenery and open public spaces. The lack of green space portrays an un-welcoming image for both clients and potential retailers.

A system of green corridors is proposed which connects the neighborhood and ,the existing green while providing new meeting places, social events and though more integration and safety.

The corridors pass through the degraded and potential lands for new redevelopment. Green overpasses along green corridors on Majlessi and Vali-E-Asr street provide connection, safe pedestrian/bike pass over the street and green refreshment. Landscaping would be installed to designate paths and act as buffer zones .

Green corridors are spaces for walking, practicing sports, recreation and environmental best management of water.They would provide spaces for outdoor group activities such as morning exercises, Tai Chi, aerobics and open-cinemas using building wall as projection screens.

Provision outdoor furniture for mind stimulation and physical activities such as life sized chess and checkers or outdoor exercise machines along the paths. They would ensure effective security and usability along with sense of care of inhabitants. The garden is more than a shared community garden in that it is self-managed by local residents and schools in neighborhood and volunteers. 2 green overpasses on Vali-E-asr and Majlessi streets,as parts of the green corridors would symbolically re-link the historical context divided in parts by modern streets,providing a pleasant and safe pedestrian passage for pedestrians and cyclists.

Residents would be engaged in the maintenance of a number of urban orchards along the green corridors. The product shall be collected for local and external consumption. Urban Orchard shall be managed by interested individuals and self-organized groups which would promote more sense of community and care in the area.

The environmental contribution of green corridors should not be overlooked especially with regard to their role in decreasing GHG emissions and noise pollution.



17 GREEN CORRIDORS



Union Street Urban Orchard

Planner: Heather Ring

A disused site in Bankside, London, has been transformed into a public garden with the introduction of apple trees, allotments, a timber pavilion, and a table-tennis table in a skip.

The garden, hosts workshops and discussions on urban agriculture for locals and visitors.

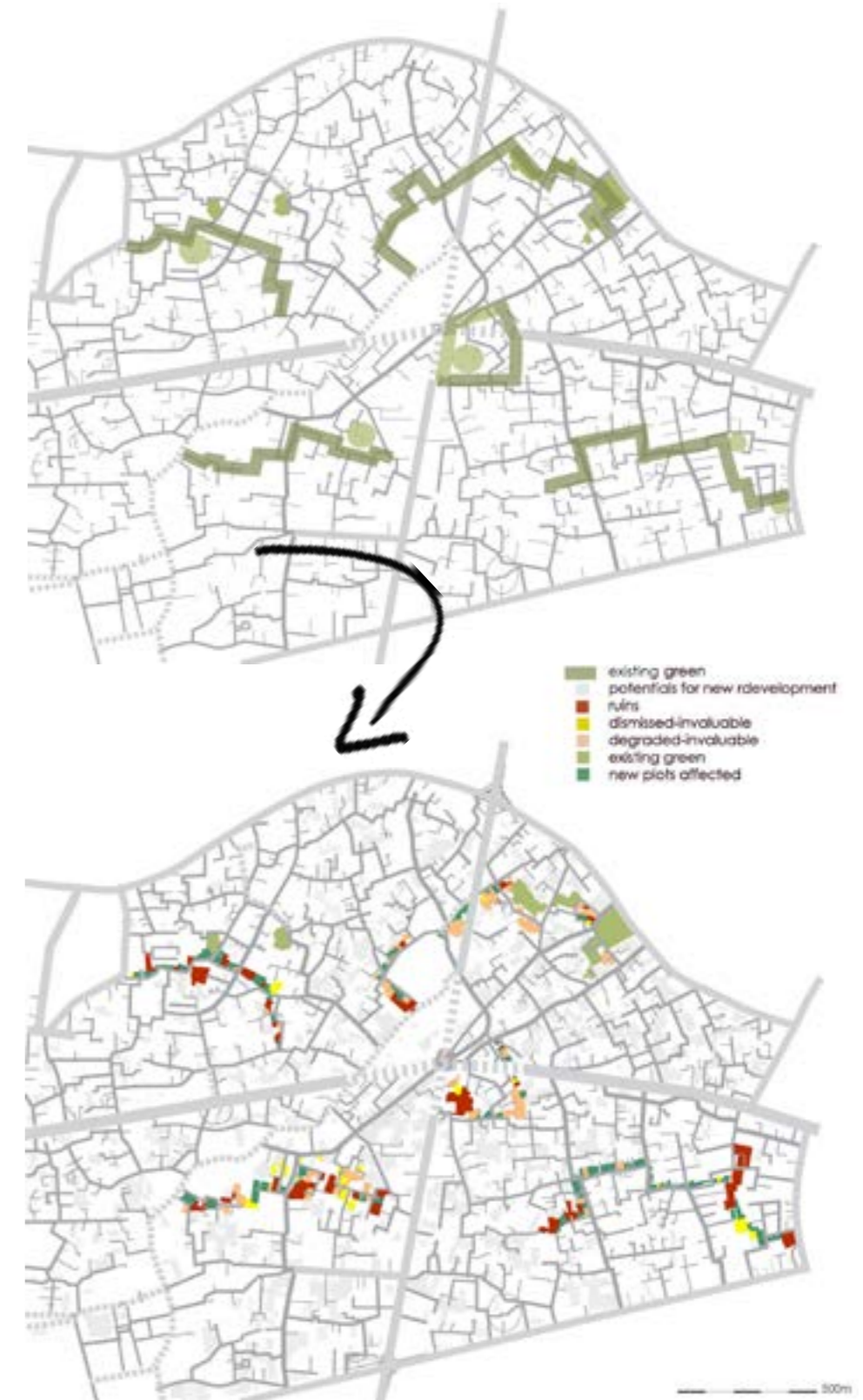
" During the London Festival of Architecture and beyond, the site of 100 Union Street in SE1 will be transformed into an urban orchard and community garden."

"... the garden will regenerate a disused site in Bankside and create a place for exchange between local residents and visitors to the Festival."

source: <http://www.dezeen.com/2010/07/11/union-street-urban-orchard-by-heather-ring/>

In order to embed the corridors in the historical context, green corridors along with modified infrastructure and new on site parking spaces refill the potential redevelopable plots (blighted, dismissed, degraded and invaluable residential units if required)

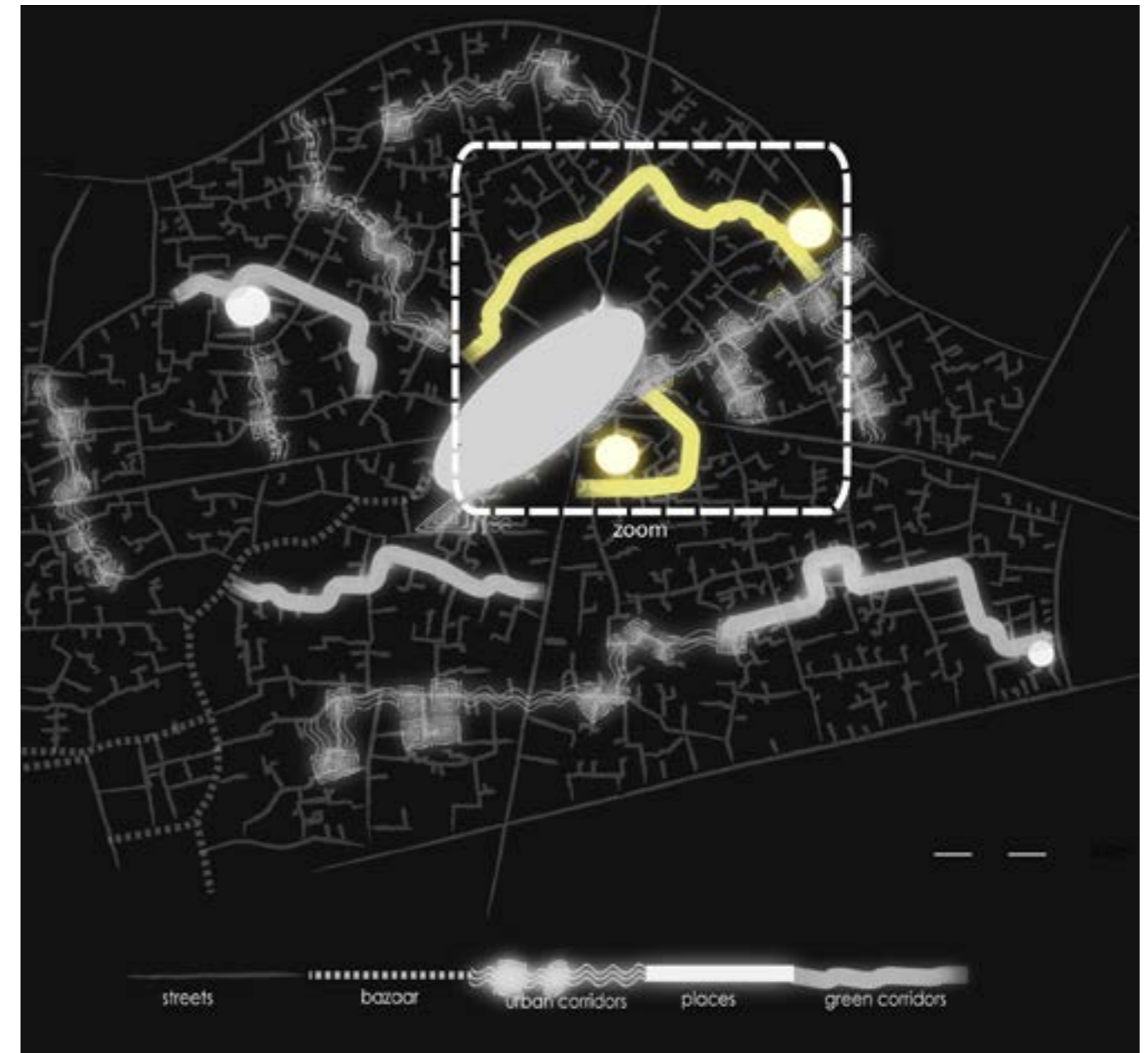
The aim has been the least destruction and though the least expenses. The conceptual connected corridor is embedded in the redevelopable context replacing the dilapidated plots instead of destroying high percentages of new active plots. Therefore the green corridors would be formed by chains of context based forms.



18 EMBEDDING THE CONCEPTUAL GREEN CORRIDOR IN THE CONTEXT



; Green corridors along with modified infrastructure and new on site parking spaces refill the potential redevelopable plots (blighted, dismissed, degraded and invaluable residential units if required). The aim has been the least destruction and though the least expenses. The conceptual connected corridor is embedded in the redevelopable context replacing the dilapidated plots instead of destroying high percentages of new active plots. Therefore the green corridors would be formed by chains of context based forms. (source: author's drawings)



136.A zoom on corridor 1 and 2 depict spaces for walking, practicing sports, recreation along with gardens, urban orchards and streets of the neighborhood.



section A-A

section B-B

19.corridors 1 and 2 would be zoomed in(source:author's drawings)



20...section B-B—an example section of green corridor among buildings (source:author's photomontage)



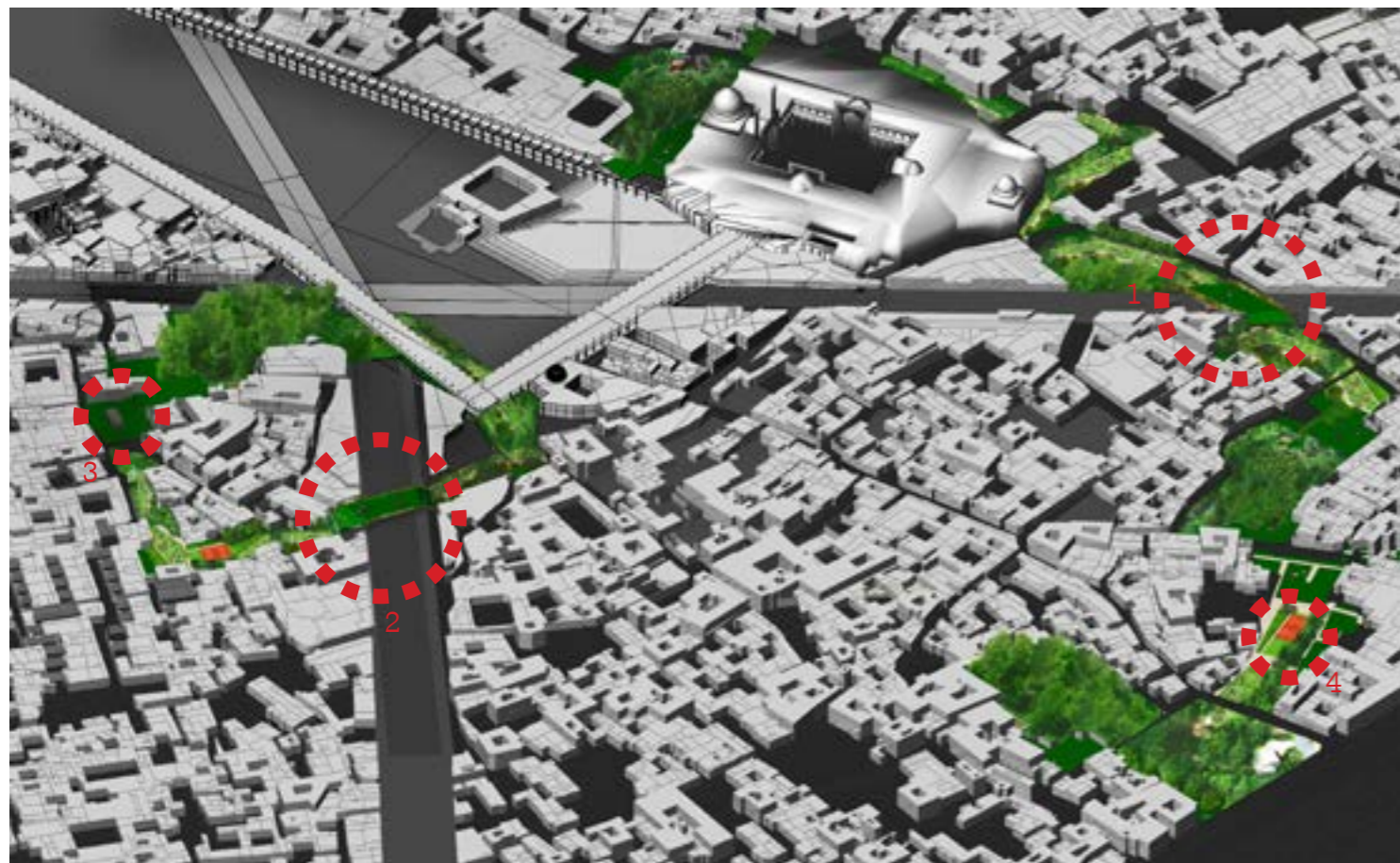
21.section A-A—example section of green corridor along a local street(source:author's photomontage)



22..zoom on the plan of a green corridor



137. **zoom 1.** Majlesi Street(source: www.panoramio.com)



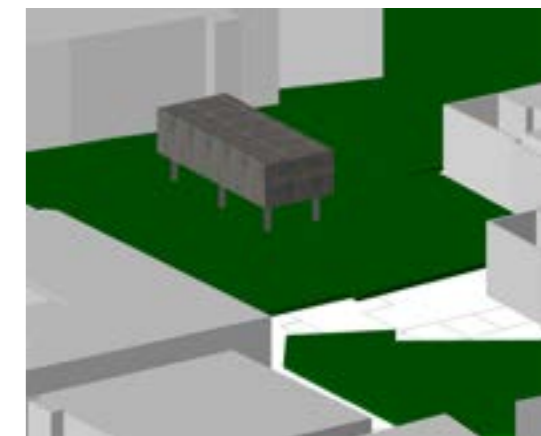
23. **zoom 2** .aerial view of corridors 1 and 2 (source:author's drawings)



138. Vali-E-Asr StreetStreet(source: www.panoramio.com) over pass Vali-E-asr street,linking the 2 parts of the context

zoom 3

A mobile structure which would be set up through the corridors. The structure's lower half is an open space that can easily be configured to accommodate the neighborhood's various programs, the ground space into a formal lecture setting, a stage for a celebratory gathering, or a workshop with tables for hands-on experiments. and polit projects. The upper part of the structure houses a flexible rigging system for different workshops and labs.



24. .aerial view of the mobile structure subject to different meetings and activities

Lightweight and compact, with a structural skeleton built of carbon fiber, the mobile structure for the first cycle of the BMW Guggenheim Lab has been designed by the Tokyo architecture firm Atelier Bow-Wow as a "traveling toolbox." The structure's lower half is a present-day version of the Mediterranean loggia, an open space that can easily be configured to accommodate the Lab's various programs. The upper part of the structure houses a flexible rigging system and is wrapped in a semitransparent mesh. Through this external skin, visitors are able to catch glimpses of the extensive apparatus of "tools" that may be lowered or raised from the canopy according to the Lab's programming needs, transforming the ground space into a formal lecture setting, a stage for a celebratory gathering, or a workshop with tables for hands-on experiments, (source:http://www.bmw-guggenheimlab.org/what-is-the-lab/architecture?utm_source=hootsuite&utm_medium=sm&utm_campaign=bgfacebook).



zoom 4

Outdoor events, weekly markets and gatherings could be organized in mixed used spaces provided along the green corridors



139.Examples of outdoor activities predicted in multi-function greens
source:Architecture Studio,2011,p.60-61)

4- Requalification of the neighborhood

Requalification of the neighborhood entails a set of general policies **at neighborhood scale** to upgrade the dilapidated context. These strategies go hand in hand with in-fill mixed used projects , urban axis and green corridors. It would insure more viability,dynamism safety connection and prosperity. The policies would be emphasized through urban axis as priorities in the first phase and accordingly would be implemented all over the project area.

Requalification entails general 3 interventions:

1-improvement

Improvement requires loyalty to the original identity,improving the positive aspects and decreasing the negative characteristics of the plots.Sub-Interventions include:protection,preservation,maintenance,conservation,restoration,consolidation and repair. The interventions should comply with rules established by" Heritage Preservation And Tourism Organization."

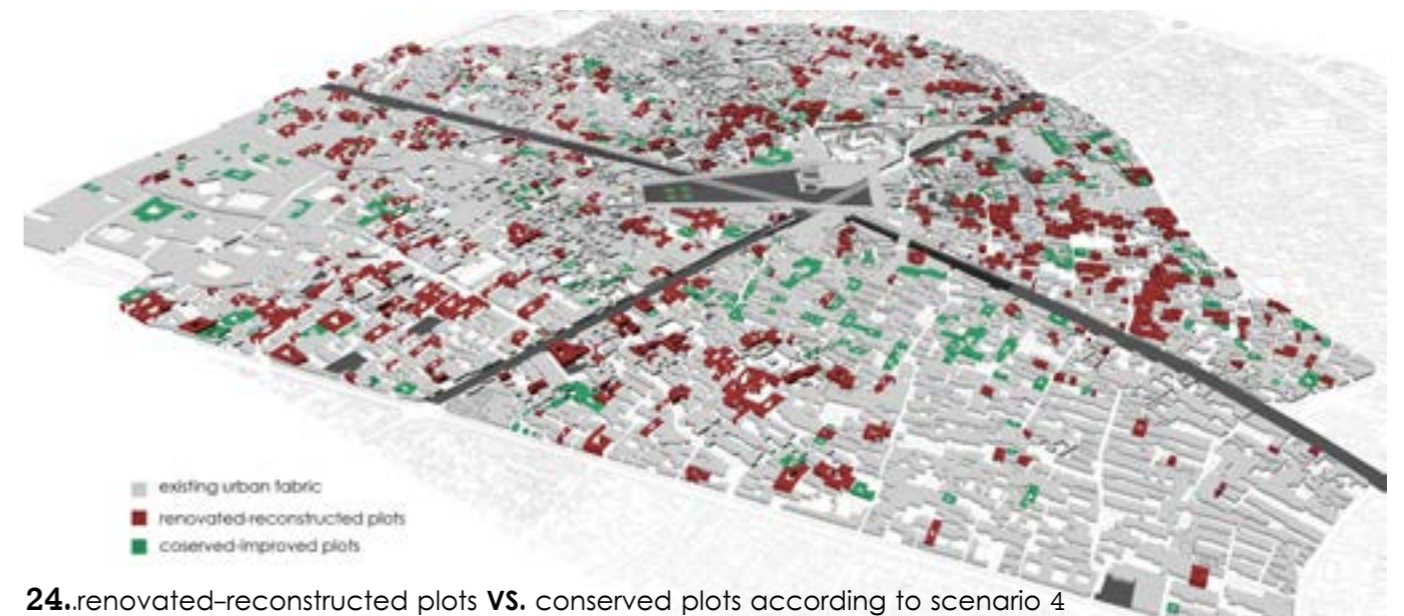
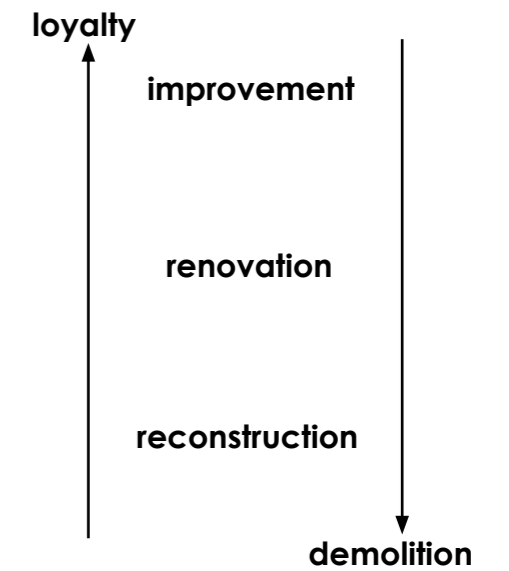
2-renovation

loyalty to the original plot decreases in this intervention compared to "Improvement".To provide more productivity and efficiency and rehabilitating the context,sub-interventions include: renewal,rehabilitation,revitalization adoption and conversion.

3-Reconstruction

There is no obligation to preserve the original identity and the intent is a new spatial,environmental and physical settings.

Interventions include: demolition,clearance,rebuilding



24..renovated-reconstructed plots VS. conserved plots according to scenario 4

the redevelopable plots are divided in 2 groups:The blighted,dilapidated and a proportion of degraded plots to be reconstructed/renovated and the rest of the degraded plots to be improved/conserved.

1-http://www.maskansazancz.ir/Default.aspx?tabid=367

The 3 sources for redevelopment would be requalified s:

1. Existing Blighted plots would be reconstructed,
2. Existing dismissed plots would be renovated.
3. A proportion of degraded plots would be subject to improvement and renovation strategies and the rest would be improved (conserved)

Therefor the redevelopable plots are divided in 2 groups:blighted,dimissed and a proportion of degraded plots to be reconstructed/renovated and the rest of the degraded plots to be improved/conserved.

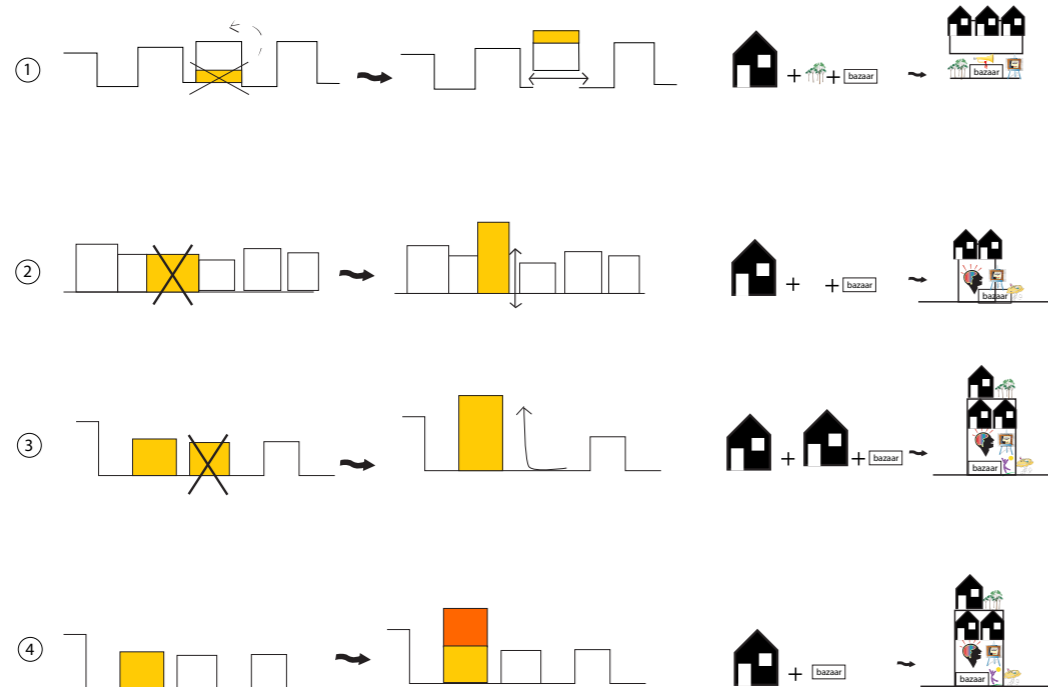
New infill mixed used projects prescribe higher densities and adaptive re-use. They would be accommodated in the renovated/reconstructed plots.

Some strategies for renovating/reconstructing the plots,spurring higher density and adaptive re use are:

1. providing courtyard/pilote spaces(transferring the residential mass to upper floors)for mixed used activities;artistic activities,shops,café,studios and greenery.
2. intensifying mixed uses in higher buildings and freeing the land for public uses
3. freeing land by eliminating some (blighted)plots and replacing them by public open spaces
4. intensification;higher buildings substitute loe density 2 story dilapidated plots providing mixed activities.
5. 5-adding extentions to the existing plots in approaches as "Parasite architecture"



"Parasite architecture" is niched in the variety of architecture. The small structures are mostly fixed on or upon existing buildings and occupy the roof or unused space between two different buildings. The architects create an own identity with an expressive design, in order not just to design an extension of established architecture. This kind of parasite architecture has been affected in 1984 by the loft conversion Falkestrasse in Vienna. source:<http://us2.campaign-archive1.com/?U=1b7e62d3a2235dec3c2750f61&id=0bd993976a>)



25. different strategies for renovating/reconstructing the plots,spurring higher density and adaptive re use (source:author's drawings)

Renovation of the main bazaar, secondary neighborhood bazaars

Bazaar passing the northern edge of the square would be renewed and intensified. The refurbishment aims to restore the original features of the bazaar, modernizing electrical work, bring in more high-end Iranian and international brands to appeal to more local shoppers instead of under-performing stalls.

New shops on south and east edge of the renovated plaza would accommodate the businesses stalled because of the project,the extricating businesses in the old bazaar and new businesses promoted by economical strategies. They would contribute to economic prosperity of the area as well. This could be implemented by municipality of distric 3 with co-operation with Fruits and vegetable organization vendor representatives: Guild Affairs Association of Isfahan City in an attempt to resolve the deadlock..

Requalification of secondary bazaars which usually exist in old quarter centers,has been implemented along historical axes by improvement of the space;conservation and preservation techniques along with conversion of architectural elements as pavements and arcades.

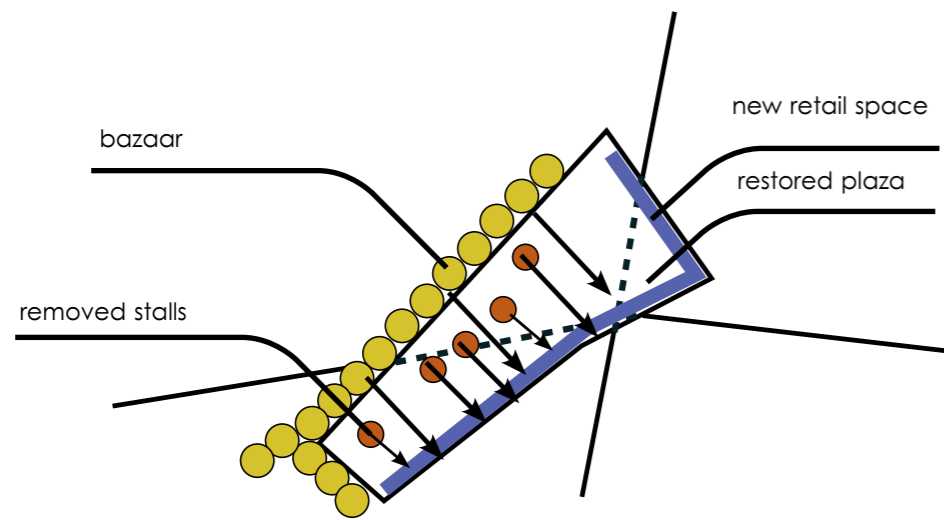


140.existing situation of bazaar of Isfahan(source: <http://www.traveladventures.org/continents/asia/es-fahanbazaar5.shtml>)



refurbishment of Istanbul bazaar
One of Istanbul's most popular tourist destinations is getting a long-overdue makeover. The 550-year old Grand Bazaar is about to be infused with 140 million Turkish Lira (about \$100 million USD) to renovate and update the covered market. .
In addition to restoring the original features of the market, modernizing electrical work, the refurbishment aims to bring in more high-end Turkish and international brands to appeal to more local shoppers. While the bazaar currently sees about 500,000 visitors daily, only about 30% are local and name brands may attract more locals than tourist souvenir stalls. With the Council of Monuments reviewing and approving plans, it is hoped that the Grand Bazaar will retain its heritage and avoid becoming another generic shopping mall. Regardless of new additions, locals and visitors can agree that cutting down on the large amount of stalls selling Made-in-China swag and "genuine" fake Gucci bags to make room for more traditional artisans could help preserve the unique landmark.(source: <http://www.gadling.com/2010/10/25/istanbuls-grand-bazaar-to-undergo-100-million-renovation/>)

An open space improvement project relates to the Tablita Market on the main pedestrian axis linking the heart of the Fatimid city with the Azhar Parkin Cairo. Here, an uncontrolled proliferation of street vendors, poor management and deterioration of environmental conditions have led to a situation where the market was under threat of being completely removed with disastrous consequences for the local community. A new project to contain and reorganise the vendors within an enclosed new market hall has now been prepared by AKTC in close cooperation with vendor representatives and in consultation with the Cairo Governorate, in an attempt to resolve the deadlock and to provide a suitable architectural solution for this sensitive vacant space.(source: THE AGHA KHAN TRUST FOR CULTURE,p.45)



26 New shops on south and east edge of the renovated plaza would accommodate the businesses stalled because of the project(source:author's drawings)



141.Requalification of secondary bazaar along historical axe of Dardasht: has been implemented by improvement of the space;conservation and preservation techniques along with conversion of architectural elements as pavements and arcades. (source: google earth-www.panoramio.com)

Streets capes range from basic space planning to accommodate conflicting activities, upgrading street paving, public lighting and signage, as well as facades and storefront design.

While these improvements do not generate economic activity by themselves, they can do much to attract and enhance commerce.

The facades would be, reconstructed, renovated or improved in terms of materials used, the height and style according to some set design principles to infuse an integrity.

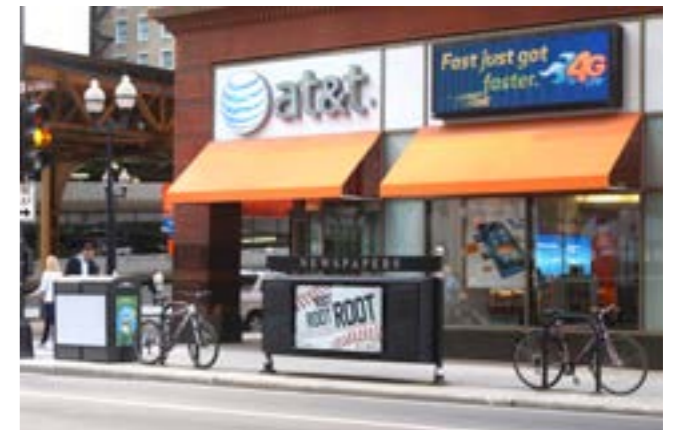
Canopies, arcades and urban furniture as newspaper boxes, urban light posts and sculptures would revitalize the neighborhood.

Sidewalks would be provided for many streets lacking pedestrian commuting zone.

Impaired plots would be reconstructed.



142.improvements of facades:favelas painting Rio De Janeiro in a low class neighborhood in (source:http://www.favelapainting.com/santa-marta)



143.Urban facilities revitalize urban lifelife,Chicago(source:author's photography)



144.Urban sculpture in a regenerated ex-industrial quarter in Chicago(source:author's photography)



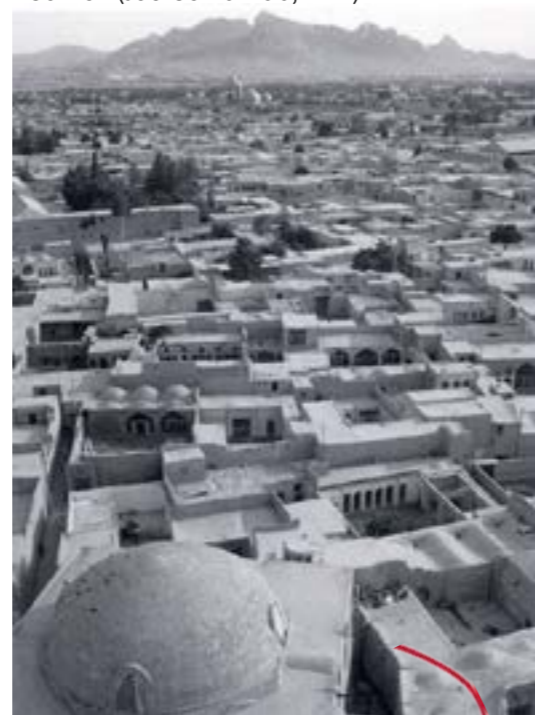
145..Street:paving modification in San Candido (Italy), 2003 source: http://www.publicspace.org/en/works)

New and renovated constructions should comply with the existing context in terms of spacial organization ,materials and architecture .

New developments would follow mass around courtyards which is the dominant traditional architectural pattern in the area,responding to climate of Isfahan.

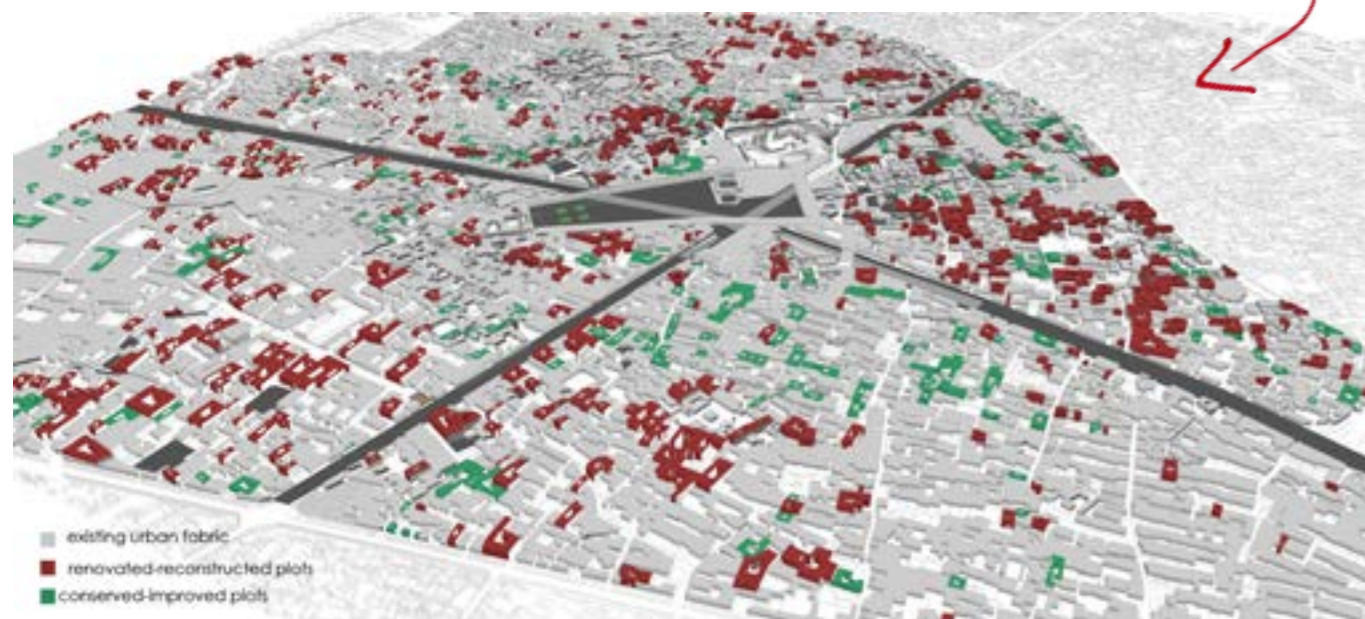


146.general policy;new and renovated plots should comply with the existing context(source:Pakzad,2005)



147.traditional architectural style of the context(source:source:http://archnet.org/library/images/)

27.redevelopment in new plots would follow mass around courtyards which is the dominant traditional architectural pattern(source:author's drawings)



148.a secondary street in west south quarterth of the project area near bazaar (source:www.panoramio.com)

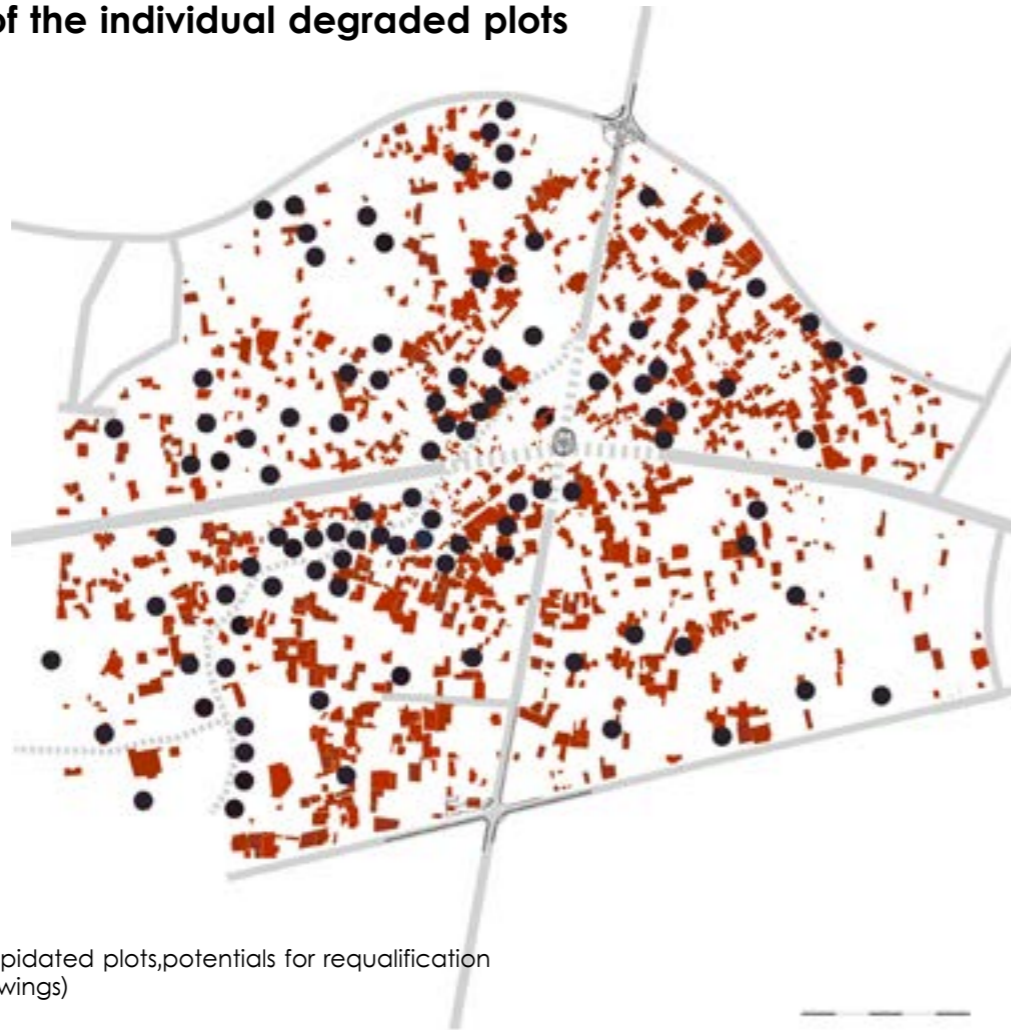


149..lentrance of bazaar on Majlessi Street (source:NAQSH, E, JAHAN-PARS) Consulting Engi-neers,2010.)



150.a degraded street on Majlissi Street (source:NAQSH, E, JAHAN-PARS) Consulting Engi-neers,2010.)

5- Requalification of the individual degraded plots



28. valuable plots and delapidated plots, potentials for requalification purposes (source: author's drawings)

Requalification of the individual plots entails general 3 interventions considered in previous unit as well: **improvement, renovation and reconstruction.**

Dilapidated plots should be distinguished and be subject to evaluation. They are divided in 3 categories in terms of value and percentage of degradation:

1. Valuable plots
2. Degraded and dismissed plots
3. Blighted plots

Managing committee would investigate the ownership of the plots and negotiate with them. They would compromise; sell the plots or requalify them in exchange for money, facilities or loans. The last alternative would be being forced to sell the plots (by municipality)

Requalification interventions are proposed for 3 different categories.



151. street painting (of dilapidated wall source: <http://jonathancorley.tumblr.com/post/25941985062/via-streetartutopia-in-barrio-del-carmen>)

1. Valuable plots
Improvement and renovation interventions would be applied to valuable plots:

- Fortifying the worn out structure of the buildings
- facade restoring and preservation
- restoring and provision for their ongoing maintenance,
- adaptive re-use-using historic structures, setting new uses for the plots according to sources and existing general plans
- spacial and landscape improvements

2. Degraded and dismissed plots: Improvement and renovation interventions would be applied to valuable plots:

- Fortifying the worn out structure of the building
- facade restoring and preservation
- spacial and landscape improvements

152. Bekhradi House renovation: change of use of the historical residential to a hotel- an example of renovating a valuable plot On Sonbolestan Street in the project area (source: www.panoramaio.com)



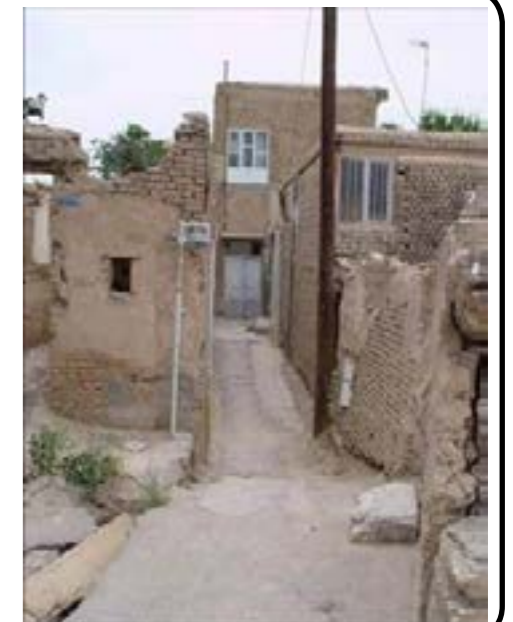
The general project of Renovation of degraded context in Isfahan Municipality.

2157 hectare of degraded context has been identified in Isfahan Municipality. Heritage Preservation And Tourism Organization, Isfahan Civic And Residential Organization and Municipalities of Isfahan are the main 3 actors which identify the degraded plots, negotiate and establish partnership with the owners, improve, renovate or reconstruct the plots according to the requirements.

There are 3 criteria for identifying the degraded context:

- 1- small plot sizes; blocks which more than 50% of their plots are less than 200 sqm
- 2- instable, blocks which more than 50% of their plots are instable/ do not have structure.
- 3- unpermeable; blocks which more than 50% of their streets are less than 6 meters wide.

(source: <http://www.maskansazancz.ir/Default.aspx?tabid=367>)



3. blighted plots reconstruction interventions would be applied to valuable plots:

- accumulating the debris
- setting new uses for the plots according to sources and existing general plan
- adaptive re-use-using historic structures,setting new uses for the plots according to sources and existing general plans
- building/adding new extensions usually when a part of the building has been destroyed e.g the secondary bazaar structures
- environmental and landscape improvements



28 .reconstruction of a blighted plot on Sonbolstan Street(source:author's drawing)

Facade treatments

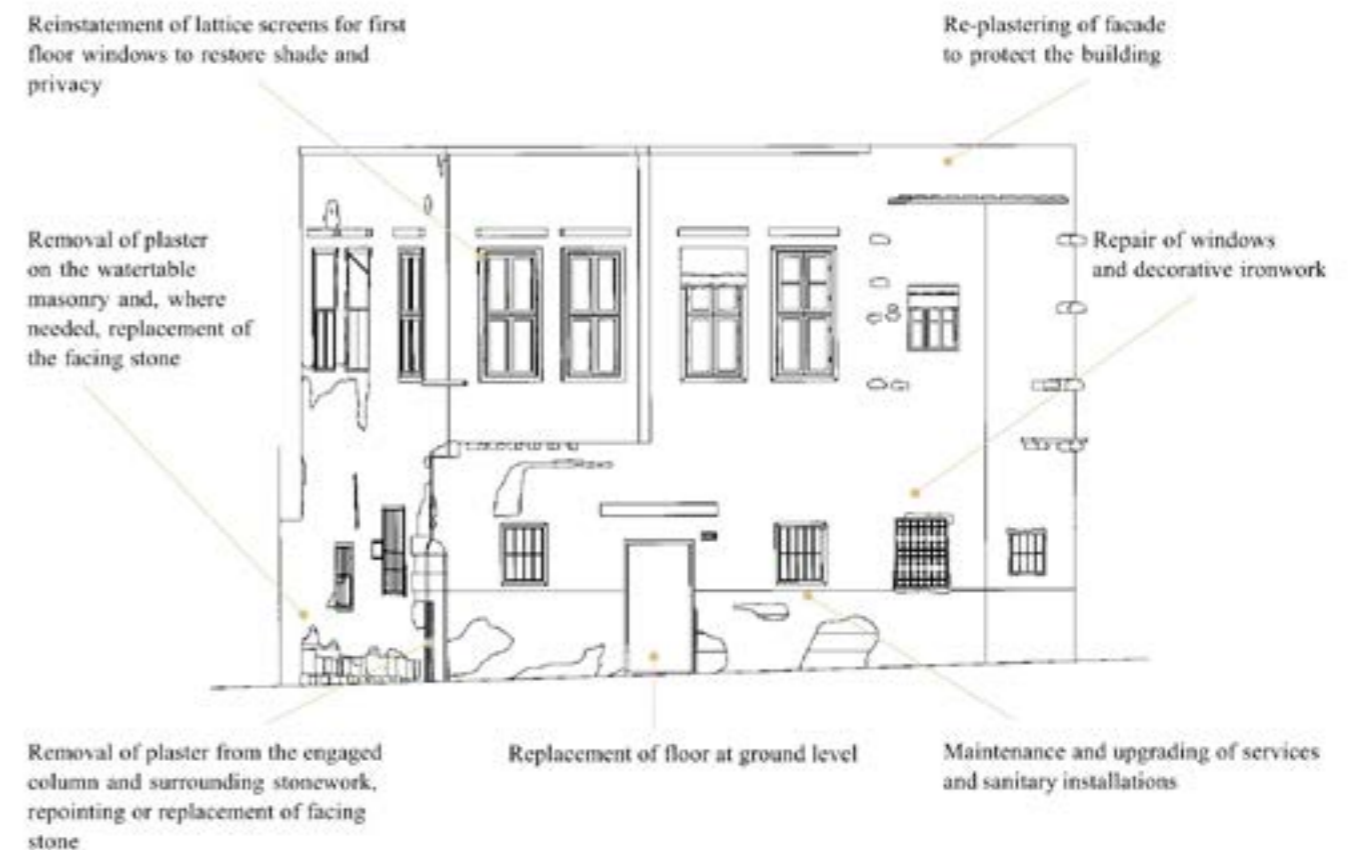
Facade treatments cover versatile interventions which include repairing, cleaning and maintenance.

Repairing the facades entails mending and replacing the deteriorated finishing and materials of the facades, replacement of the dilapidated openings frames and reconstruction of some parts that have been destroyed. Keeping the traces of the old elements even in wide destructions is proposed.

Cleaning of the facades could be implemented through various methods for instance by use of water ,abrasives or through chemical process in this project.Cleaning by water is possible to be done in the form of spray, steam, high pressure vacuum and soft brushing.Cleaning by the use of abrasives -would be implemented either by blasting or mechanical means, with or without water.Chemical process involves acids, alkalis and/or other solvents.

Consolidation removal is practiced by use of lime water (aqua di calcio) for consolidation of the surfaces.

.Protection and maintenance by use of organic products for protection is relevant.



153.an example of physical renovation of a building in Cairo,old historical context (source: THE AGHA KHAN TRUST FOR CULTURE,p.47)

6-Promoting public spaces

The intervention entails improving and activating the existing potentials for public spaces and providing new chances for users to be present and interact along urban axes and green corridors.

Renovation of the main bazaar and secondary neighborhood bazaars through requalification of the neighborhood plans and renovating valuable inactive heritage plots such as bath-houses and historical residentials through provision of new public uses, would activate the existing dormant potentials.

New mixed used redevelopments provide public places; cultural-commercial courtyards and green outdoor places would be provided along green corridors. In this unit the focus is on renovation of the central Saljuk plaza and small neighborhood squares-places .



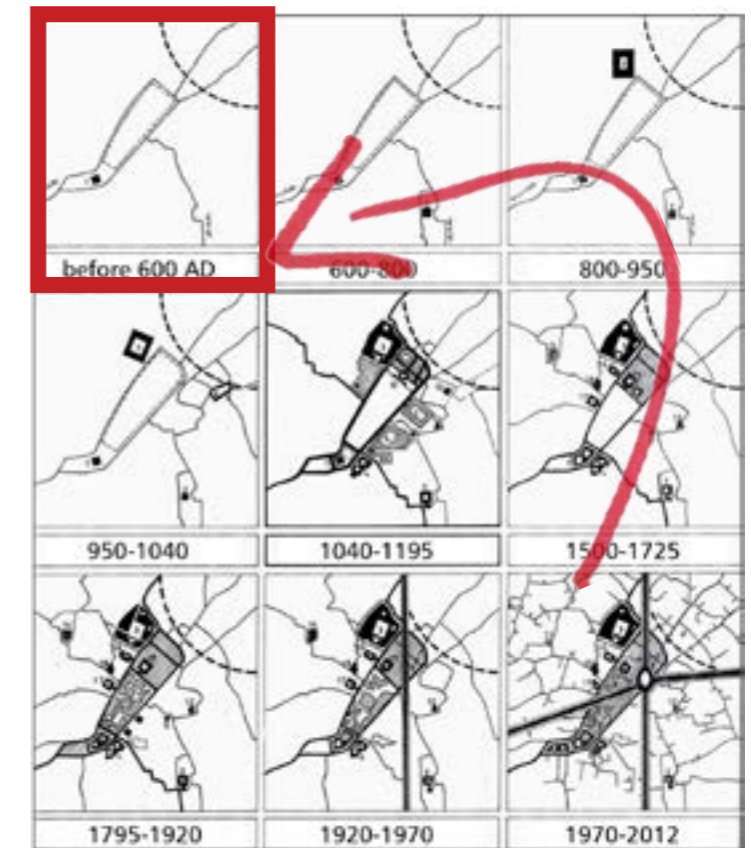
29.Saljuk Paza among public local places connected through bazaars, historical and urban axes and green corridors attribute to public space reorganization and activation. (source: author's drawings)

6-1-Pedestrian plaza

Ancient Saljuk plaza filled with stalls and invaluable commercial plots in chronically, would be emptied and restored.

Bazaar passing the northern edge of the square would be renewed and intensified.

New shops on south and east edge of the renovated plaza would accommodate the businesses stalled because of the project, the extricating businesses in the old bazaar and new businesses promoted by economical strategies. They would contribute to economic prosperity of the area as well.



154. Ancient Saljuk plaza filled with stalls and invaluable commercial plots in chronically, would be emptied and restored. (source: author's translation from NAQSH, E, JAHAN-PARS Consulting Engineers, archive2010, p.36)



155. bazaar passing northern edge of the disappeared plaza-aerial image taken in 1937 (source: NAQSH, E, JAHAN-PARS) Consulting Engineers, 2010.)

Plads Til Alle
København (Denmark), 2009

The aim of the intervention was to offer a frank, direct response to the starting-point reality. In 2008, a series of meetings was held with the residents in order to identify and talk about the values and features that were to characterise the new space.

The initiative gave rise to a list of values that included community, identity, security, voluntary work, respect and admiration. Also taken into account were features such as variation, seating options, lighting, shelter, a stage and a shop.

After banishing the private car, the project consisted of the installation of twelve items of street furniture constructed of Danish oak slats. They are also portable so that a multitude of arrangements are possible within the courtyard. In the upright position, they take the form of a bench with a backrest and, upturned, they become a corner bench.

Tipped over, they generate four benches, all facing each other, thereby fostering the establishment of social relations. In this position, they can also be covered by accessory panels that turn them into a slightly raised stage. At night, fixtures installed inside the frames filter out light through the gaps between the slats.



Vabaduse väljak
Tallinn (Estonia), 2009-AREA: 11,000 m2-COST: 20,000,000 €

In 1998 the Council called for entries in a competition with the aim of giving relevance to the space and making the most of its strategic centrality. Besides turning it into the main venue for the annual festival held in the Estonian capital, the idea was to get rid of the cars. The construction of an underground car park with a capacity of two hundred vehicles beneath the old esplanade has made it possible to free the space of cars and completely refurbish it. The surface, which has been paved with large granite slabs of 120 x 300 cm, constitutes a horizontal space spreading out from the base of the buildings aligned along the north face. The street furniture that equips it, consisting basically of wooden benches and prefabricated concrete plant stands, is set on wheeled platforms that make it possible to shape the space in many different ways and for many different functions according to the needs of the moment. Free of any fixed objects, the platform module has great versatility which means it can be used, for example, to create a dismantlable stage for multitudinous open-air concerts. The fact that the space is clear also makes it possible to spread out textile sports surfaces with the appropriate markings for public competitive events. The eastern side of the square is now marked out by nine high streetlights that trace a virtual, rhythmic and unitary front without blocking out the adjoining Jaani Kogudus. In contrast, the western side of the square opens out on to the green belt, where several nineteenth-century buildings have been restored to their previous state to give dignity and visibility to the remains of the fortifications. A space has been reserved here as the location of a monument commemorating the Estonian Liberation War. The southern side of the square abandons the horizontal plane to fold down in order to form a hollow of some four metres deep.



Piazza Gramsci
Cinisello Balsamo (Italy), 2004-AREA: 15,000 m2
 Conversion of the square outside the Church of Sant' Ambrogio in the old town of Cinisello Balsamo; from an unused courtyard to a pedestrian piazza, providing places for the users to enjoy and interact. The church is emphasized by raising along monumental stairs. (source: <http://www.publicspace.org/en/works>)



Plaça de la Llibertat
Reus (Spain), 2003-AREA: 27,000 m2
 Remodelling of a square in the centre of Reus as part of the construction of underground parking facilities; provision of a multi functional place with appropriate lighting system and landscape for different activities and gathering (source: <http://www.publicspace.org/en/works>)

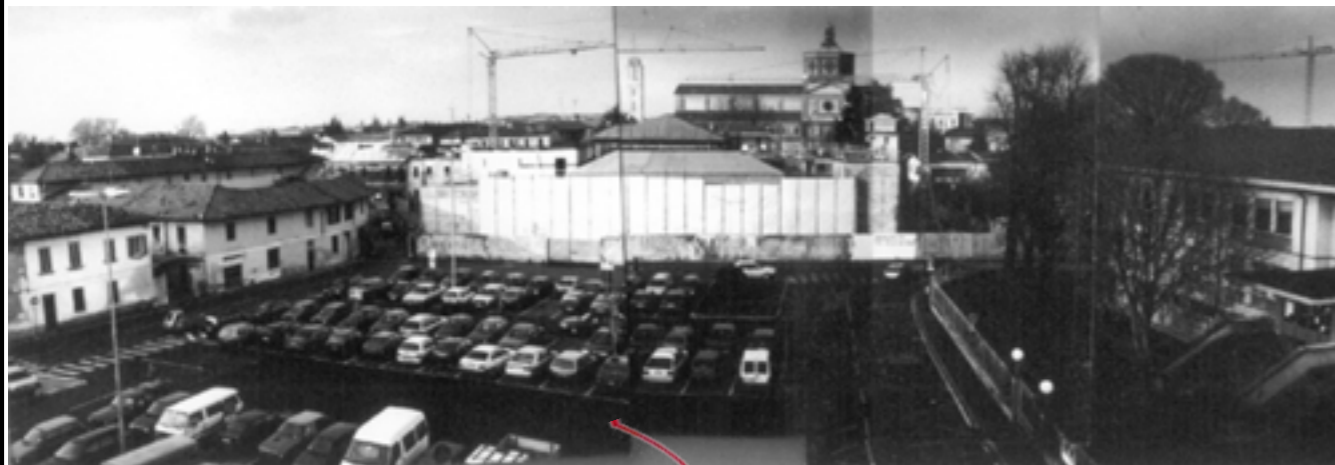


Piazza Unità d'Italia
Cernusco sul Naviglio (Italy), 2002
Regeneration of the main square in Cernusco sul Naviglio
AREA: 5,540 m²
COST: 635,635 €

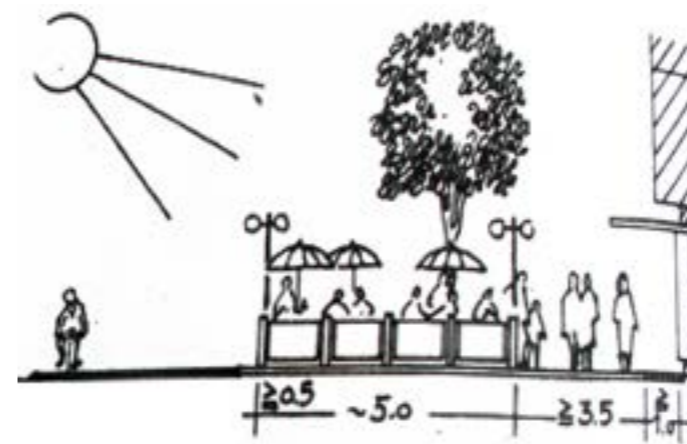
In 1997, the Cernusco Sul Naviglio Council called for tenders in order to regenerate the urban complex consisting of the main square – Piazza Unità d'Italia – a smaller nearby square and the route joining the two. The main aim was to recover the space of the square as a setting for public life, returning it to its role as a place of social relations in the old centre as an area that both linked up with the city's history. The work carried out in the Unità d'Italia Square completed the plan of introducing the restricted zone for traffic that was envisaged for the entire historic centre.

The remodelling took into account the circulation of traffic – restricted access of vehicles and the city's buses – on the northern side of the square, defining a route in keeping with the traffic restrictions and low velocity that had been established. This road was paved in stone like that which existed throughout the historic centre, and was separated from the area designated exclusively for pedestrians by a row of mulberry trees. In order to guarantee flexibility in the uses of the square, the remodelling project defined two clearly differentiated areas, one neutral area, understood as a multifunctional space, and a garden zone on the east side, slightly higher than the other area in an attempt to synthesise the ideas of landscape and cityscape given the rural and urban settings of Cernusco Sul Naviglio.

(source: <http://www.publicspace.org/en/works>)



Principles for re-planning the plaza



- Active recreational and commercial facilities like shops, bars and restaurants revitalize the plaza and return revenues for the development. A few overnight facilities are proposed to provide vibrancy and security during night time.
- A versatile place would accommodate different events and uses: street plays and concerts, festivals, ceremonies, group activities and improvised recreational events.
- distinguished signage and info. boards for the tourists and other users to map out their way and valuable heritage in the historical context.

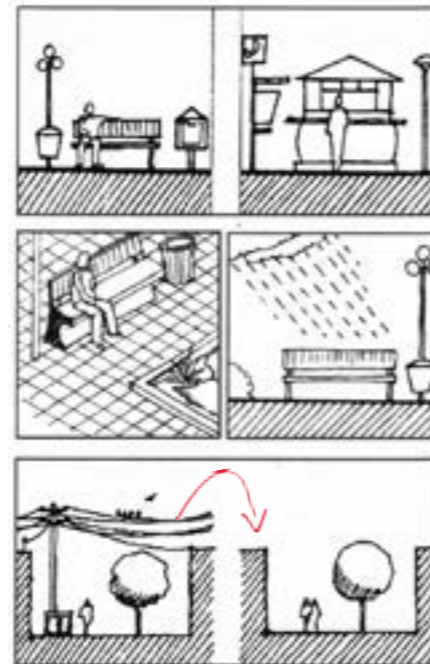
active recreational and commercial facilities for the plaza

156 different versatile event in the plaza

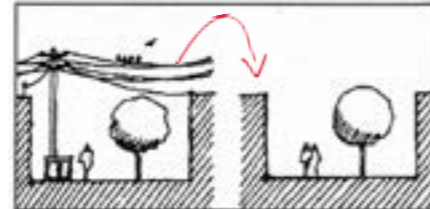
sufficient signage in the organic context

(source: Pakzad, 2005)

- Urban furniture should be resistant to climate variable conditions.



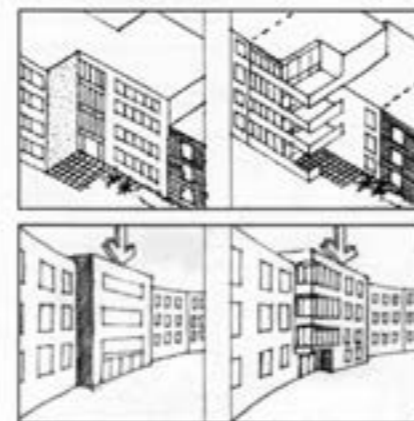
- Exposed electrical and mechanical facilities should be banished and avoided.



- Entrances to the plaza would be emphasized .

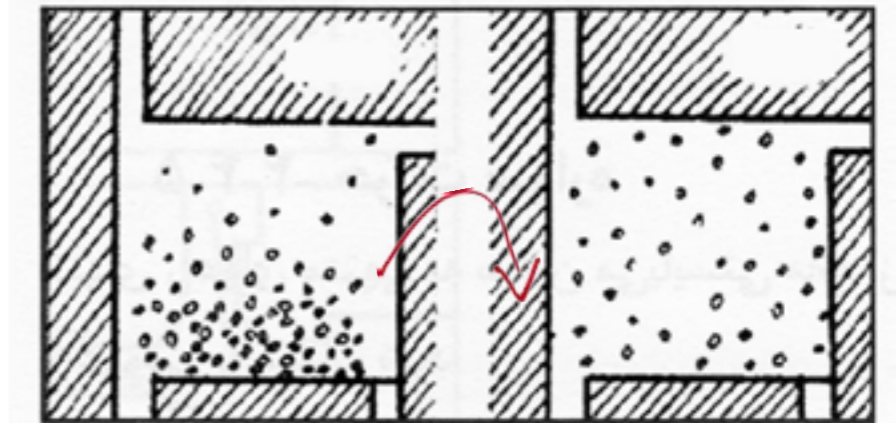


- Facades around the plaza should follow similar modules inspiring integrity. All the facades facing the plaza should be planned..

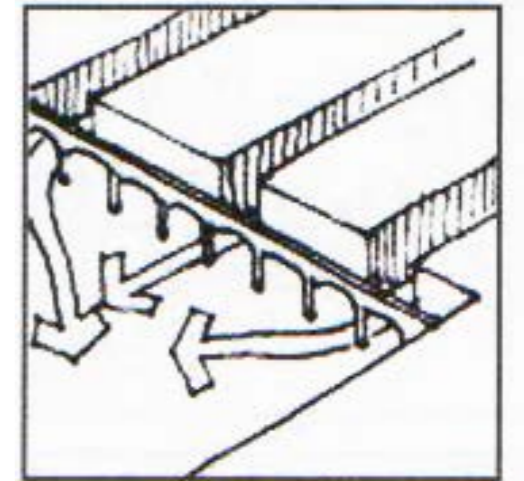


157.principls for planning the urban plaza
(source :Pakzad,2005)

- Localization of different functions in the plazas should not infuse congestion in some points,it should defuse users homogeneously.



- Secondary entrances to the plaza through bazaar and old context would be concealed in favor of the integrity of the plaza.



- Motor vehicles are banished in the plaza except for auxiliary and security vehicles
- More than one motor vehicle road around the plaza is not acknowledged.



158.explanatory sketches
(source Pakzad,2005)

Activities

The proposal is promoting a mixed used place for versatile activities to integrate different classes of users; residents and visitors. A study of the activities which can take place in the plaza indicates some similarities with other versatile plazas. Commercial and recreational activities as shopping and eating out, weekly/bazaars, group meetings, lingering and meeting friends, outdoor concerts and street plays, festivals, temporary exhibitions and expositions are among the transnational activities which could take place in the plaza. Moreover, a series of national and religious rituals, plays and meetings and context based events can distinguish Isfahan plaza from counterparts. The plaza would be a place for both traditional and modern classes of the community.



159.Examples of behaviors which can take place in the plaza street cafes used by traditional Iranian class citizens
(source: Pakzad,2005)

160.daily markets in Rome and Isfahan
(source: Pakzad,2005)

161.Iranian Muslims performing a holy day ritual
(source: <http://www.shahrnevesht.ir>)



162.Kite-running in Babolsar at the southern coast of the Caspian Sea
(source:<http://www.theatlantic.com/infocus/2012/01>)



163.recreational stagecoaches run on Naghsh-E-Jahan square, Isfahan (source:google earth)



164.people enjoying evening in bars in a plaza in Capri, Italy
(source:author's photography)



165.Iranian youths shoot water at each other with water guns, k in northern Tehran,
(source:<http://www.theatlantic.com/infocus/2012/01>)



166.Temporary cultural bazaars
(source:http://www.unspecial.org/UNS636/UNS_636_T05.html)



167.Iranian men play a traditional game during a nomadic pastoralist festival in northern Tehran
(source:<http://www.theatlantic.com/infocus/2012/01>)

Renovated plan

area:110600 square meters

Given the historic significance of the context, the intervention focused on eliminating elements that hampered its legibility while also bestowing a subtle, rational treatment on the newly recuperated spaces. The interventions aims to intensify the use of the historic centre and the role of squares as places of civic exchange.

Improvements of the square range from basic space planning to accommodate versatile activities, upgrading street paving, public lighting and signage, as well as facades and storefronts. While these improvements by themselves do not generate economic activity, they can do much to attract and enhance commerce.

Saljulk plaza is restored ,navigating the 2 intersecting streets to the by-passes underground,freeing the space of vendors and stalls(navigating them to the shops on south and east edge of the square.

Monuments

2 important religious heritage venues: Jameh moSque and Harounieh complex would be emphasized and recognized from the 2story facade round the square bestowing green landscape in the square connecting it to the context.

Kasegaran (religious)school is revamped .It would accommodate a history museum on the history of old context of Isfahan.

Part of remains of Kasehgaran dilapidated neighbor mosque would be preserved as a memorial to the heritage in the plaza.

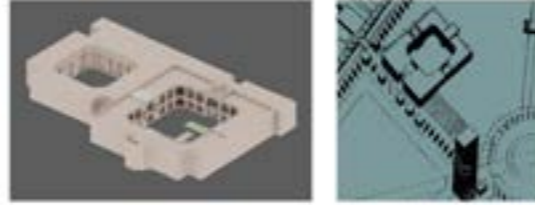
Jameh-mosque entrance recognition

The entrance of Jameh mosque would be reorganized ;un-organized stalls would be removed from the entrance of Jameh mosque. The entrance would be visible from the plaza ,recognized on a platform approached by monumental stairs .

Integrity

Arcades along 2 edges of the square ,on the bazaar external facade, provides shade and in congruence with 2 story commercial -recreational s edges of the square.. The arcade is one story high ,but the facade is made in 2 story to be in congruence with 2 story commercial -recreational s edges of the square.

commercially re rational facilities;shops replacing new commercials,stalls on the previous square,bars and restaurants are infused on south and east edges of the square in 2 stories incongruence with bazaar .



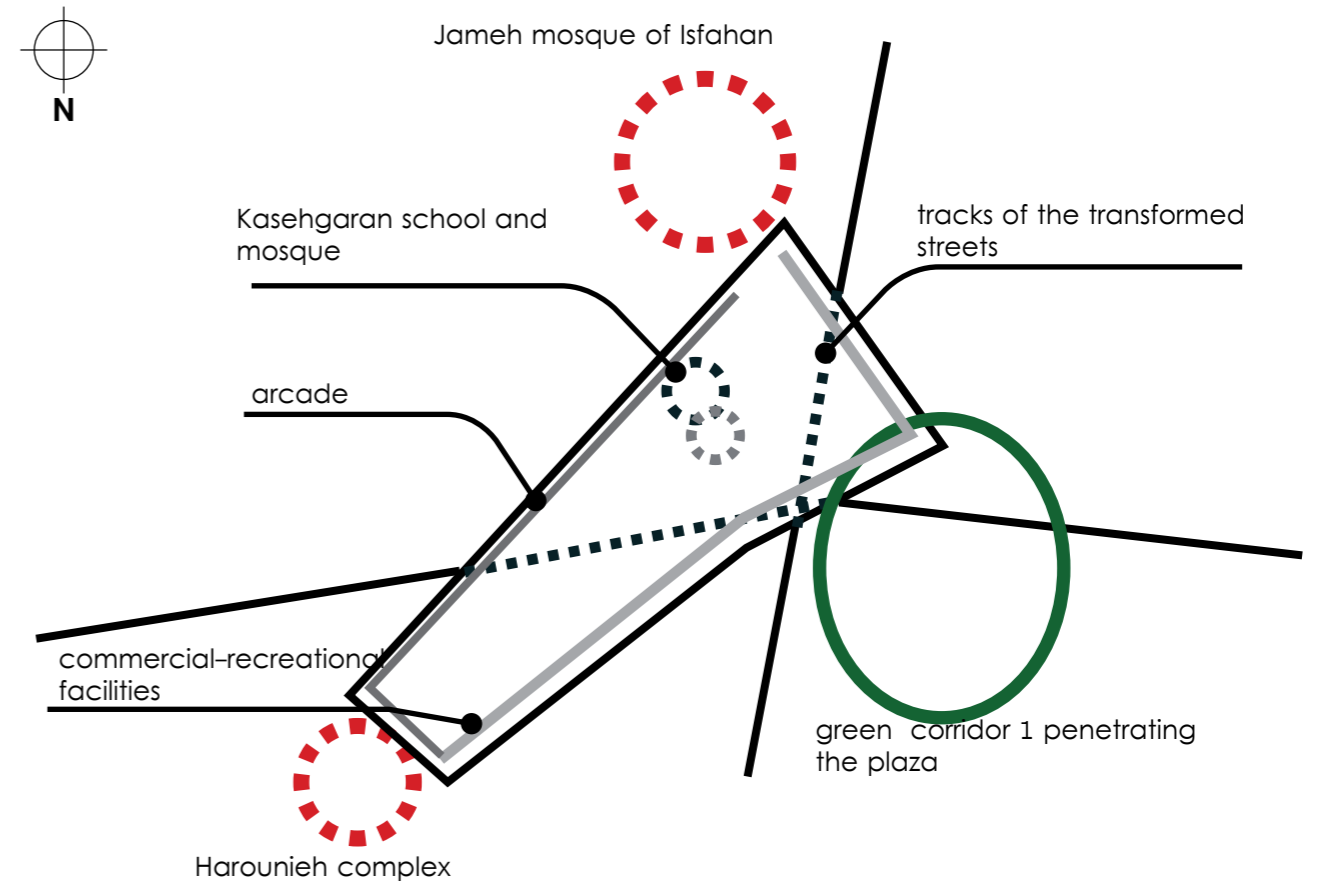
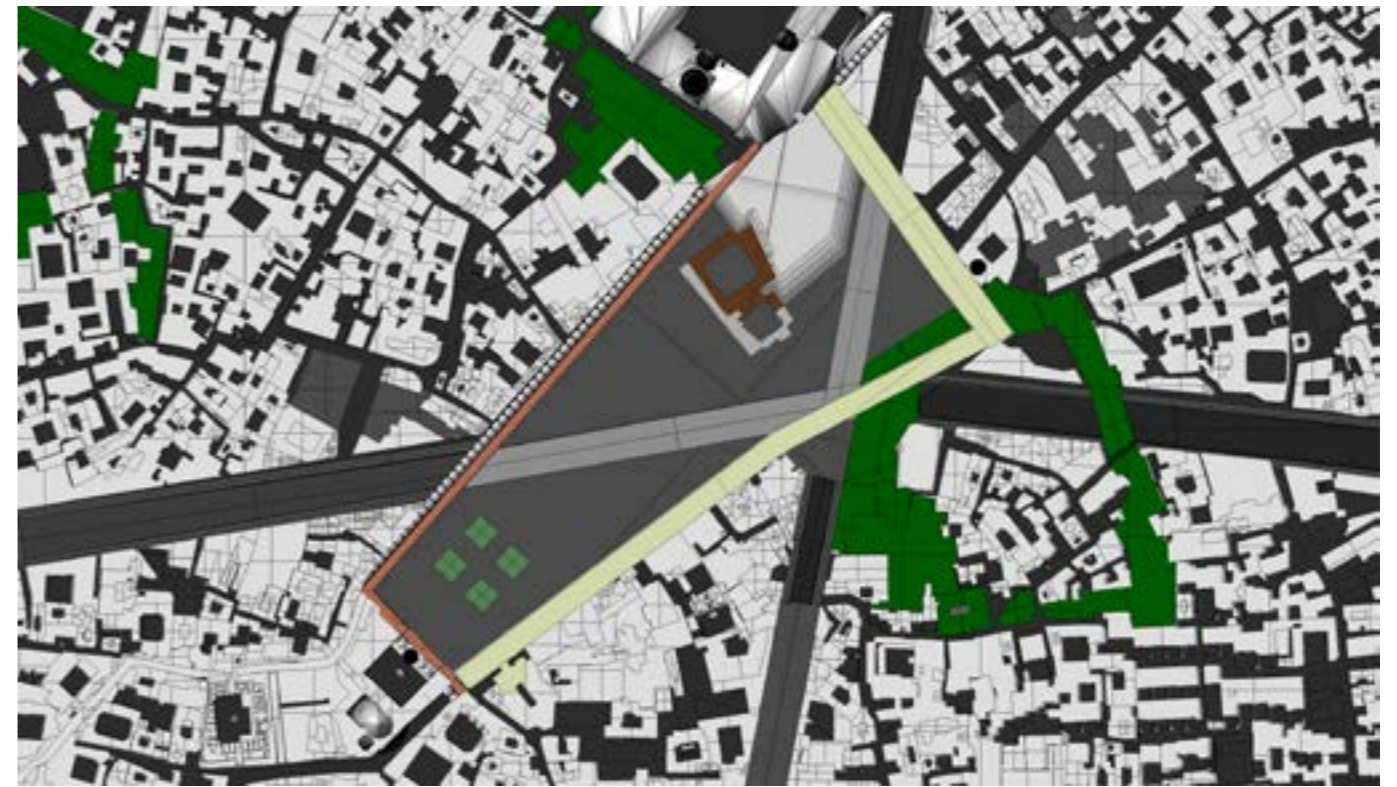
168.Kasegaran (religious)school is revamped .Part of remains of Kasehgaran dilapidated neighbor mosque would be preserved as a memorial to the heritage in the plaza.



169.Entrance of the historical monument raised by monumental stairs in Piazza Gramsci Cinisello Balsamo(source: <http://www.publicspace.org/en/works>)



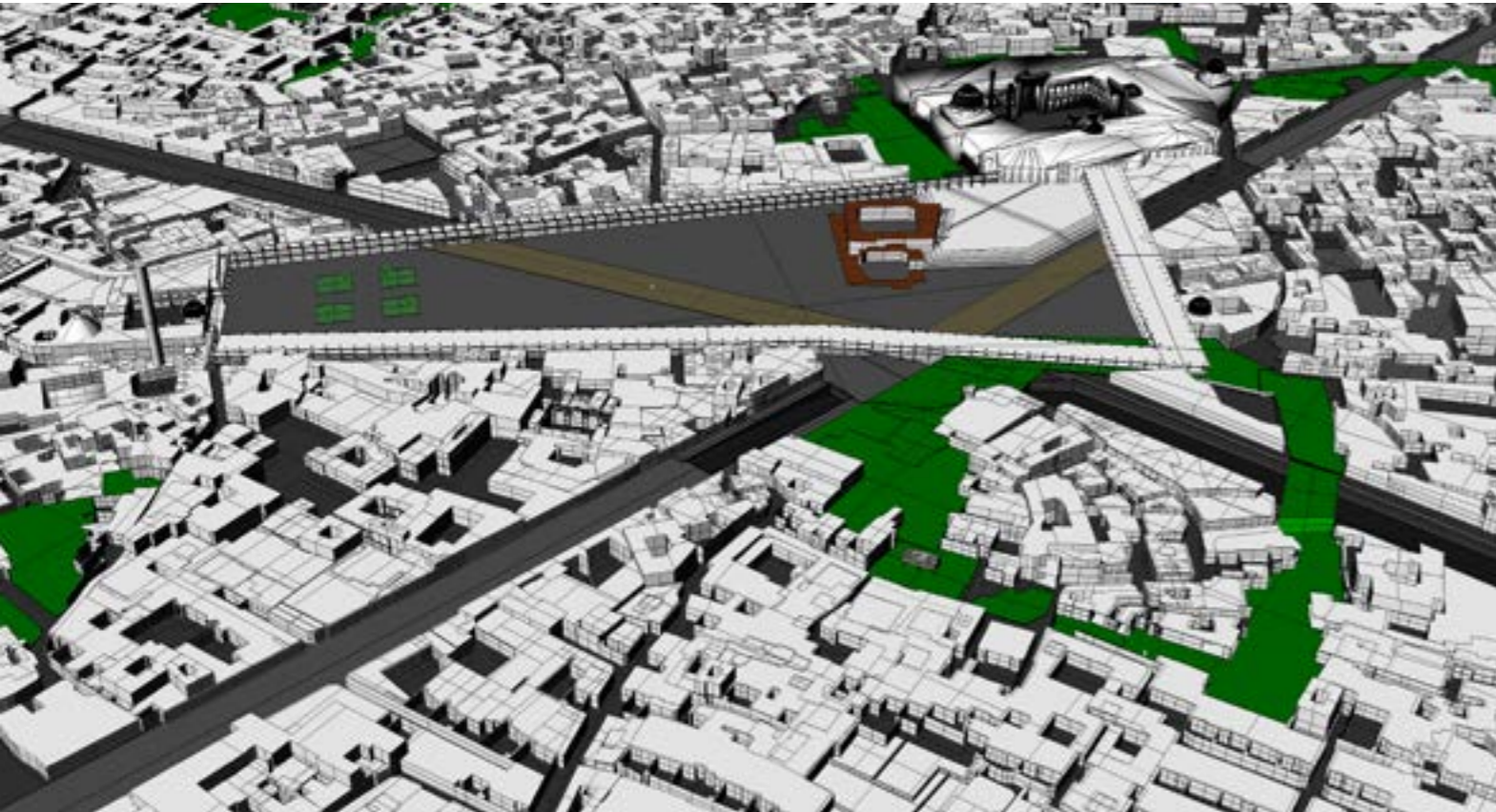
170. bazaar on Naghsh-E-Jahan square edges in 2 stories integrity around the plaza. (source:www.panoramaio.com)



30 PLAN OF THE RENOVATED PLAZA

(source: author's drawings)

Restoration of Saljuk plaza



31 VIEW TO THE RESTORED PLAZA FROM SOUTH EAST

entrance of Jameh mosque on north east is recognized adjacent to Kaseh-Garan School renovated as a museum with restoring a part of the dilapidated neighbor mosque as a memorial

The previous axis of the transformed streets are distinguished on ground by changing the paving pattern as a memory

Green corridor on south penetrates to the plaza under the two story arcade in continuum to the shops

(source: author's drawings)



32 VIEW TO HAROUNIEH COMPLEX ENTRANCE ON WEST SIDE OF THE PLAZA

view to Harounieh complex entrance on west side of the plaza
row of 2 story commercials on left and the arcade on right are recognized (source:author's drawings)

Versatility

Mobile urban furniture consisting basically of benches and prefabricated concrete plant stands, street lights set on wheeled platforms and light weight structures that make it possible to shape the space in many different ways and for many different functions according to the needs of the moment.

Greenery

Green corridors linking 2 separated parts of the neighborhood upon old context, penetrates the square area on south east

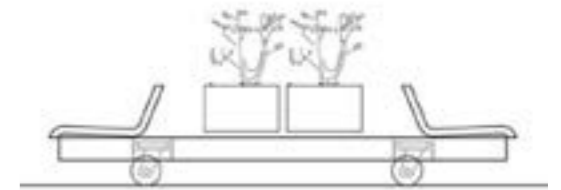
Light green gardens are proposed to revitalize the plaza but not banishing the predominant views.

Pavement

Change in the paving materials on 2 axes moderates the huge scale of the square and recalls memories: previous axes of 2 streets which were a part of the history of the plaza.

The paving of most of the surface except to the 2 citing axis which are paved in a different smaller pattern, is done in large granite slabs of 120 cm. squared, neutral in direction to be usable for different activities.

At some points the granite flagstones have been replaced by lights set into the pavement.



171. Mobile urban furniture on wheeled platforms

172. mobile pavilion installed for a special event

173,174, light green gardens and plant stands applicable in the plaza

source: <http://www.publicspace.org/en/works>



33 view to Harounieh complex entrance on west side of the plaza
(source:author's drawings)



34 Next page:view from south towards Jameh mosque and Kasehgaran (religious)school
3 episodes depicting versatile event and uses in the renovated plaza ;market at weekends with tables and benches for chess and backgammon players on weekdays,concerts,religious rituals,lingering and meeting,recreational activities..
Kasehgaran (religious)school is revamped .Part of remains of Kasehgaran dilapidated neighbor mosque would be preserved as a memorial to the heritage in the plaza.



175. present situation of the main entrance of Jameh Mosque
(source: NAQSH, E, JAHAN-PARS) Consulting Engineers, 2010.)



176. present situation of the Id plaza
(source: www.panoramaio.com)



177. present situation of the Id plaza
(source: www.panoramaio.com)

The entrance of Jameh mosque would be reorganized ;un-organized stalls would be removed from the entrance of Jameh mosque. The entrance would be visible from the plaza ,recognized on a platform approached by monumental stair



2 STORY PARKING UNDERGROUND

178.a 2 story parking-upside down!
source(author's photography)

The cutting streets would be transferred to an underpass. A 2 level parking area would serve the district at the west part of the square underground off the safe zone of 100 meter from Jameh mosque which would serve 756 cars. The streets around the square would be pedestrian with limited motor vehicle access. Only the street on west edge would be vehicle allowed.

6-2-neighborhood squares-places

In this sub-unit the focus is on renovation of small neighborhood squares-places which require comprehensive reorganisation and space planning.

Improvements in these spaces can do much to enhance the image of the area and attract visitors.

Small neighbourhood squares are found throughout the inner blocks of the quarters, often associated with memorials of saints, community mosques, neighborhood bazaars or at intersections. Street modifications and widening some old paths has also provided some local "places". They can be used as forums for commercial activity and social interaction.

These spaces can be targeted for simple low-cost improvements, designed to encourage informal contact and community life.

The actions foresee the involvement of local residents in an improvement scheme for the places that includes elimination of informal vehicular parking and the upgrading of public utilities, paving and lighting. The scheme will be complemented by facade improvement programmes of the residential and commercial buildings around the square, as well as selective restoration of the valuable plots facing the square.

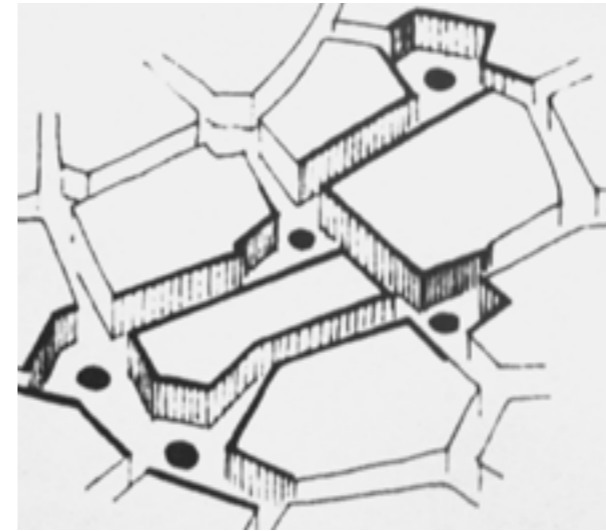


179. examples of local neighborhood squares, Capri, Italy (source: author's photography)

Arts on Track project is an example of a public philanthropic partnership highlighting how devoted citizens worked together to enhance Toronto's public spaces.

Stakeholders' Concerned about the declining condition of public spaces in the city, convened a communal dialogue to explore how residents, businesses, community organizations, and government might work together to create public space that enhances the livability and social cohesion of the city, and how private interests, including philanthropy, could be integrated into supporting public space.

(source: <http://tcf.ca/vitalinitiatives/artson-track.html>)



180. sketch shows local squares in a neighborhood (source: Pakzad, 2005)



181. examples of local squares in Isfahan project area, associated with memorials of saints, community mosques (source: google earth)



local squares attribute to street and neighborhood modifications on an urban axe provides local "places" for residents to be present and interact



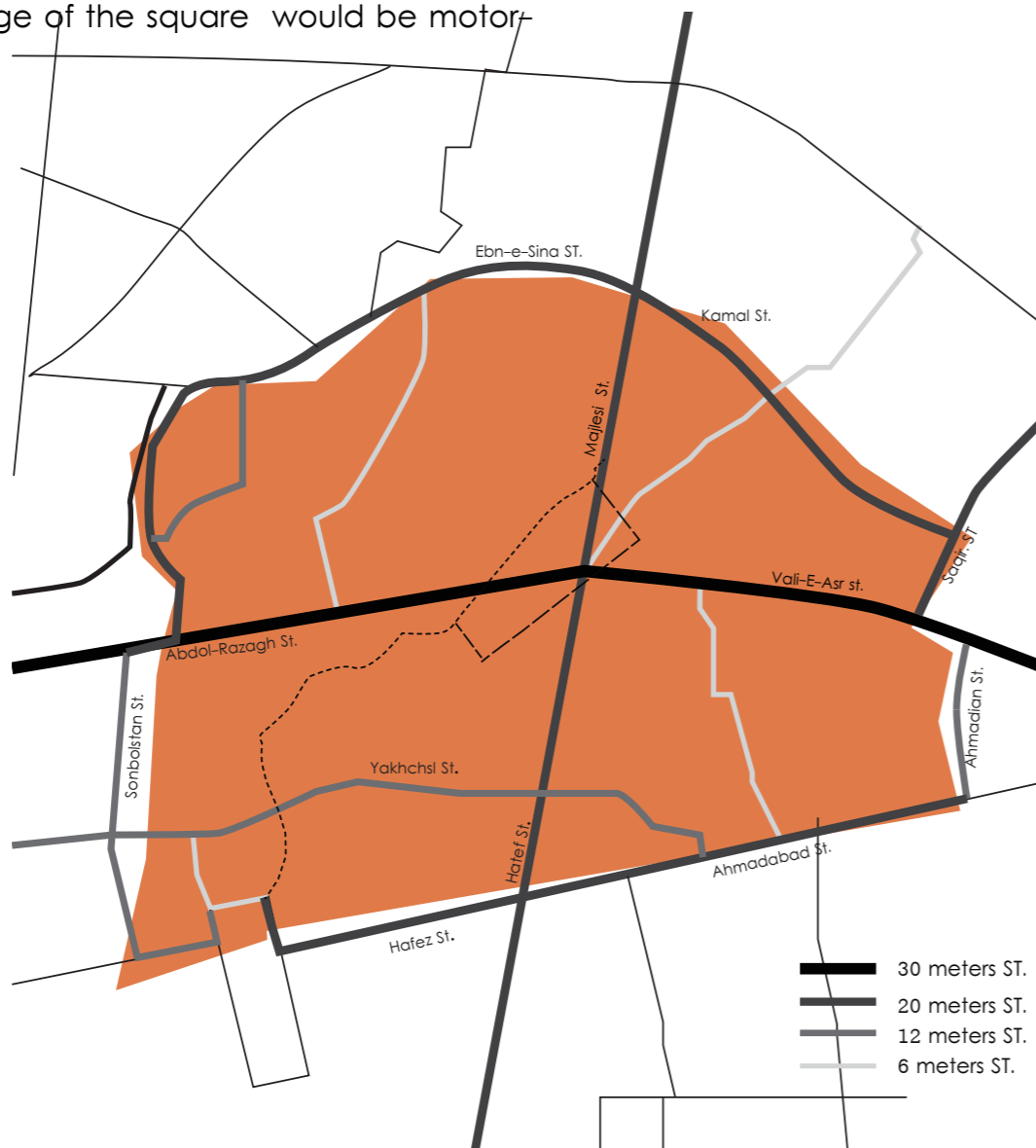
35 An example of improvement of a local square in the project area as forums for commercial activity and social interaction. (source: author's drawings)

7- Streets and infrastructure modification; an integrated network

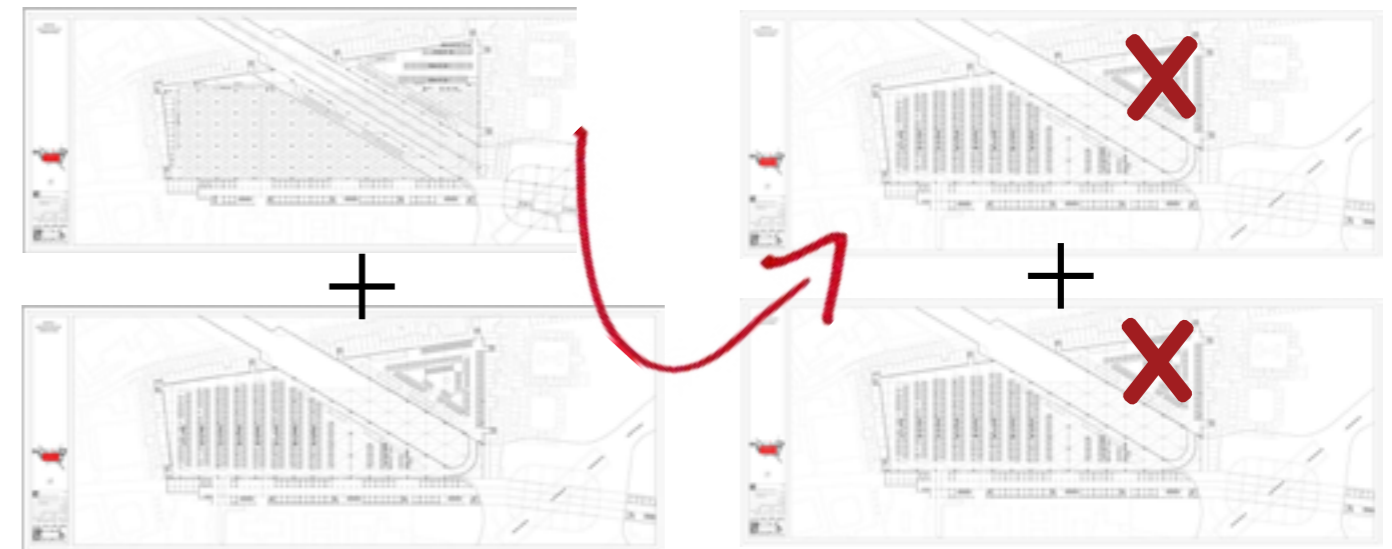
The aim of infrastructure modification is preserving the nature of the old infrastructure and historical paths while reforming the deficits

Old Atigh Square as the heart of the area ,would be transferred to the original pedestrian Seljuk plaze,while the 4 main streets pass under the surface of the plaza according to IMR & RO project.Though the heavy traffic in the existing square would be eased through the new under-passes.

A 2 level parking area would serves the district at the south-west part of the square,out of a 100 meters buffer from the foundations of the heritage mosque, underground. It would accommodate 756 cars in 2 floors . The streets around the square would be pedestrian with limited motor vehicle access. Only the street on west edge of the square would be motor-vehicle allowed.



36 The sketch shows the Sajuk square at the heart of the area along with the main streets with the existing widths (source: author's drawings)



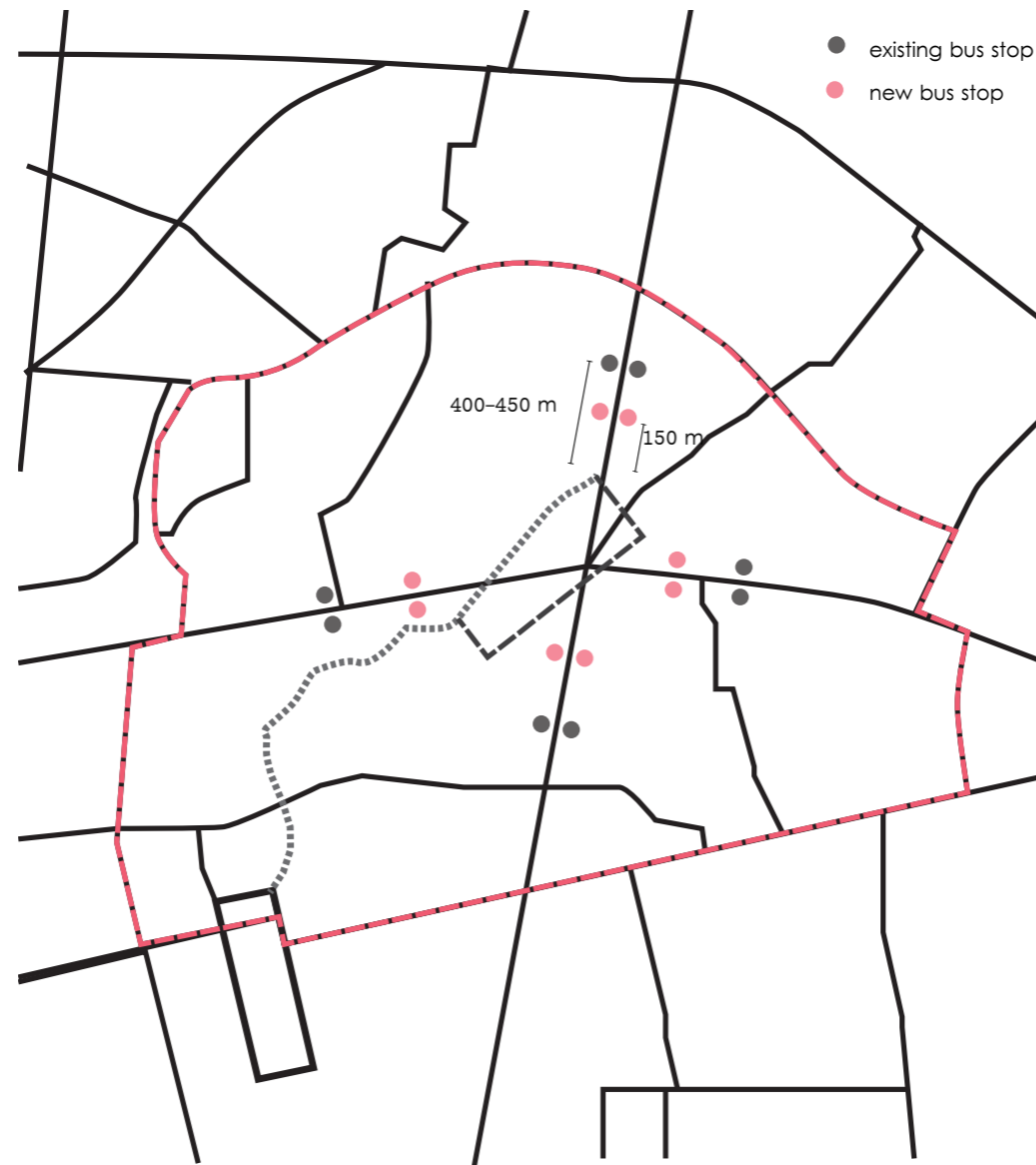
IMR & RO's proposal for 1st and 2nd basement floors under renovated Saljuk plaza vs. new proposal for for 1st and 2nd basement floors under renovated Saljuk plaza
The new project proposes 2 floors of underground parking lot on the west of the underpass (each floor accommodates 378 cars and totally 756 cars in 2 floors)instead of IMR & Ro's proposal for a multipurpose saloon on first basement floor+one floor of parking lots in second basement + 2 story of parking lots on north east side of the underpass in the buffer zone of 100 meters of the heritage square.IMR & RO 's proposal accommodate 498 car totally.

The other consideration is to persuade users to use public transportation by increasing the number of bus stop in the neighborhood and facilitating the non standard existing bus and taxi stations. The existing stations around the central square are in a distance of more than 400 meters.The project proposes new stops in a distance of 150 meters from the renovated plaze.

The subway line 2 would serve the area at a Molavi station when it starts running,although it's presence in a buffer zone of fewer than 100 meters from the foundations of the heritage Jameh mosque and other historical monuments has been a threat.

182.Majlesi station would serve the atra on line 2 which connect west to east part of the city (source: 1-<http://www.esfahanmetro.org/introduction.php>)





37 The existing stations around the central square are in a distance of more than 400 meters. The project proposes new stops in a distance of 150 meters from the renovated plaza. (source: author's drawings)



a bus stop identified with a sign occupied with motorcycles on Majlessi Street.
 Bus stop island design in London providing recreation for the users
 Bus stop island design in London equipped with air conditioners for harsh climate (source: www.narestan.ir)

183. Bus stops should be provided with an island and facilities to place and protect the users. Examples of bus stop islands are presented above

Streets modifications

The intent is promoting a local scale-inter connected network; completing a large context based grid, few streets are proposed to be added to the existing, a few changes to the width and function of some existing and a few motor vehicle allowed streets around the historical heritage are proposed to be banned for the vehicles and become pedestrian.

The historical hierarchy of infrastructure; main path-secondary path and dead-ends would be preserved.

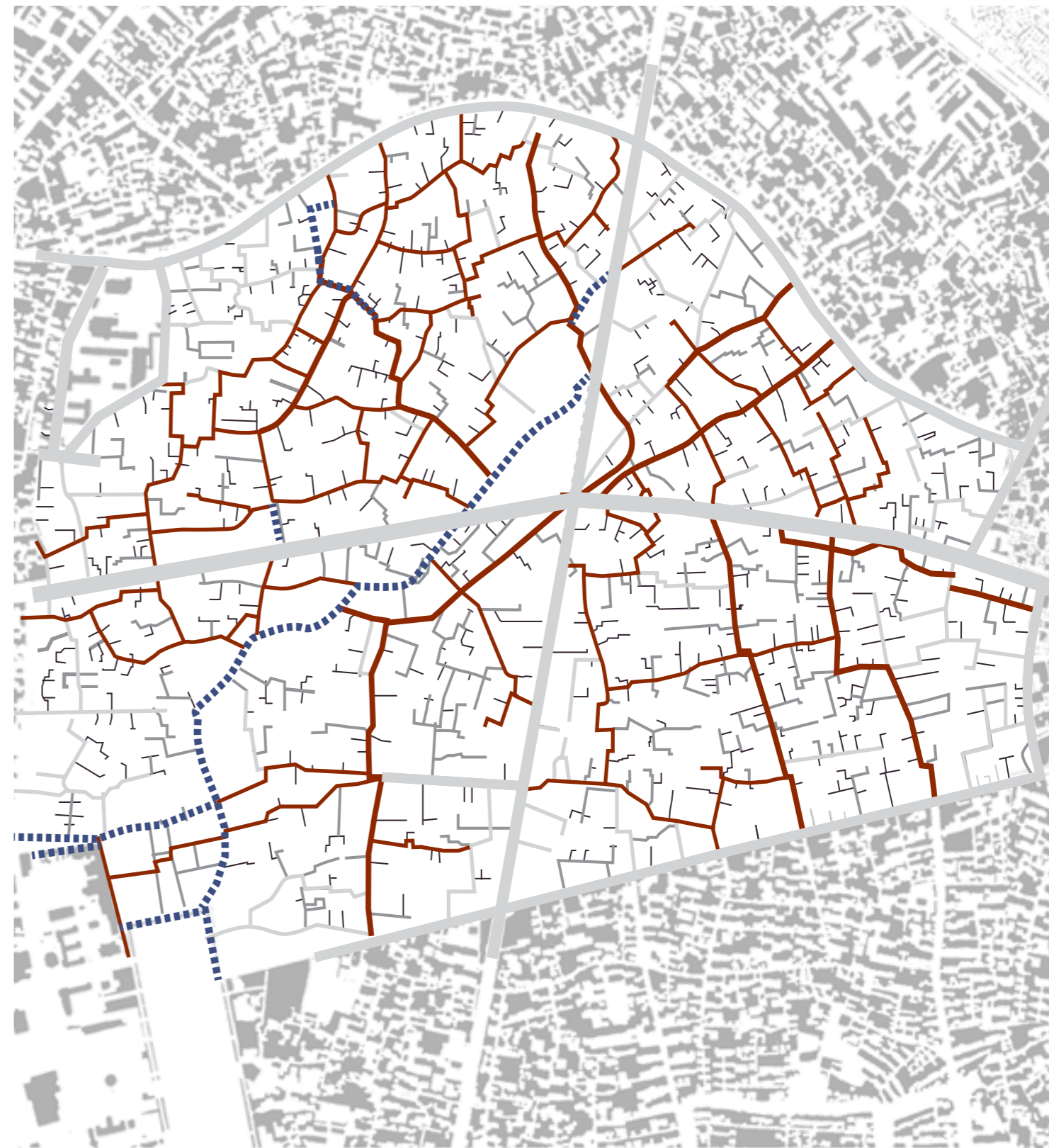
Paths with many turns in the non valuable degraded context would be straightened. It provides more connection and safety.

The streets would be widened by destroying parts of dilapidated or degraded plots with compromising with the owners. (refer to the map of replaced plots on page)



38 connected organic network

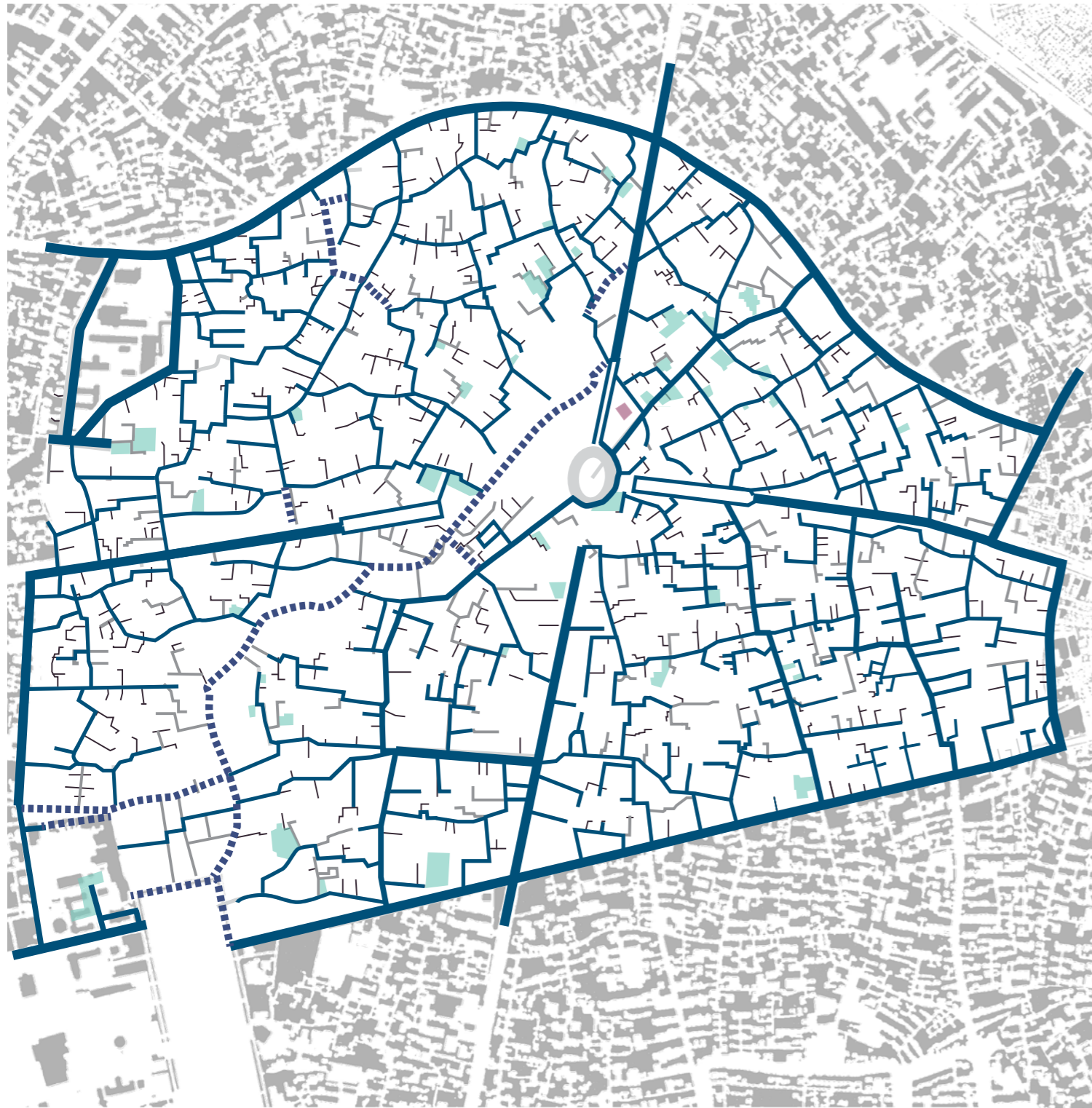
promoting a connected network by modifying the old infrastructure and historical paths



39 existing infrastructure

old hierarchal infrastructure cut by modern streets

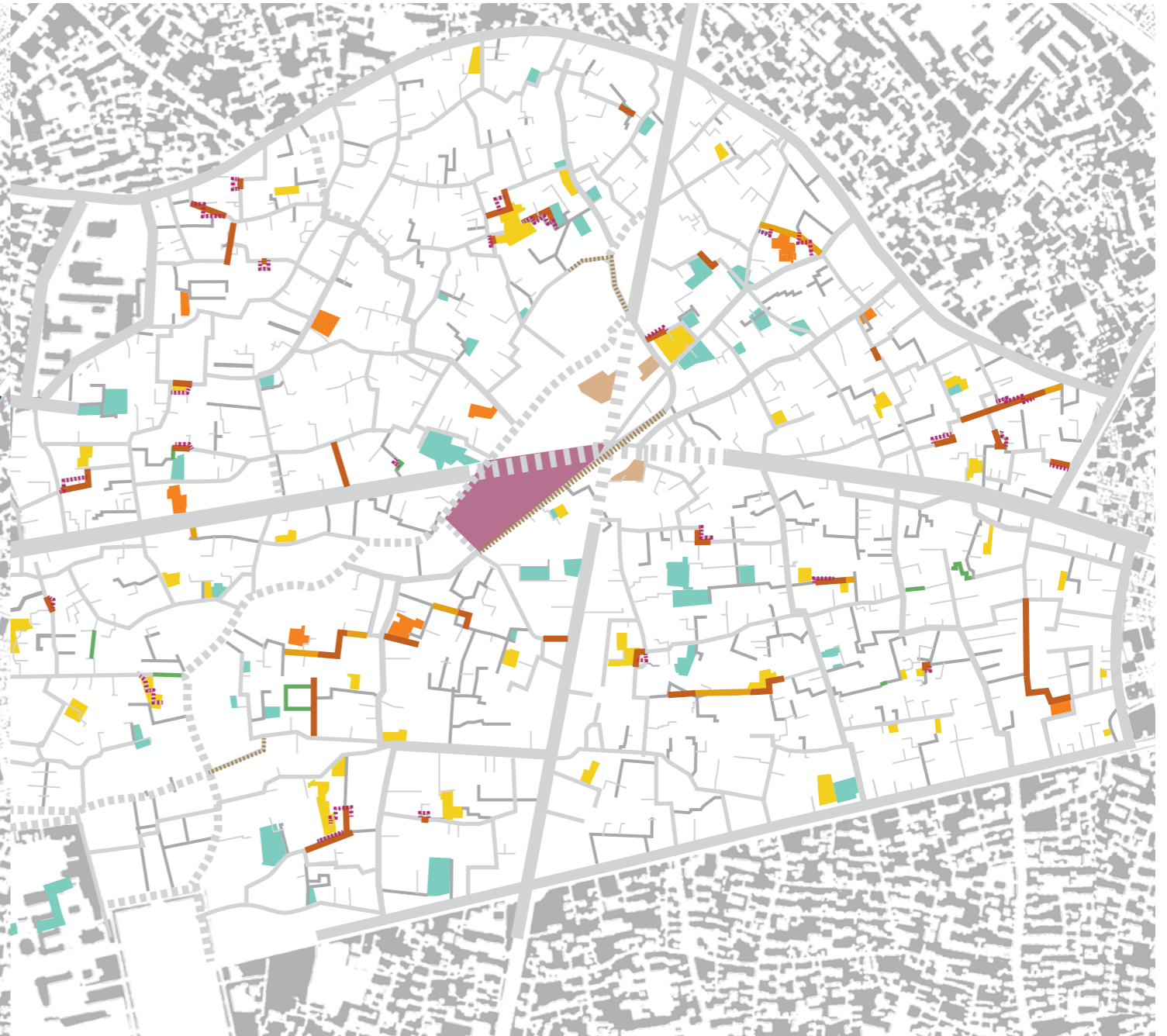
- egendexisting framing streets
- primary old paths
- secondary old paths paths
- deadends
- modern paths
- bazaar



- 500m
- motor vehicle allowed streets
- pedestrian paths
- deadends
- bazaar
- existing open parking spaces
- existing interior parking spaces

40 existing motor vehicle infrastructure

The map shows existing motor vehicle infrastructure in blue along with existing parking spaces.



500m

41 infrastructure modifications

This map presents different modifications on existing infrastructure; linking two streets with a new connecting one, changing the use of some streets from motor vehicle allowed to pedestrian and vice versa, providing some new pedestrian streets and to be replaced streets. Paths with many turns in the non valuable degraded context would be straightened. It provides more connection and safety. The existing parking lots and "to be added: ones" are distinguished on the map as well. The new parking lots would replace some blighted or dismissed plots specially in vicinity to urban axes, green corridors and public places.

- existing streets
- bazaar
- new motor vehicle street
- existing pedestrian streets modified to motor vehicle allowed
- new pedestrian streets
- to be removed-streets
- motor vehicle street to pedestrian street
- existing on-site parking lots
- parking lots to be removed
- new on-site local parking lots
- new on-site public parking lots
- new off-site underground parking



184. existing off site parking near bazaar entrance(source:www.panoramaio.com)

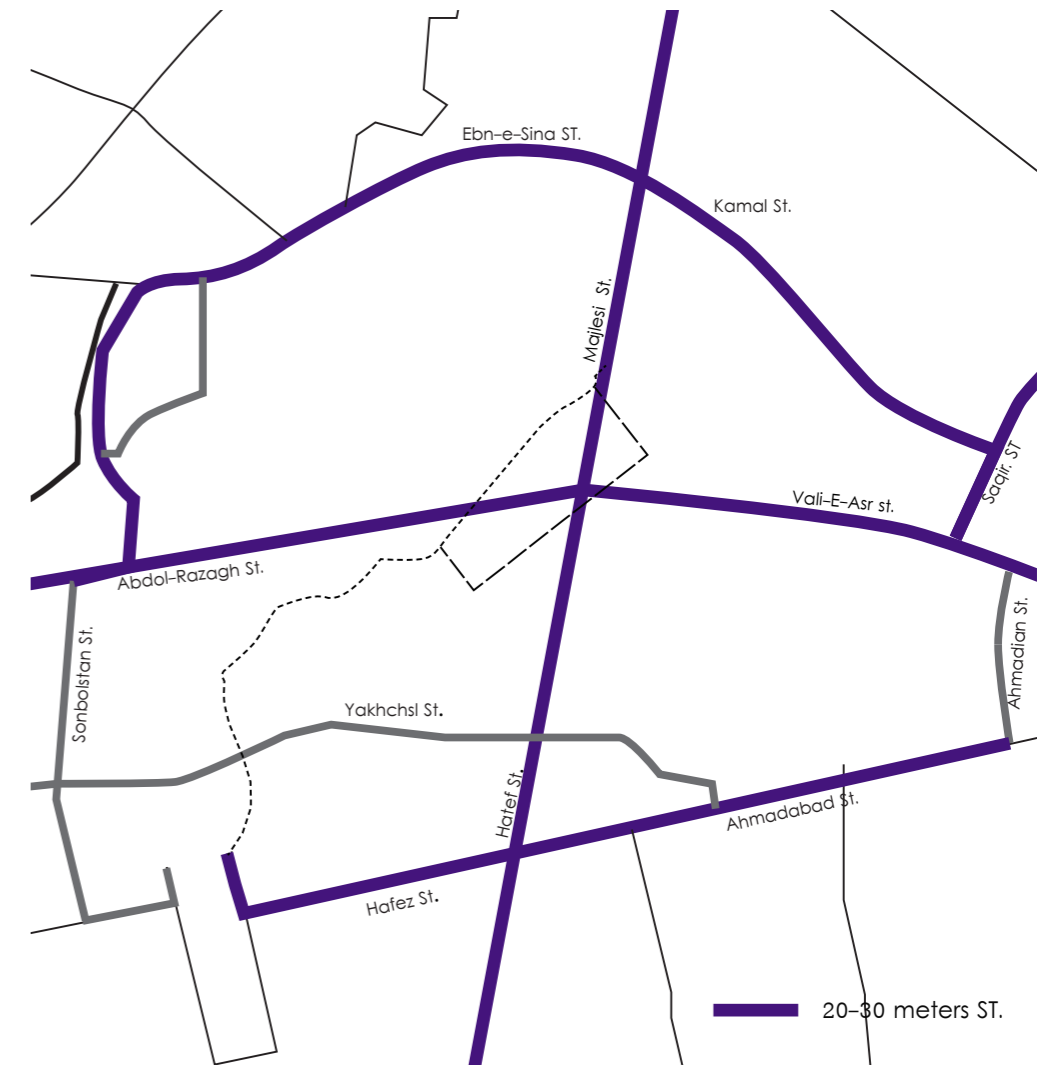
Other than bus and taxi, other Major means of transport in bazaar area and city center in Isfahan are motorcycles and bicycles. But unfortunately the city suffers from lack of required infrastructure for supporting the riders. Unsafe mixed streets, lack of presence of bike/ motorcycle lanes and parking spaces have resulted in unsafe, unorganized and chaotic traffic atmosphere. Some interventions are proposed for both cyclists and motorcyclists.

Bike-motorcycle lanes would be provided on the streets with width over 20 meters (the main streets: the framing and 4 main intersecting streets). It would provide a safer transportation for the cyclists and people often threatened by cyclists' commuting on sidewalks (in any), while the overall accelerating the traffic flows.

Motorcycle and bike parking would be provided in vicinity of bazaar area and on on-site and off site parkings proposed to substitute illegal parkings.



Cycling has been reduced as a means of transport from 4.15% of all the commuting in Isfahan in 80's to 0.5% now in 2012. Replacing bikes instead of motor vehicles has been encouraged by municipality from 80's by establishing bike lanes in parts of the city. During recent years, Municipality has started providing "bike houses" places to rent bikes. But still the city lacks the required infrastructure for safe cycling. source: <http://traffic.isfahan.ir/>



42 bike-motorcycle lanes would be provided on the streets with width over 20 meters (source: author's drawings)



185. examples of bike-motorcycle lanes on streets (source: <http://news.motorbiker.org/blogs.nsf/dx/uk-motorcycles-in-london-bus-lanes-now-official.htm>)

Sidewalks and paving would be reconstructed if damaged and would be provided for many degraded streets on which there is no division between pedestrian and vehicle movement. Greenery would be provided along the streets to revitalise the area and filter the air.

The streets would be covered at parts with endemic arcades to provide protection against hot and dry climate.

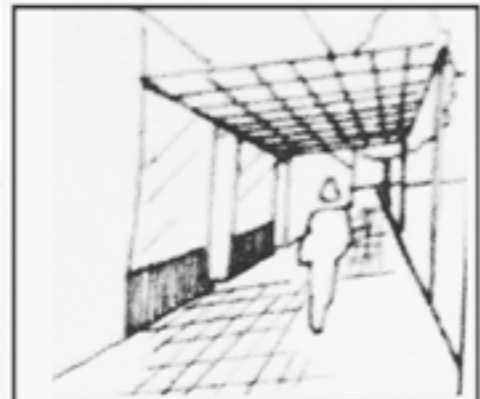
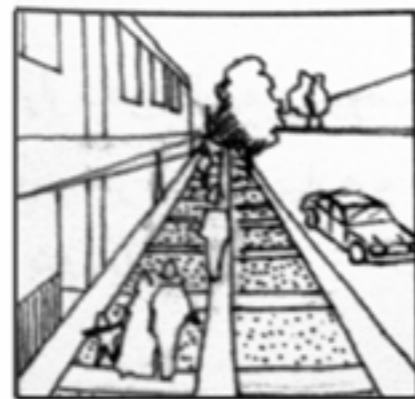
186, streets in the neighborhood with no sidewalks would be divided to pedestrian and vehicle zones by provision of sidewalks
(source: NAQSH, E, JAHAN-PARS) Consulting Engineers, 2010.)

187, 188. local streets with separated pedestrian and vehicle zones
(source: NAQSH, E, JAHAN-PARS) Consulting Engineers, 2010.)

189. an sketch showing division of pedestrian and vehicle zones by provision of sidewalks.
(source: Pakzad, 2005)

190. covering a part of Jouybareh quarter street with arcade
(source: <http://www.imbf.ir>)

191. an sketch showing covering a part of the street with an arcade
(source: Pakzad, 2005)

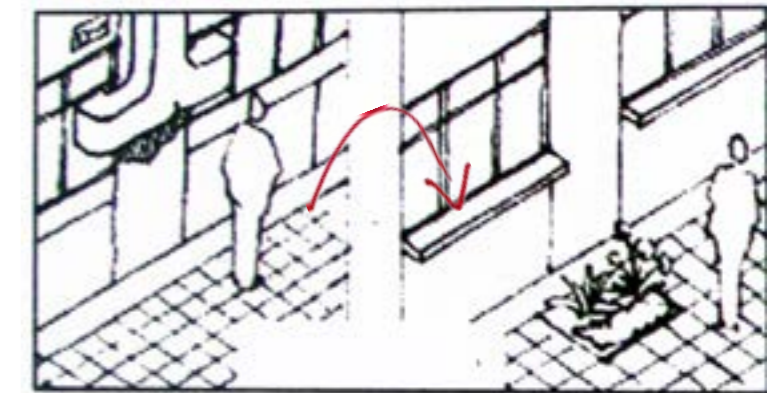


192. mechanical and electrical exposed facilities on Majlessi streetscapes
(source: NAQSH, E, JAHAN-PARS) Consulting Engineers, 2010.)

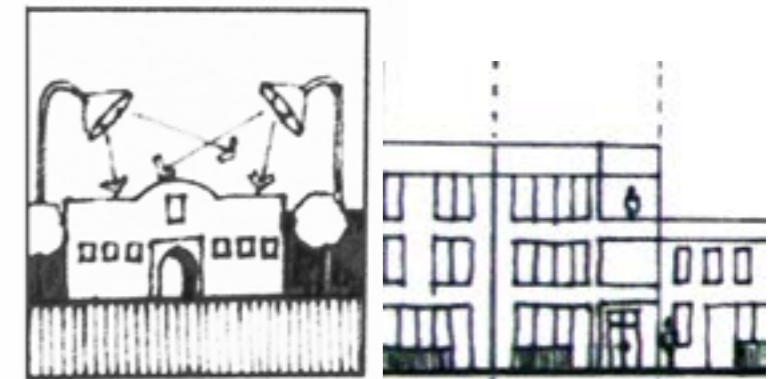
Mechanical and electrical facilities should be re-installed as "exposed". The existing exposed mechanical and electrical facilities should be removed from exposed views.

New constructions should comply with the existing context in terms of skyline, materials and architecture.

The valuable plots would be emphasized with Lighting effects which improves safety and visibility.



192. Exposed facilities should be replaced with un-exposed facilities (source: Pakzad, 2005)



193. The valuable plots would be emphasized with Lighting effects (source: Pakzad, 2005)

194. New constructions should comply with the existing buildings (source: Pakzad, 2005)

The inner Quarters

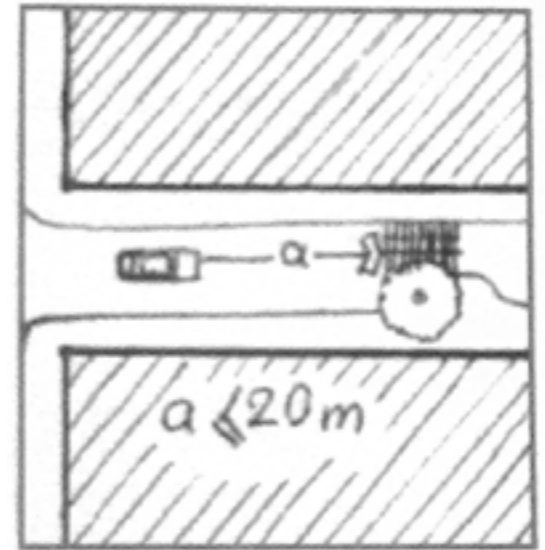
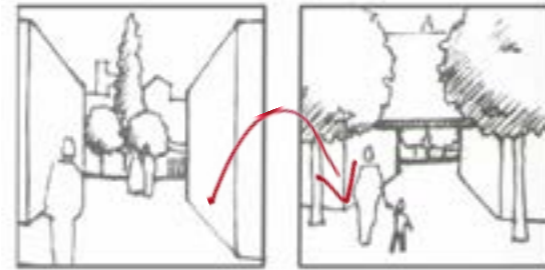
How to redeem the socio spatial hierarchy of the context?

The entrance of the quarters from the main streets ,intersections and points of focus would be emphasized with change of the pavings and./or arcades

Arcades on entrances would diminish the view to the inner quarter from outside the neighborhood,providing a hierarchical socio-spatial value from out to in. It would induce a sense of privacy and sequential hierarchy.

Vehicles are induced to speed down in quarters by provision of speed bumps,turns,greenery and narrowing the streets especially at entrances. contributing to feeling the change in the socio spatial values as well.

A mixture of masonry materials and greenery would revitalize the visual look of the area bearing in mind not to camouflage the district by plants and trees.

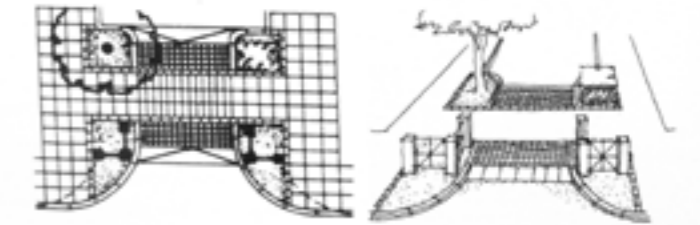
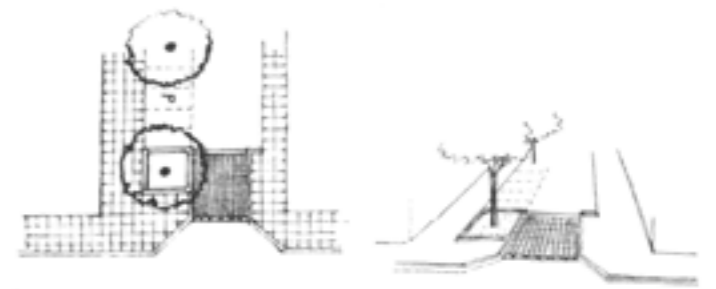


195..An arcade over the entrance of the quarters,would induce a sense of privacy and sequential hierarchy

196.changing the paving at the entrance

197,198..interventions to reduce speed in residential neighborhoods

source:Pakzad(2005))



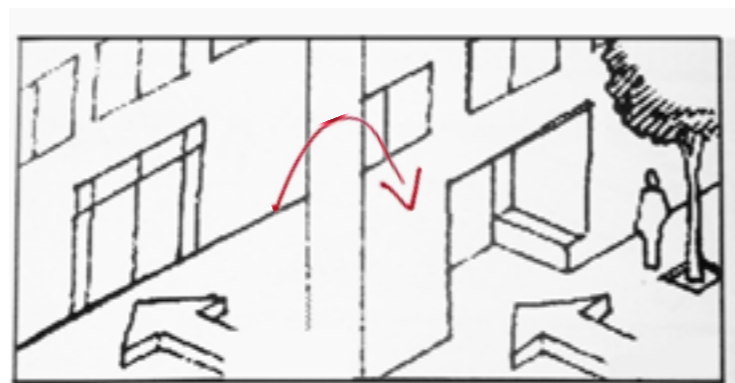
199.proposals for the entrances of inner quarters of the area-entering from main streets (source:Pakzad,2005)



44 Emphasized entrances of the 2 quarters on 2sides of Hatf street(source:author's drawings)

Entrances of the plots and other architectural elements should be planned in a way to provide "urban places" instead of facades.

Strong signage should be provided to lead Vehicles and pedestrian flow to destinations through the organic context.



200.entrances of the plots and other architectural elements should be planned in a way to provide "urban places" (source:Pakzad,2005)



211,212.Signs showing directions and details about destinations (source:author's photography)



213.sketch shows recognized signage and guidance of users " (source:Pakzad,2005)

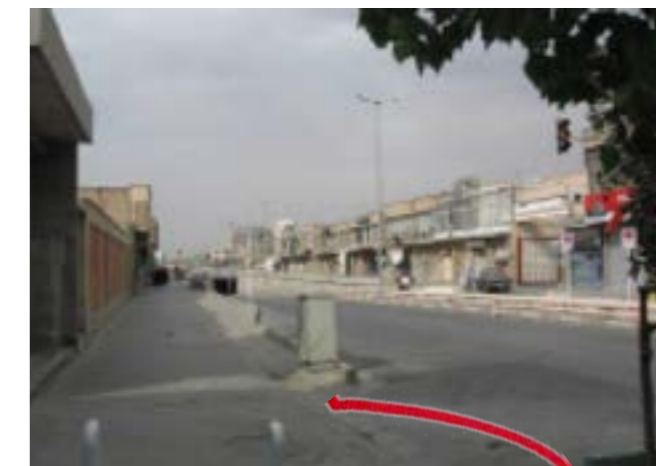
Proposals



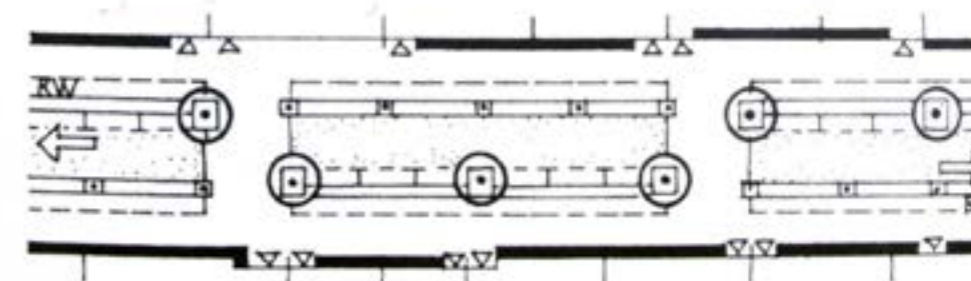
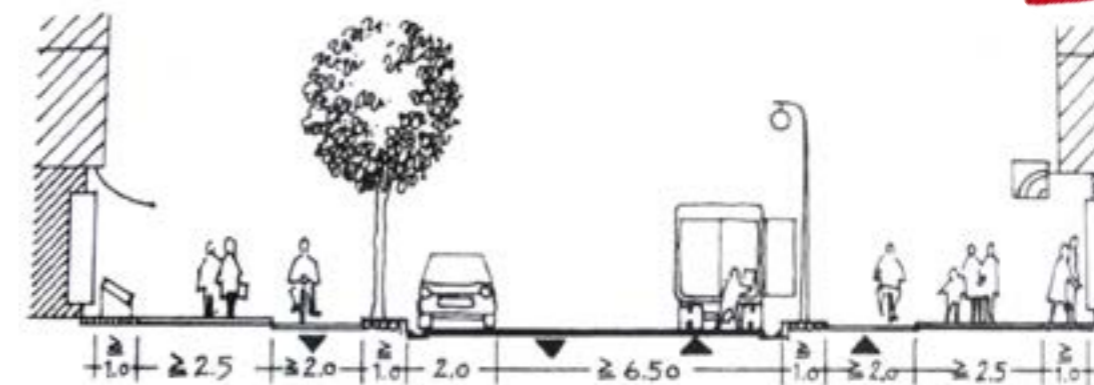
214.proposal for rehabilitation of a 6 meters wide street like the secondary neighborhood scale streets in the project (source:Pakzad(2005))



215.Majlisi Street (source:google earth) (source:www.panoramaio.com)



216.Hatef Street (source:google earth) (source:www.panoramaio.com)



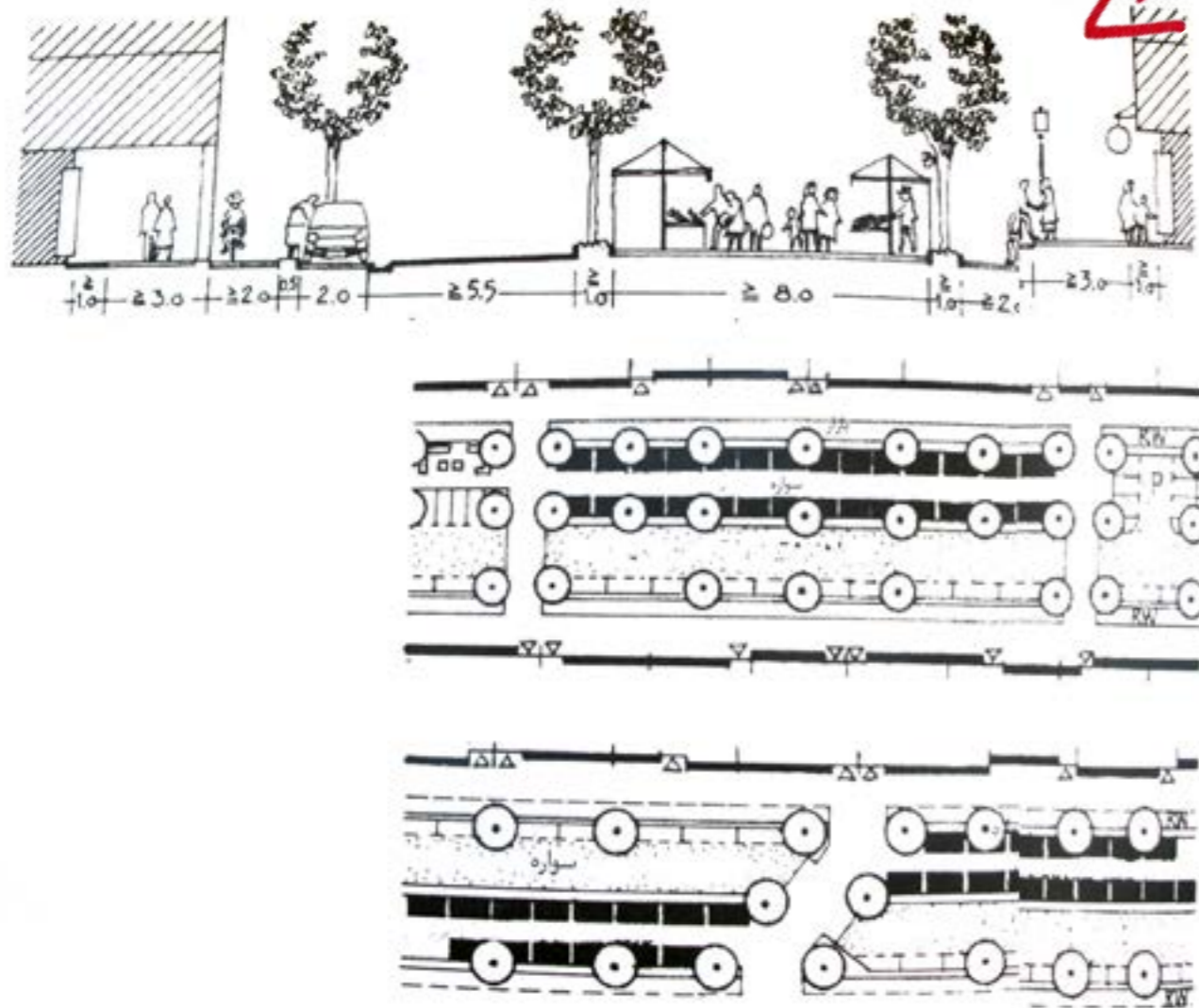
217.proposals for rehabilitation of a 20 meters wide street like:Vali-asr and Abdorazagh streets (source:Pakzad,2005)



218. Abdo-Razagh Street (source:google earth)



219. Vali-E-Asr Street (source:google earth)



220. proposals for rehabilitation of a 30 meters wide street like: Vali-asr and Abdorazagh streets (source: Pakzad, 2005)

Parking facilities

One of the consequential problems in the area is the lack of parking spaces which has affected the space and life of the users aggressively.

Planning new commercial and cultural uses along with inviting higher social classes to reside in the area would exaggerate the problem. Therefore this issue should be contemplated significantly 11 on-site parking spaces already exist in the area. Most are public and a few are private owned. Some of them are not utilized efficiently. More accurate management and transport system modification is required to provide better exploitation of the existing parking 3 existing parking spaces would be omitted as they fell in the area of the restored pedestrian area.

There are on-site free parking lots spread among present historical context which should be accessed more comfortably by modifying the paths and good signing .

A number of new on site parking lots would be established in the potential vacant lands (replacing ruins and dismissed plots) both public and private; for the use of the users especially along green and urban corridors and mixed use functions and the ones which would serve residents. Parking for the use of visitors could bring back revenues for the area.

A share for motorcycles and bikes would be considered in the existing and new parkings, also in the underground square parking. A new motorcycles parking would be considered in vicinity of bazaar other than the existing one..

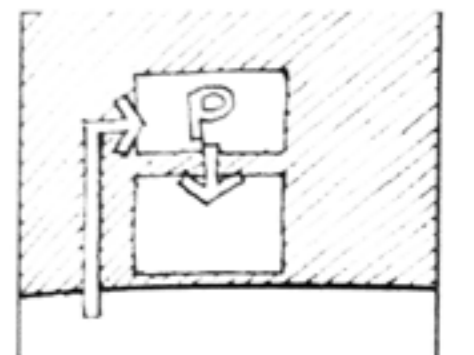
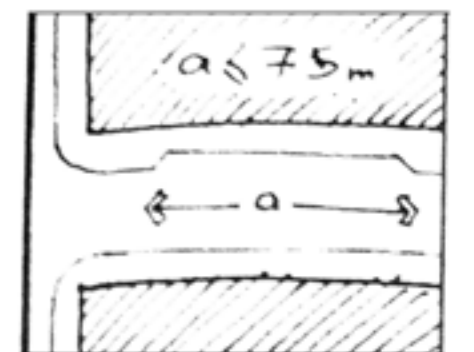
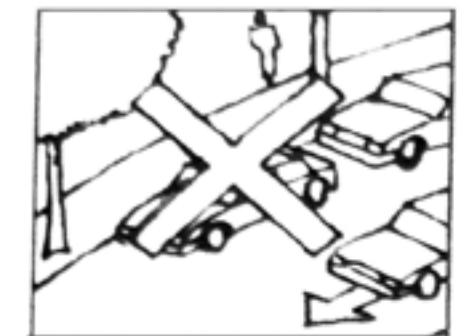
Parking should be banned along narrow crowded streets

Along wider streets parking lots should be provided at distances, each not occupying a line of vehicles longer than 75 meters.

The entrance to the parking spaces should not be on the main street, but from a secondary street.

221, 222 existing parking spaces (source: NAQSH, E, JAHAN-PARS) Consulting Engineers, 2010.)

223. sketches show obligations of parking along the streets (source: Pakzad, 2005)



20-2. Institutional tools

The implementation of the various initiatives, however meaningful in themselves, will only be of limited consequence to the district unless they are accompanied by an institutional framework. Some refining specific mechanisms and institutional tools for future actions and local involvement are presented:

- **Declaring the neighborhood as a restoration district** subject to special planning provisions, including a conservation and development plan with accompanying building regulations.
- **Establishing a dedicated task force (steering committee)** charged with the continued planning and management of the area, and, in particular, implementation of individual restoration and rehabilitation initiatives, provision of advisory services and monitoring of building applications and construction activities.
- Implementation of interrelated physical, social and economical activities is sought through action plans **and series of pilot projects** in specific locations. Over the next few years, these pilot projects will offer an opportunity to investigate key conservation and development issues and help identify policies and solutions for physical improvements that can be applied throughout the district. Whether individual monuments, public spaces or residential areas, these projects can be viewed not only as candidates for rehabilitation but also as catalysts for future social and economic revitalization.
- **Introducing indirect incentives** in the form of employment opportunities, neighborhood facilities and training. Employment-generation incentives include direct recruitment for rehabilitation and construction in the project.
- **securing the financing** for the establishment of three neighborhood facilities accommodating community, recreational, and health-related service¹

- **facilitating entrepreneurship** in circulating enterprises as middle persons; delivery platforms (like exhibition and exposition and meeting places) and creative incubators
- **breaking down the walls between the commercial and nonprofit sector.** For example, That city's Mayor's Office of culture can support a full menu of art and culture offerings that embrace nonprofit, commercial and community events and actors
- **Broadening Participation:** providing tools to broaden community engagement with the assistance of social media and Community Development Corporation these tools make it possible to efficiently engage in ongoing conversations among community stakeholders and facilitate more frequent face-to-face interactions.
- **encouraging students to provide assistance to old people in exchange for facilities;** getting discounts, free academic lessons, and housing rebates, there will be mainly voluntary initiatives to teach group exercises and therapies, but also public sector could sponsor some of these activities.
- Through programs and various media, **employing the youth**, who have an opportunity to find their voice on community issues and gain valuable experience for future work in the media industry. Youth work together in a supportive environment to promote healthy lifestyles to other young people, produce works of art, learn new skills, and become engaged in their community's life.
- establishing residents' data banks interactive communications systems, **community-based multimedia** centers, are powerful tools to enhance the residents participation
- **providing training infrastructure;** appropriate skills for production; classes and workshops, are to be expanded with the contribution of other institutions and donors.

- **using the social and political role of the mosque and religious venues** in the traditional community

A Mosque in a religious regimes is more than a place of worship but serve as a place for social interaction and gathering.

This is a place where Muslims can register to vote and be informed about current events and issues that challenge Muslim communities.

There are several famous mosques in the project area (most importantly Jameh moaque ,Hakim mosque, Ali mosque and....(refer to the map)

They provide **social recourses, political support ,spaces for meeting and interaction or even learning and getting informed. They can be utilized as places for pilot projects.**

In terms of political role; usually, campaigns for advocacy are promoted here, in which people are urged to participate in religious, social, and political activities.

The project authorities can use its power to gain legitimacy and finance for more progress, improving more social life and interaction.

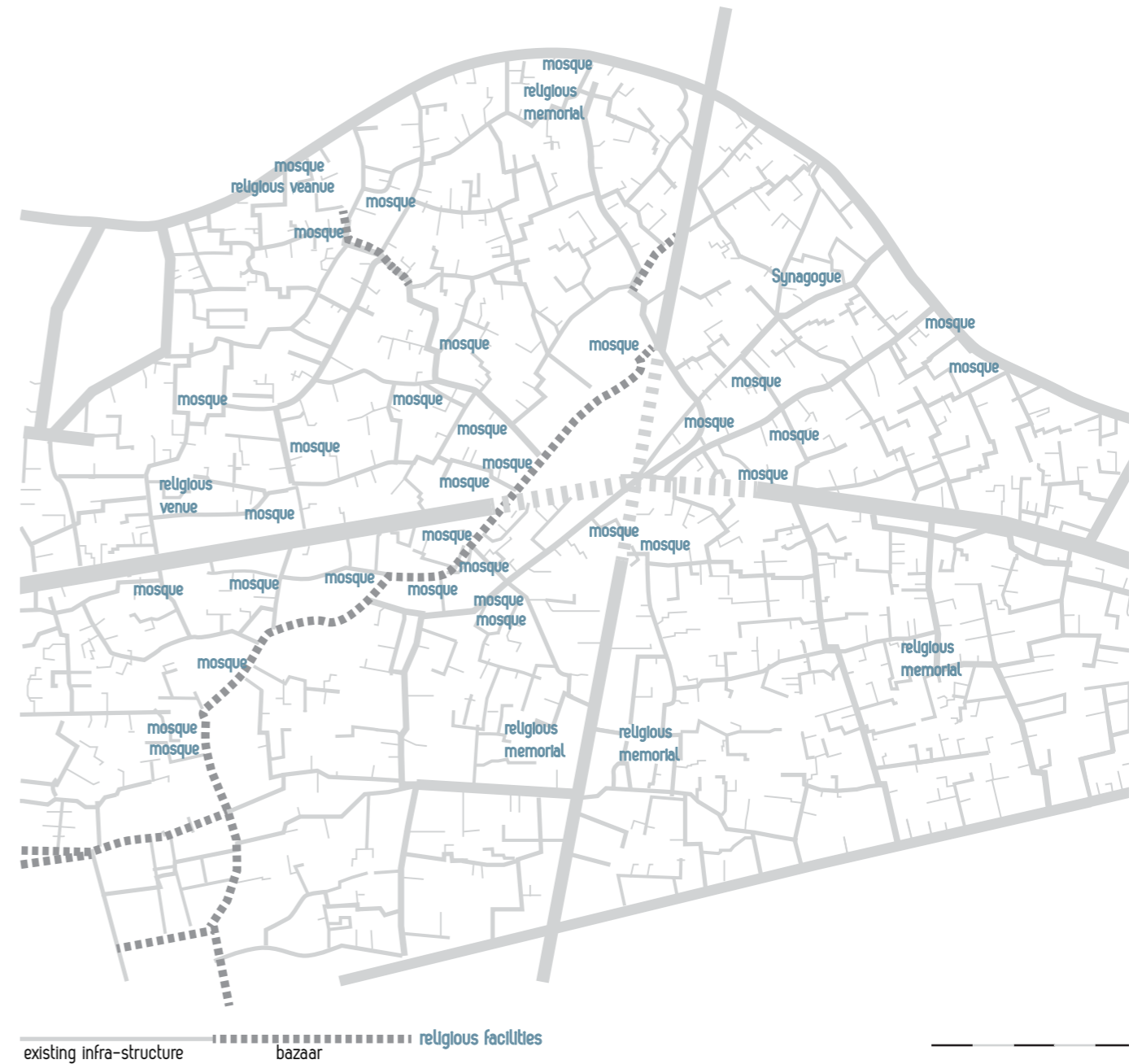
How?

- The mosque authority should be explained about the project and should be justified about its benefits to the community (for instance during the special commission sessions held at times), it can transfer the information to the residents in the daily speeches, informing them and ask them to cooperate.

- The mosque has even the power to persuade the politicians to put more resources to the project in the system which could be advantaged from.

- Different social and educational campaigns and pilot projects could be held in the mosques as public social places

- the youth and women should be more integrated and welcomed in today's mosque more male dominated mosques.



45 existing mosque and religious venues in the project area

They provide social recourses, political support ,spaces for meeting and interaction or even learning and getting informed. They can be utilized as places for pilot projects.(source:author's drawings)

20-3-Economic tools

Proposals are presented to enhance prosperity and economy with the restricted budget at hand:

1-supporting "Local economic projects

identifying opportunities for income-generating activities and offers startup assistance for aspiring entrepreneurs, implementing plans for basic physical and social infrastructure services identified as necessary by local communities; and provides small scale lending opportunities to startup enterprises.

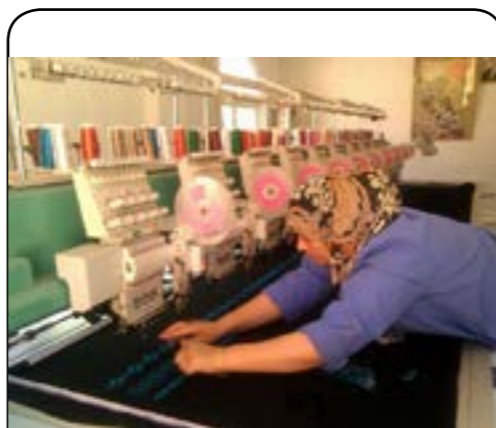
2-Modifying the traditional existing system in bazaar by:

Intensification and renewal ; the refurbishment aims to restore the original features of the bazaar, modernizing electrical work, bring in more high-end Iranian and international brands to appeal to more local shoppers. instead of under-performing stalls.

In terms of the unused non profitable industries and enterprises 3 alternatives can be implemented by the municipality:

- 1) Buying the existing un-used and non prosperous stores, replacing them with new enterprises and selling them to new entities
- 2) establishing partnership with existing owners to repair and improve their shops and services or replacing them with new enterprises-In this case municipality could benefit of acting according a general vision for the whole area and supervising the progress as well while earning money in long term.
- 3) Transferring all the unused enterprises to somewhere else. Municipality can assume responsibility for finding a location for the replaced enterprises(the case that has been practiced in the under progress project in terms of the shops and vendors who had occupied the surface of the Seljuk square. or just issue a permit for establishing it elsewhere.

The proposal of this project is alternative 2 for the stalls ,vendors and non viable businesses in bazar



Period: 2008-Present

Primary Donor(s): Jordanian Ministry of Planning and International Cooperations (MOPIC)

Building on long experience working in Jordan's most impoverished areas, NEF partnered with the Jordanian Hashemite Fund (JOHUD) to stimulate economic development in 6 of the country's poorest regions—areas designated as "poverty pockets" by the Jordanian government. The project provides capacity building training for local communities and community-based organizations (CBOs); identifies opportunities for income-generating activities and offers startup assistance for aspiring entrepreneurs, implementa plans for basic physical and social infrastructure services identified as necessary by local communities; and provides small scale lending opportunities to startup enterprises.(source: http://www.neareast.org/projects/jordan_POP2)

Cutting down on the large amount of stalls selling Made-in-China swag and fakes tuff to make room for more traditional artisans could help preserve the unique landmark.

The new commercials on the south edge of Saljuk square would accommodate the businesses stalled in the project,the extricating businesses in the old bazaar and new businesses.

3-Attracting appropriate business types

The intent is **to create a more comfortable business climate** for the existing ones by attracting number of support businesses † including research facilities, office and tech support, supply stores, pharmacies, senior transportation services, and shipping services.

Attract types of spin-off business further create **economically viable commercial districts**. Spin-off businesses provide secondary services to employees, residents, and tourists within the area. Such examples of these types of businesses include florists, gift shops, dry-cleaning, coffee and sandwich shops.

4-providing new and expanded business-assistance programs and financial incentives

5-launching Creative economy

Creative economies reflect the basic shift in the structure of the global economy from one based on the production of goods and services to a knowledge based economy .

Creative industries were defined as: "activities which originate in individual creativity, skill and talent and which have the potential for wealth and job creation through the generation and exploitation of intellectual property." 1

The focus of the project is on local cultural economy.

The target is stimulating a business climate for start up companies and to provide significant contributions to local and regional economies by creating jobs, businesses, and increasing the quality of life.

“Quality of Place” is a critical factor in determining where knowledge workers choose to locate and invest; improve the quality of place.

Businesses see the opportunities for social interaction, the quality and diversity of the environment and the urban amenity as important for their business. This economics of proximity’ is as important for consumers as for producers as it produces the additional benefits of a safe and lively environment.¹

Suggested policies

promoting a high degree of combined business and social networking in the area providing a strong basis for precisely those networks of social interaction

- Building a network of investors that will aid in the development of new businesses.

- supporting new business Incubation: It is a business support process that encourages the successful development of start-up companies by providing entrepreneurs with an array of targeted resources; management guidance, technical assistance and consultation .Incubators also provide appropriate rental space and flexible leases, shared business services and equipment, technology support and assistance in obtaining financing necessary for company growth.² incubators are sponsored by academic institutions, government entities, economic development organizations, local institutions, and for-profit entities.²

The incubator should also be aware of government subsidies that exist to help start up businesses.

- Strategies for event attraction
- importing substitution policy: is important as it leads to robust local and regional economies and it generates local cultural self-sufficiency and autonomy.

1-Mercer(2006),p.25

2-http://en.wikipedia.org/wiki/Business_incubator

6-Approaching marketing tools

Marketing tools include various services which connect clients to consumer samples. Communities and blogs have become trusted sources for new product ideas and consumer preferences .¹

These could be provided in commercial ,non-profit and community sector examples:

Commercial sector

- Commercial deals and discounts
- Persuading people to buy

Non-profit sector

- Cultural-commercial deals

Advertising, promotion, packaging and branding are important marketing tools which are used to make products and services more desirable and hence increase sales and profits.²



224.example of creativeadvertising.(source:<http://studioblog.danielledunn.com/?cat=456>)



225.example of promotion advertising (source:Walgreens Phatmacyl)



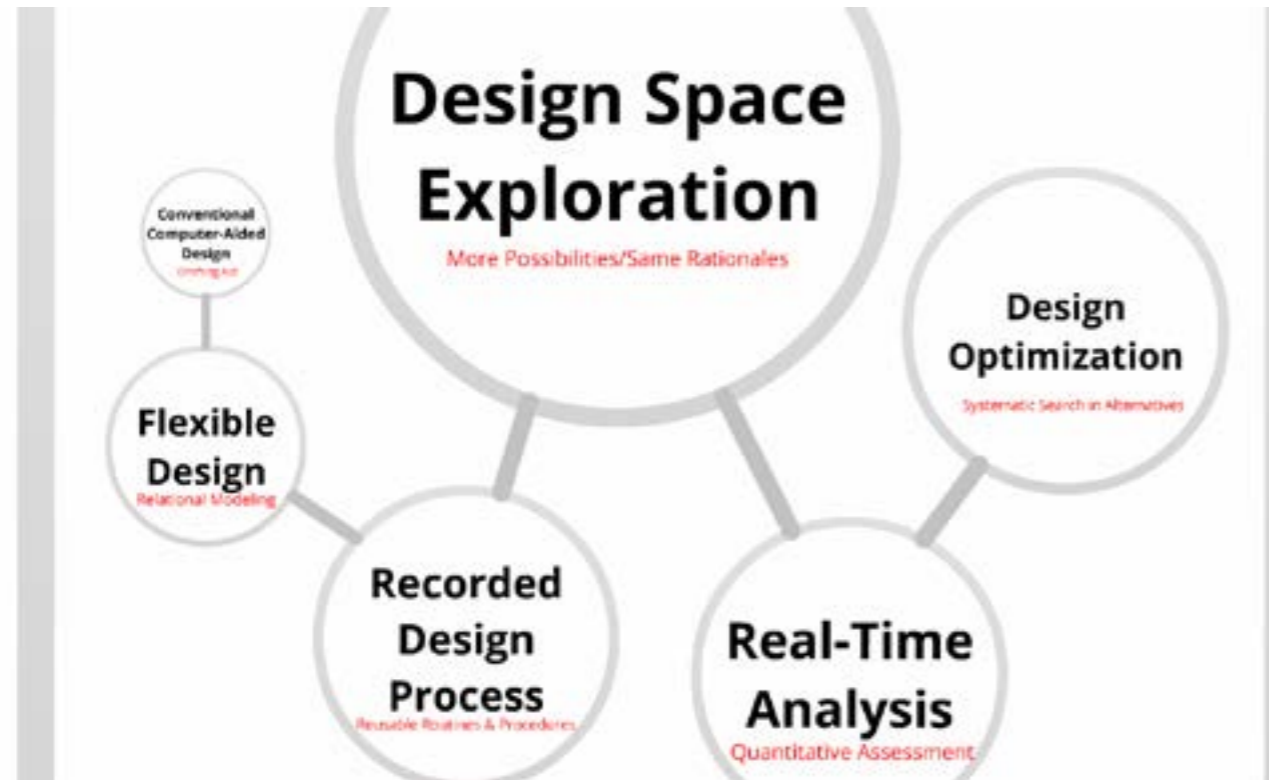
226.example of creative packaging (source:<http://jayce-o.blogspot.co.uk/2012/07/35-cute-milk-packaging-design.html>)

1-<http://en.wikipedia.org/wiki/MarketTools>

2-<http://businesscasestudies.co.uk/business-theory/marketing/marketing-techniques.html>

ONCE UPON A PROCESS

21-1-SCENARIOS-TOWARDS IMPLEMENTATION



227.The parametric tool infuses a flexible recorded approach which makes real time analysis and design optimization possible. (sourc:http://prezi.com/vugxpdznjx6e/a-systematic-approach-to-parametric-design-from-methodology-to-technology_fin/)

An associative¹.parametric design method has been chosen to test different scenarios in terms of densities. Parametric associative design empowers the planner to change one or more variable(s) (e.g. density) set in a flexible recorded process of design and observe the result and the final interface right afterward as all the steps of design are linked associatively. There for a parametric method provides the opportunity to test different scenarios to optimize the solution. The planner goes back and forth between leading idea-scenarios and alternatives to optimize a solution.

The software which is used in planning an associative design in this project is "Grasshopper" a plug-in of Rhinoceros .

Once the process planned and saved,it can receive different variables as "input",process them and shoe the results as "outputs".



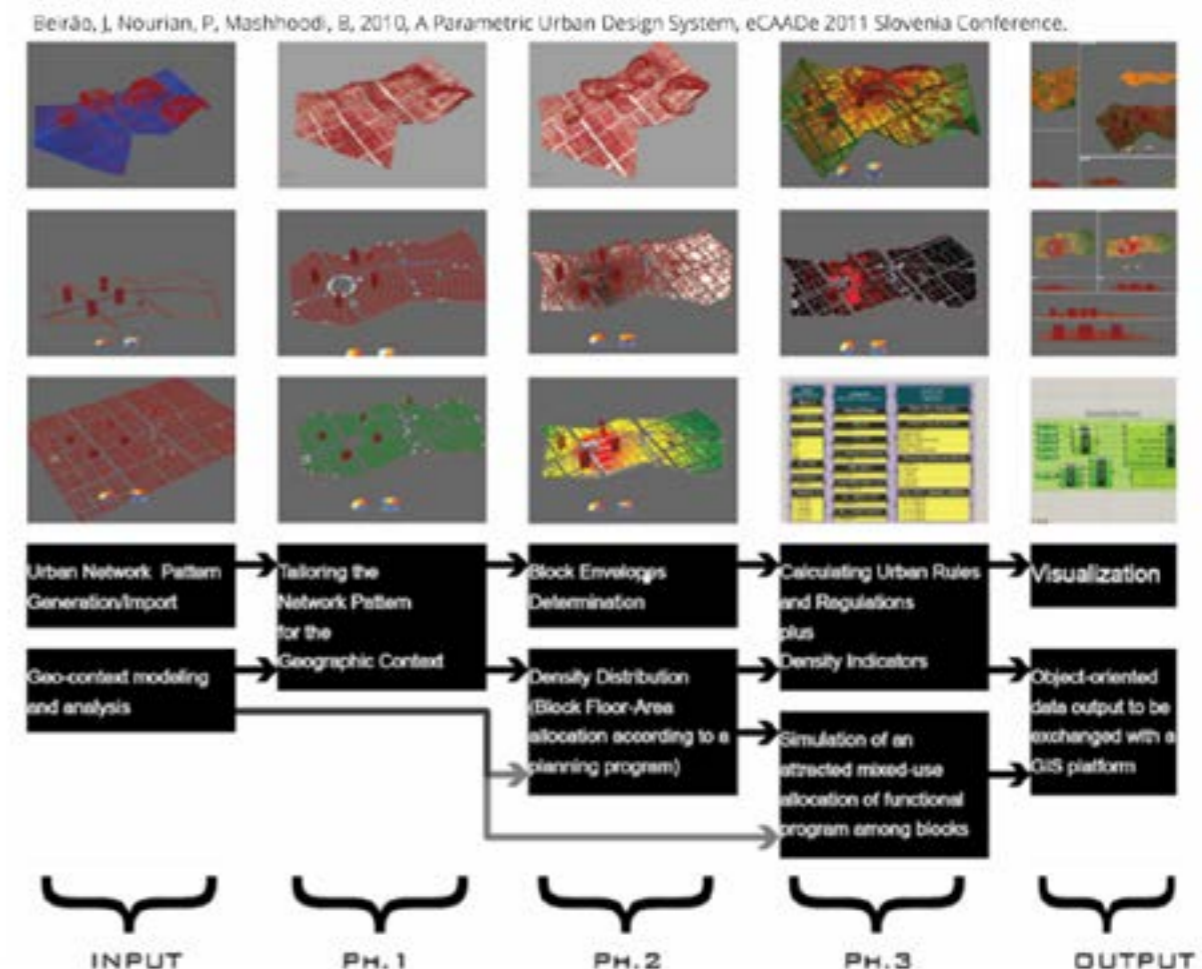
Grasshopper™ is a visual programming language developed by David Rutten at Robert McNeel & Associates.[1] Grasshopper runs within the Rhinoceros 3D CAD application. Programs are created by dragging components onto a canvas. The outputs to these components are then connected to the inputs of subsequent components. Grasshopper is used mainly to build generative algorithms.[2][3] Many of Grasshoppers components create 3D geometry.[ex 1] Programs may also contain other types of algorithms including numeric, textual,[ex 2] audio-visual[ex 3] and haptic applications(source: http://en.wikipedia.org/wiki/Grasshopper_3d)

1-For more explanation and examples please refer to Associative Design practice in Berlage(<http://www.viddler.com/v/f3ff0682>)a more "formal" approach to urban design by using associative method .

According to Patrik Schumacher Parametric Urbanism takes the paradigm and tools of parametric design into the domain of urbanism. The power of parametrics is usually exploited to cope with the rapid succession of design changes, i.e. for its ability to produce variations of a single building, or to generate versions of building components for a complex building geometry that does not allow for the repetition of elements.Parametric Urbanism suggests that these techniques of versioning can be applied to an array of buildings, so that a new version does not replace an older version but instead comes to join and extend the field of simultaneous versions in building up a complex urban

field.

This project intends to cope with the rapid succession of design changes, i.e. for its ability to produce variations",not in the form of the buildings but in the the planning process.



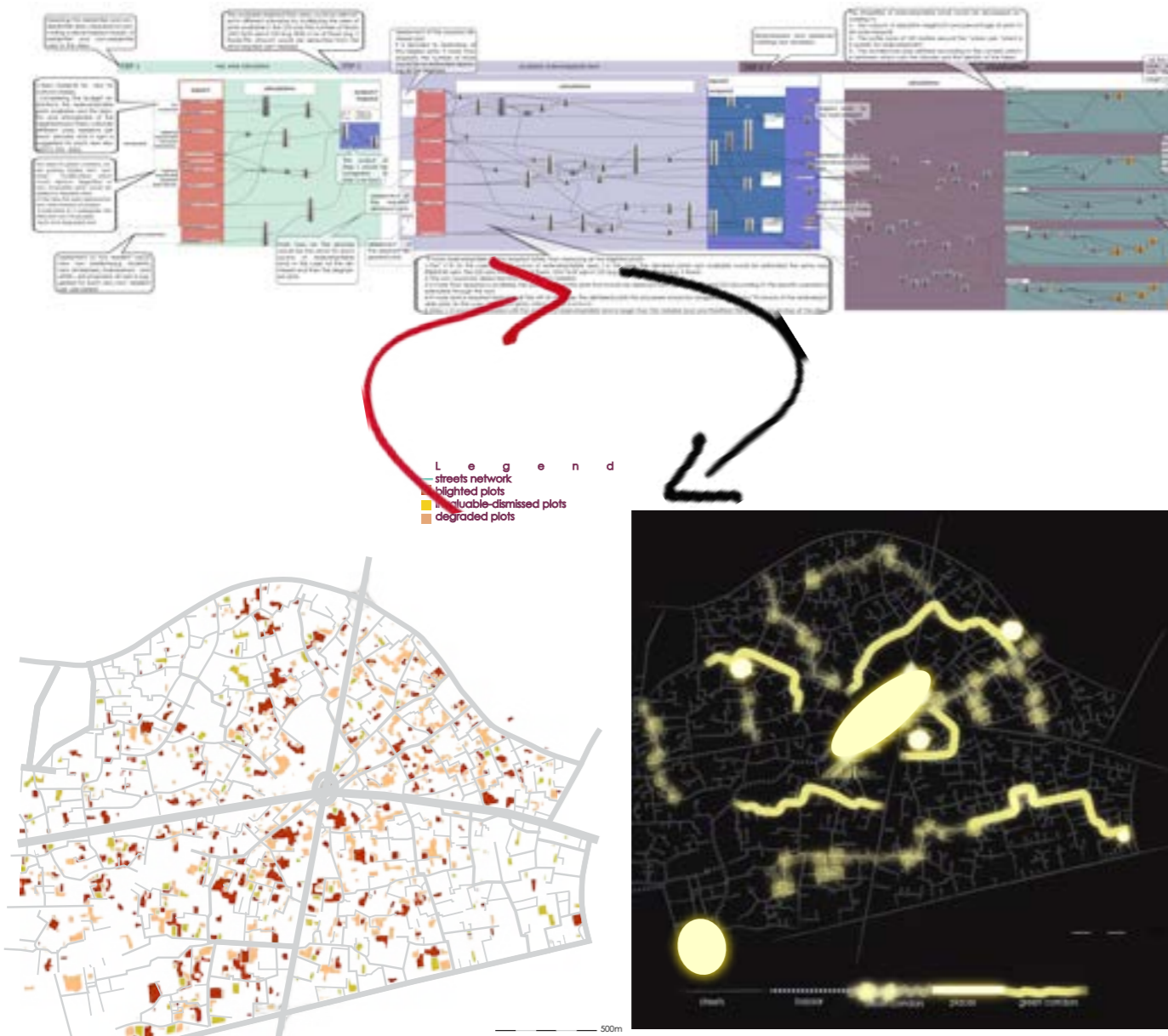
228.example of a flexible urban approach :A site and a few reference criteria has been selected;main 228. infrastructure,landmarks and topography(as inputs).

The variables have been the percentage of different uses required e.g. residential,commercial,office and... and the weight(importance)of the attractor points assigned to the landmarks(which defined the proximity to the landmarks) By changing the percentages and the weight of the attractor points(inputs) different spatial organizations were tested(outputs)

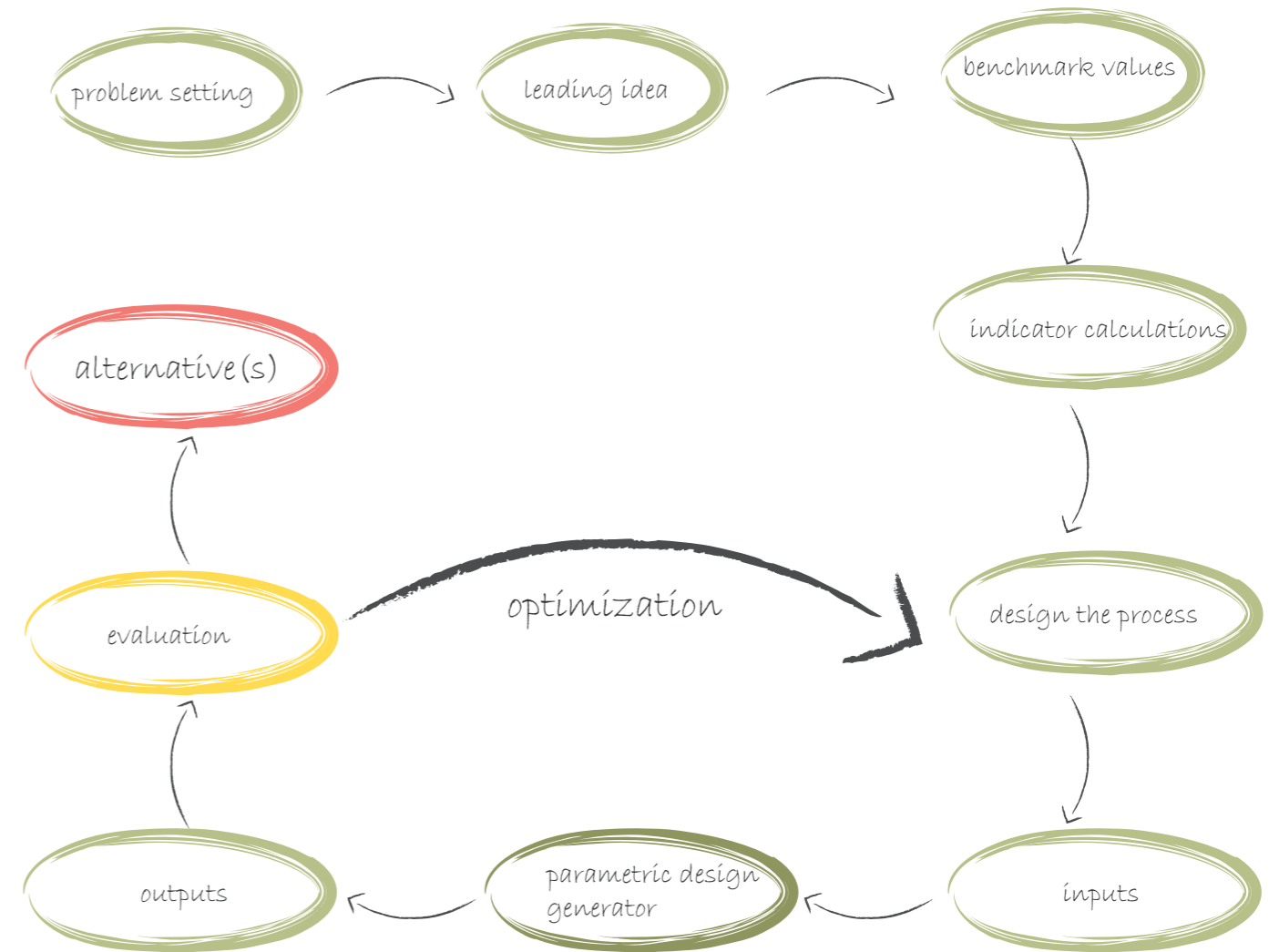
(sourc: http://prezi.com/vugxpdznjx6e/a-systematic-approach-to-parametric-design-from-methodology-to-technology_fin/)

1-http://www.aaschool.ac.uk/aadr/ABOUT/DOWNLOADS/parametric_urbanism_briefs/parametric_urbanism_briefs.pdf

The planner using a parametric tool would move back and forth between the leading idea, and the generic process planned by the tool, to test different scenarios and optimize the performance of each alternative would be evaluated and the solution would be optimized.



46 moving back and forth between leading idea and different scenarios created by generic tool



45 processing of an associative flexible approach (source: author)

Parametric associative tool to test scenarios

General process
The planner

1. **plans an associative process once** and tests scenarios through flexible recorded approach to compare outputs
2. sets some specific values as inputs for variables according to the targets of the project and achieve outputs
3. The next phase would be **performance evaluation** which would be possible by assessing the outputs of the process to achieve a certain goal.

Design process

The area is 456.62 hectare and the average existing height is 2 floors. Existing average GSI (average proportion of built space in each plot is 70 %) which is dense and more than the new municipality permissions that is <+60%.

The idea is introducing a decentralized mosaic of residential and non-residential uses to the area according to the leading idea's targets; promoting mixed used neighborhood with higher density.

Once the process planned and saved, it can receive different variables as "input", process them and return the results as "outputs".

The "numbers" inserted for different variables are suggested upon the results of existing situation, the requirements of the project and feasibilities. These numbers could be replaced according to new requirements. For example an average of 55 sqm (square meters) is suggested for each new resident in the area. However, if 45 or 65 sqm would be proposed for a different condition, the **whole process would be recalculated and visualized accordingly.**

The ability to find impractical alternatives is another advantage. The calculations depict the non-practical inputs e.g. input densities that does not meet the required space needed for mixed used developments and therefore helps the planner to avoid unpractical alternatives.

This is true for all other variables in the project (population, area, sqm required, number of floors required, GSI (percentage of the land to be built...)) (inputs: areas-outputs: volumes-visualization)

T

The process is divided in 3 steps:

1-assessing the required residential and non-residential area for a mixed used redevelopment (inputs: values-outputs: square meters required)

2-assessing the area of redevelopable lands available (inputs: areas-outputs: areas)

3- defining the redevelopable plots which are going to be renovated and conserved according to different scenarios.

5 representative scenarios would be tested and examined **to achieve an optimum density** for the area. The square meters that should be added as new mixed uses is fixed at neighborhood scale for all the scenarios and is assessed in step 1 of the process.

The variables are the height of the development proposed for different sources of redevelopable plot and different GSI. They would be materialized and their behavior would be evaluated accordingly and one scenario would be prioritized as the solution to the project although the target is not finding a solution but optimization through testing different possibilities.

Step 1:-assessing the required residential and non-residential area

Considering the budget restrictions, the redevelopable plots available and the identity and atmosphere of the neighborhood 5 new culturally different class residents per hectare and 25 new non residents; e.g. students, new enterprises, businessmen and artists... are proposed to generate a new mixed population. 55 sqm is suggested for each new resident in the area. 45 sqm is suggested for each new non-resident in the area.

These new uses would be accommodated in the potential redevelopable plots in step 2.

At this step the area replaced by new interventions (the area for green corridors, on-site parking added and new street modifications) of project is estimated in 2 categories: the affected new "invaluable" plots and degraded plots that already residents are accommodating in and should be substituted.



229.5 new culturally different class residents and 25 new non residents; e.g. students, new enterprises, businessmen and artists... are proposed to generate a new mixed population. (source: author's drawings)

Step 2: assessing the area of redevelopable lands available

There are 3 potentials for redevelopable projects:

- 1-blighted plots;ruins in which nobody lives
- 2-dismissed plots :abandoned plots in state of in which nobody resides
- 3-degraded plots :active plots in state of decay in which residents live and should be substituted if redeveloped.

The 3 sources for redevelopment would be requalified:

1. Existing Blighted plots would be reconstructed,
2. Existing dismissed plots would be renovated.
3. A proportion of degraded plots would be subject to improvement and renovation strategies and the rest would be improved (conserved)

As blighted plots are free of population and ruined the proposal is reconstructing/renovating the blighted plot to fulfill the spaces required for the new uses primarily,second the dismissed would be renovated and finally the degraded plots would be subject to renovation(as they accommodate residents. The rest of the developable plots would be conserved and improved.

The available blighted floor area could be estimated in different scenarios by multiplying the area of plots available in the GSI and the number of floors: 193174.35 sqm.X GSI (e.g. 60%) X no of floors (e.g. 3 floors).This amount would be deducted from the total required sqm needed.

It is decided to redevelop all the blighted plots; If more than required, the number of floors would be re-estimated replacing all the blighted.

From now on the process would be the same for each source of redevelopable land; in this case 1st the dismissed and then the degraded plots (but it is possible to have more categories though)

(69403.65 sqm. the GSI and the number of floors: 193174.35 sqm.X GSI (e.g. 60%) X no of floors (e.g. 3 floors)

2-The sum would be deducted from the rest sqm needed.

3-If more than required is available, the percentage of the plots that should be replaced with certain height and GSI (according to the specific scenario) is estimated through the tool.

4-If more land is required replacing all the nth (in this case: the dismissed) plots the processes would be navigated to the" n+1"th source of the redevelopable plots: (in this case: degraded plots.) which equals 5-(n=n+1)



blighted plots



dismissed plots



degraded plots

48 3 potentials for redevelopable projects:
1-blighted plots.2-dismissed plots 3-degraded plots

6-steps 1-6 would be repeated until the amount of redevelopable land is larger than the needed land and therefore the process would stop at this step

The degraded plots subjected to redevelopment would be substituted

"If more redevelopable land is required (other than replacing all the blighted plots):

1-the" n"th (in this case: second) source of redevelopable area ;(in this case: the dismissed plots) sqm available would be estimated the same way

Step 3: defining the redevelopable plots

Redeveloped and preserved buildings are visualized The shapefiles of redevelopable lands would be developed according to:

1- the outputs of step 2(the height,GSI and percentage of plots to be redeveloped)

2- The buffer zone of 100 meters around the "urban axis "which is in priority for redevelopment

3- The architecture style defined according to the context; atrium in between which suits the climate and the identity of the fabric.

It is decided to build all the blighted plots, therefore all the shapefiles would be volumized with the defined GSI and height in all the scenarios.

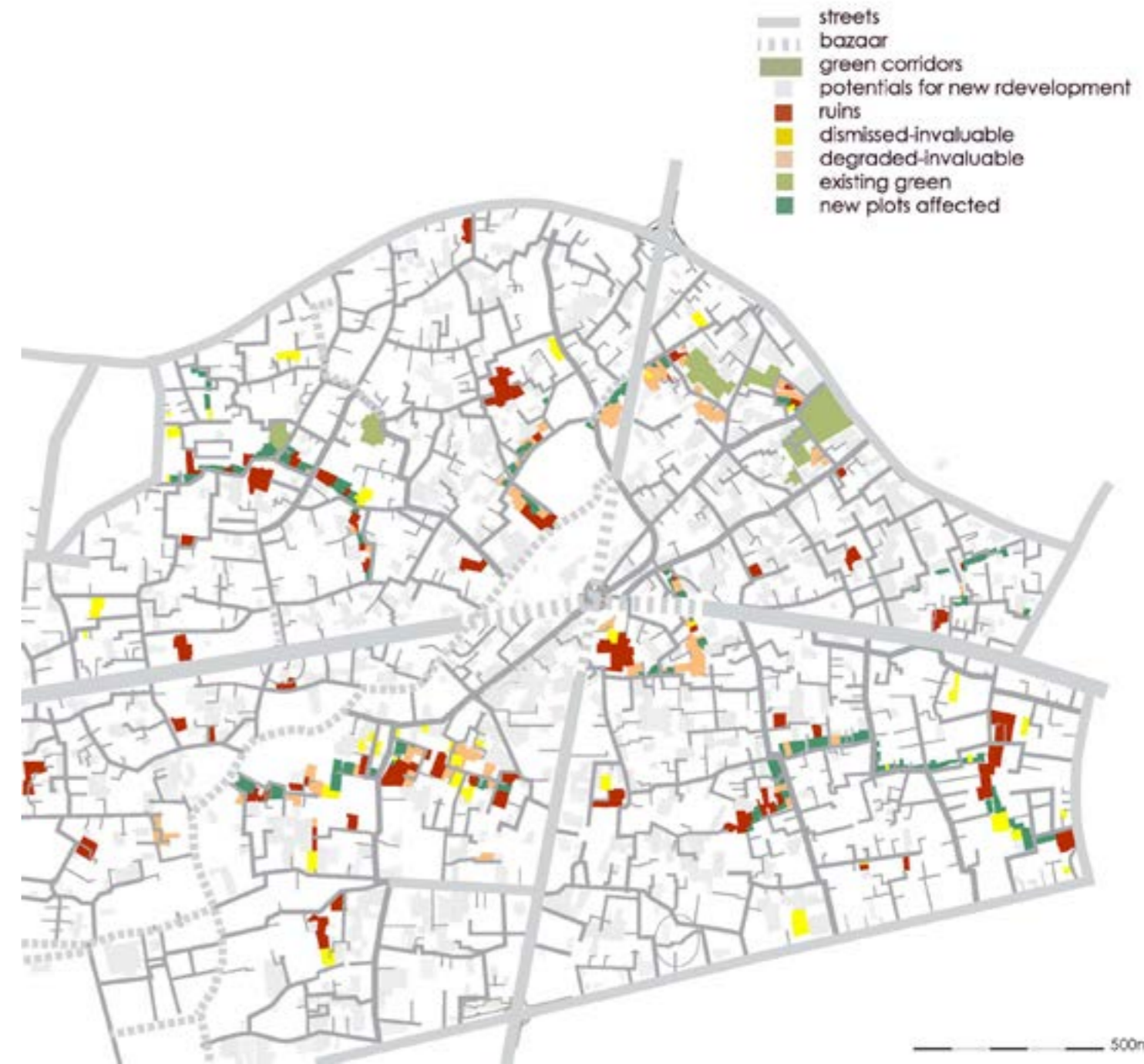
Regarding the dismissed and degraded plots,the area of the available redevelopable plots that satisfies the need of the scenario would be redeveloped with the defined GSI and height in all the scenarios.

If less than 100% is sufficient to satisfy the needs of the new mixed used development in each category, different criteria could be set for prioritizing the plots for renovation. In this project the plots which are in a buffer of 100 meters from the axis of the "urban axis"would be distinguished and chosen .If still more plots are required the tool advances to the other available plots out of the 100 buffer zone and choose as much area as required for satisfying the new redevelopments. The rest of the plots would be chosen for conservation and improvement which would preserve the existing skyline of average 2 stories.

5 representative scenarios would be tested and examined to achieve an optimum density for the area. The scenarios vary in the height of the development proposed for different sources of redevelopable plot and different GSI.Their behavior would be evaluated accordingly and one scenario would be prioritized as one solution to the project although the target is not finding a solution but optimization through testing different possibilities, and the expectations.

Mutation plan

Hers-Malpère-Marciaissone.-mutation plans



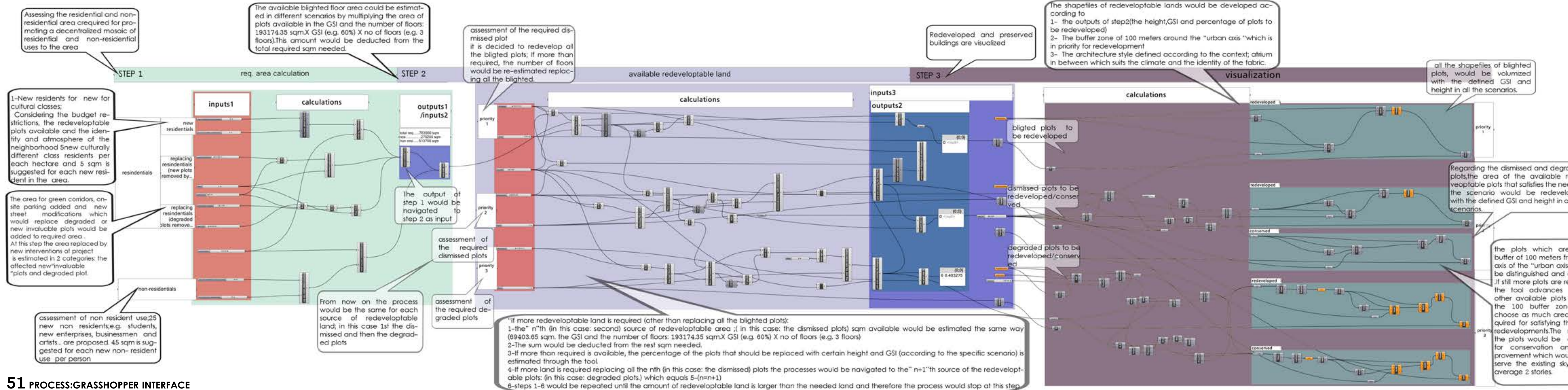
49 MUTATION PLAN

Green corridors along with modified infrastructure and new on site parking spaces refill the potential redeveloptable plots(blighted,dismissed,degraded and invaluable residentials if required) .

The intervention entails the least destruction and though the least expenses. Defining plots affected by new streets is more complicated in that there are several different situations. In cases the street would not pass the total footprint of the plot but it affects it. Therefore the total block should be defined as a required added space. In some cases that one street replaces the older one approximately occupying the same footprint, some new developments could compensate.

50 buffer of 100 meters from the axis of the "urban axis" and potential redevelopable plots inside and outside the buffer (source:author's drawings)





51 PROCESS:GRASSHOPPER INTERFACE

The interface of Grasshopper definition; tool to test different scenarios. The 3 steps of the process; 1-assessing the required residential and non-residential area for a mixed used redevelopment (inputs:measures-outputs:areas); 2-assessing the area of redevelopable lands available (inputs:areas-outputs:areas); 3- defining the redevelopable plots which are going to be redeveloped and conserved are presented in 3 colors: cyan, light and dark purple. The inputs are marked in red and outputs in blue. Outputs of each step are used as inputs of the next step. The detailed explanations are presented on the diagram. As we can see all actions are connected and associated with each other. The 3 steps, the main principles about each, their inputs, outputs and the process are categorized in a table following this diagram. By changing each of the "variables" the whole process would be recalculated and re visualized.

(source:author's drawings)

STEPS	principles	inputs	variables	process	outputs
STEP 1	<p>Considering the budget restrictions, the redevelopable plots available and the identity and atmosphere of the neighborhood 5 new culturally different class residents per each hectare and 25 new non residents; e.g. students, new enterprises, businessmen and artists... are proposed</p> <p>The area for green corridors, on-site parking added and new street modifications which would replace degraded or new invaluable plots would be added to required area.</p> <p>At this step the area replaced by new interventions of project is estimated in 2 categories: the affected new "invaluable" plots and degraded plot to be substituted.</p>	<p>1-req. area assessment(floor area required)</p> <p>A.total area(hec).....456.62 B.(GSI)Footprint of existing buildings /plots area.....70% C.no of floors(existing context).....2</p> <p>1-1-residentials for new residents added: 55 sqm is suggested for each new resident in the area. req. residential area per person55sqm no. of new added residents/hec.....5 people</p> <p>1-2-replacing residential(new invaluable plots) area of new plots affected.....61288 sqm</p> <p>1-3-replacing residential(degraded plots) area of deducted degraded plots.....60028.84 sqm percentage accommodated.....70%</p> <p>1-4- non-residential 45 sqm is suggested for each new resident in the area. req. non-residential area per person.....45 sqm</p> <p>no. of new non- residents/hec.....25 people</p>		<p>1-1= no. of new added residents/hec*req. residential area per person*A</p> <p>1-2=area of new plots affected*B*C</p> <p>1-3=area of deducted degraded plots*B*C*percentage accommodated</p> <p>1-4=eq. non-residential area per person*no. of new non- residents/hec*A</p> <p>residential: 1-1 + 1-2 + 1-3 + 1-4 =</p>	<p>total req.....783900 sqm resi.....270200 sqm non resi.....513700 sqm</p>
STEP 2	<p>priority 1:blighted plots-start redeveloping the blighted plots- decide to redevelop all the plots priority 2:dismissed plots priority 3:degraded plots</p>	<p>2-land assessment</p> <p>total req.....783900 sqm(from previous step) blighted redevelopable plots.....193174.35 sqm. no. of floors to be built.....3 or 4 dismissed redevelopable plots.....69403.65 aqm. new GSI.....60%-70% degraded redevelopable plots.....317633.31 sqm.</p>		<p>The available blighted floor area could be estimated in different scenarios by multiplying the area of plots available in the GSI and the number of floors: 193174.35 sqm.X GSI (e.g. 60%) X no of floors (e.g. 3 floors).This amount would be deducted from the total required sqm needed.</p> <p>It is decided to redevelop all the blighted plots; If more than required, the number of floors would be re-estimated replacing all the blighted.</p> <p>From now on the process would be the same for each source of redevelopable land; in this case 1st the dismissed and then the degraded plots (but it is possible to have more categories though)</p> <p>"If more redevelopable land is required (other than replacing all the blighted plots): 1-the " n"th (in this case: second) source of redevelopable area ;(in this case: the dismissed plots) sqm available would be estimated the same way (69403.65 sqm. the GSI and the number of floors: 193174.35 sqm.X GSI (e.g. 60%) X no of floors (e.g. 3 floors) 2-The sum would be deducted from the rest sqm needed. 3-If more than required is available, the percentage of the plots that should be replaced with certain height and GSI (according to the specific scenario) is estimated through the tool. 4-If more land is required replacing all the nth (in this case: the dismissed) plots the processes would be navigated to the " n+1"th source of the redevelopable plots: (in this case: degraded plots.) which equals 5-(n=n+1) 6-steps 1-6 would be repeated until the amount of redevelopable land is larger than the needed land and therefore the process would stop at this step</p> <p>In this project n>=3 as there are 3 sources of redevelopable land. Though it is not possible to build more than all the blighted, dismissed and degraded plots. If the percentage of the last source which should be replaced is estimated more than 100%(scenario 1 & 2)it means that we should modify our prerequisites(changing variable and sceneries) As the required land is considered fixed upon to the needs of the project we modify densities and test new sceneries to achieve the goal.</p>	<p>percentage of the required dismissed plot area to be redeveloped</p> <p>percentage of the required degraded plot area to be redeveloped</p>
STEP 3	<p>Redeveloped and preserved buildings are visualized The shapefiles of redevelopable lands would be developed according to 1- the outputs of step2(the height,GSI and percentage of plots to be redeveloped) 2- The buffer zone of 100 meters around the "urban axis "which is in priority for redevelopement 3- The architecture style defined according to the context; atrium in between which suits the climate and the identity of the fabric</p>	<p>3-visualization</p> <p>blighted plots.....shapes dismissed plots.....shapes degraded plots.....shapes urban axis.....shapes buffer of urban axis as prior redevelopement zone.....100m height of the new redeveloped plots.....derived from step 2</p> <p>new GSI(Footprint of buildings /plots area.....60-70%</p>		<p>It is decided to build all the blighted plots, therefore all the shapefiles would be volumized with the defined GSI and height in all the scenarios.</p> <p>Regarding the dismissed and degraded plots,the area of the available redevelopable plots that satisfies the need of the scenario would be redeveloped with the defined GSI and height in all the scenarios.</p> <p>If less than 100% is sufficient to satisfy the needs of the new mixed used development in each category, different criteria could be set for prioritizing the plots for renovation.In this project the plots which are in a buffer of 100 meters from the axis of the "urban axis"would be distinguished and chosen .If still more plots are required the tool advances to the other available plots out of the 100 buffer zone and choose as much area as required for satisfying the new redevelopments.The rest of the plots would be chosen for conservation and improvement which would preserve the existing skyline of average 2 stories.</p>	<p>visualization of plots to be redeveloped visualization of plots to be conserved visualization of the whole edvelop mnt project</p>

Scenarios

In this section, considering the spacial, institutional and economical tools previously discussed ,5 main scenarios are tested by associative tool in terms of densities.

Although unlimited scenarios could be tested by the tool,because of the targets of the project,not to destroy the identity of the area and upset the traditional context it id decide to test 5 low to mid densities ,evaluate their performance according to the intents and optimize a solution.

Before discussing the scenarios, a study of measuring density and its relation with performance from the book: Spacemate: Density and the Typomorphology of the Urban Fabric.by Berghauser Pont, M. and P. Haupt from Delft university,would be look through briefly which is the basis of the approach used in this project.

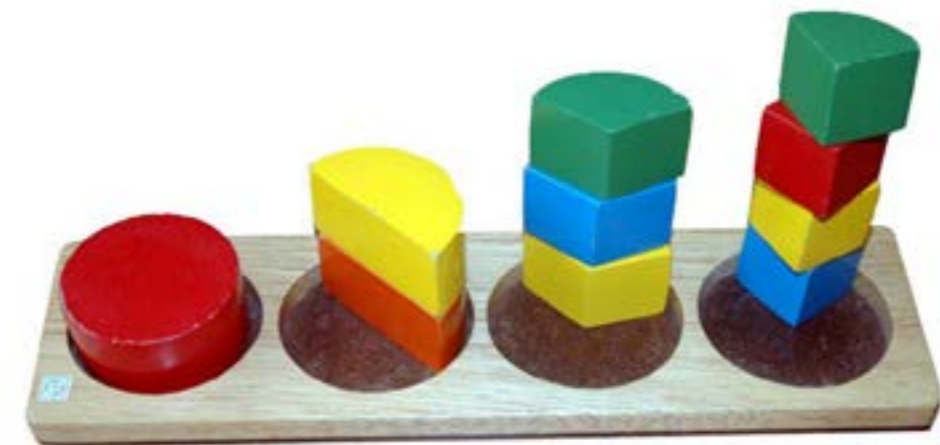
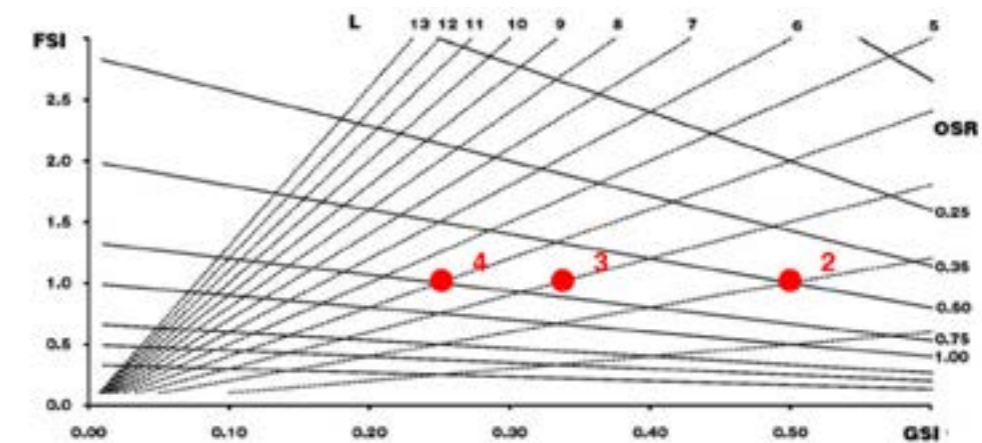
After introducing the scenarios and a brief description about evaluation methods the scenarios would be evaluated in the following unit.

“Densities can be used to define conditions under which formal ambitions can be realized.”¹

Spacemate-measuring densities

The Spacemate is a tool which investigates the relationship between density and spatial characteristics. It introduces the concept of performance indicators and suggest possible applications of spacemate as a control instrument and test framework for the planning and design practice. This part describes the advantages of using density in urban design and spatial management during the early phases of the planning process.

The Spacemate suggests that if density is defined not only as intensity (FSI), but as a combination of intensity, compactness (GSI), height (L), and pressure on non-built space (OSR).



1	2	3	4
FSI 1.00	FSI 1.00	FSI 1.00	FSI 1.00
GSI 1.00	GSI 0.50	GSI 0.33	GSI 0.25
L 1.00	L 2.00	L 3.00	L 4.00
OSR 0.00	OSR 0.50	OSR 0.67	OSR 0.75

.FSI,GSI,L and OSR explanation(source: Berghauser et. al,2012)p.31)

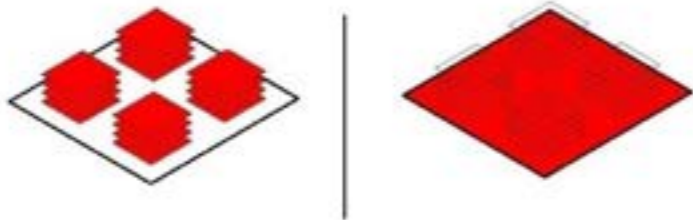
Floor Space Index (FSI)

$$FSI_x = F_x / A_x$$

F_x = gross floor area (m²)

A_x = area of aggregation x (m²)

x = aggregation (lot (l), island (i), fabric (f), or district (d))



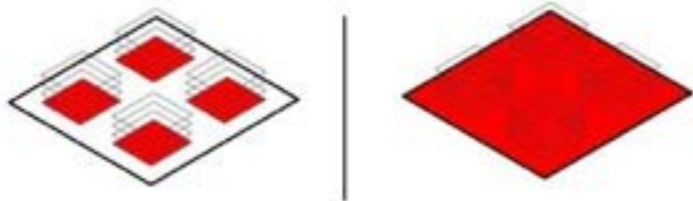
Ground Space Index (GSI)

$$GSI_x = B_x / A_x$$

B_x = footprint of (m²)

A_x = area of aggregation x (m²)

x = aggregation (lot (l), island (i), fabric (f), or district (d))



Building Height (L)

The average number of storeys (or layers), L, can be arrived at by ascertaining the intensity and coverage or, FSI and GSI, for the aggregation x. If more floor area is developed in a certain area, without changing the footprint, L will increase. If the building height should remain constant, then FSI and GSI have to increase.

$$L = FSI_x / GSI_x \tag{4}$$



Open Space Ratio (OSR)

The variable OSR, or spaciousness, is a measure of the amount of non-built space at ground level per square metre of gross floor area. This figure provides an indication of the pressure on non-built space. If more floor area is developed in an area (with the same footprint), the OSR decreases and the number of people who will use the non-built space increases. The unit of OSR is m²/m².

$$OSR = (1 - GSI_x) / FSI_x \tag{5}$$



Tare (T)

One important feature of density is its characteristics at different levels of scale. The difference in base land area (A_x) between two levels of scale define the tare (T_x), also often described as the difference between net and gross. If T describes the tare between for instance fabric (x) and island (x-1), then T can be arrived at through:

$$T_x = (A_x - \sum A_{x-1}) / A_x \tag{6}$$

where

x = aggregation x;

x-1 = level of scale of the components of which aggregation x is composed.



known

sought

FSI

$L = FSI / GSI$

GSI

$OSR = (1 - GSI) / FSI$

FSI

$GSI = FSI / L$

L

$OSR = 1 / (FSI - 1 / L)$

FSI

$GSI = 1 - FSI * OSR$

OSR

$L = 1 / (1 / FSI - OSR)$

GSI

$FSI = GSI * L$

L

$OSR = (1 / L) * (1 / GSI - 1)$

GSI

$FSI = (1 - GSI) / OSR$

OSR

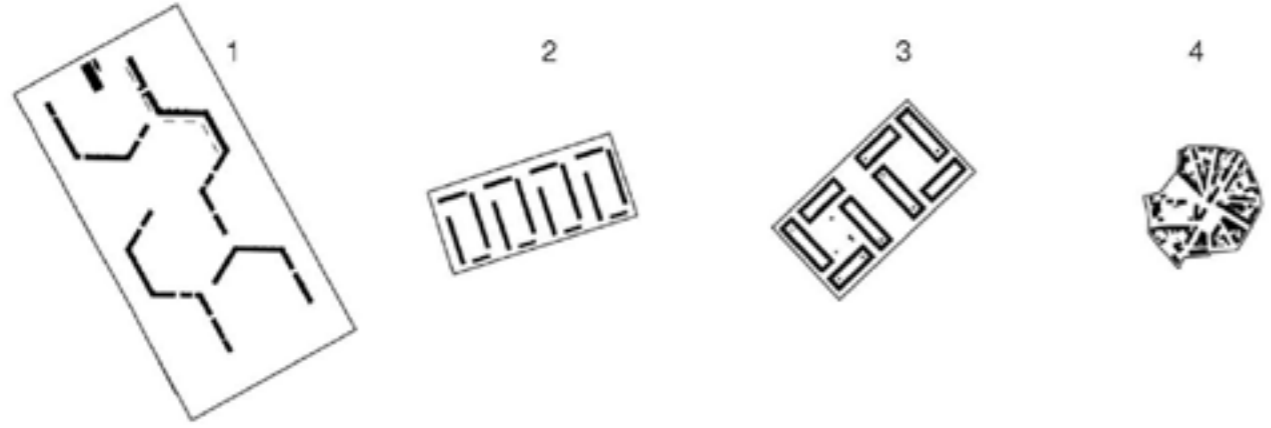
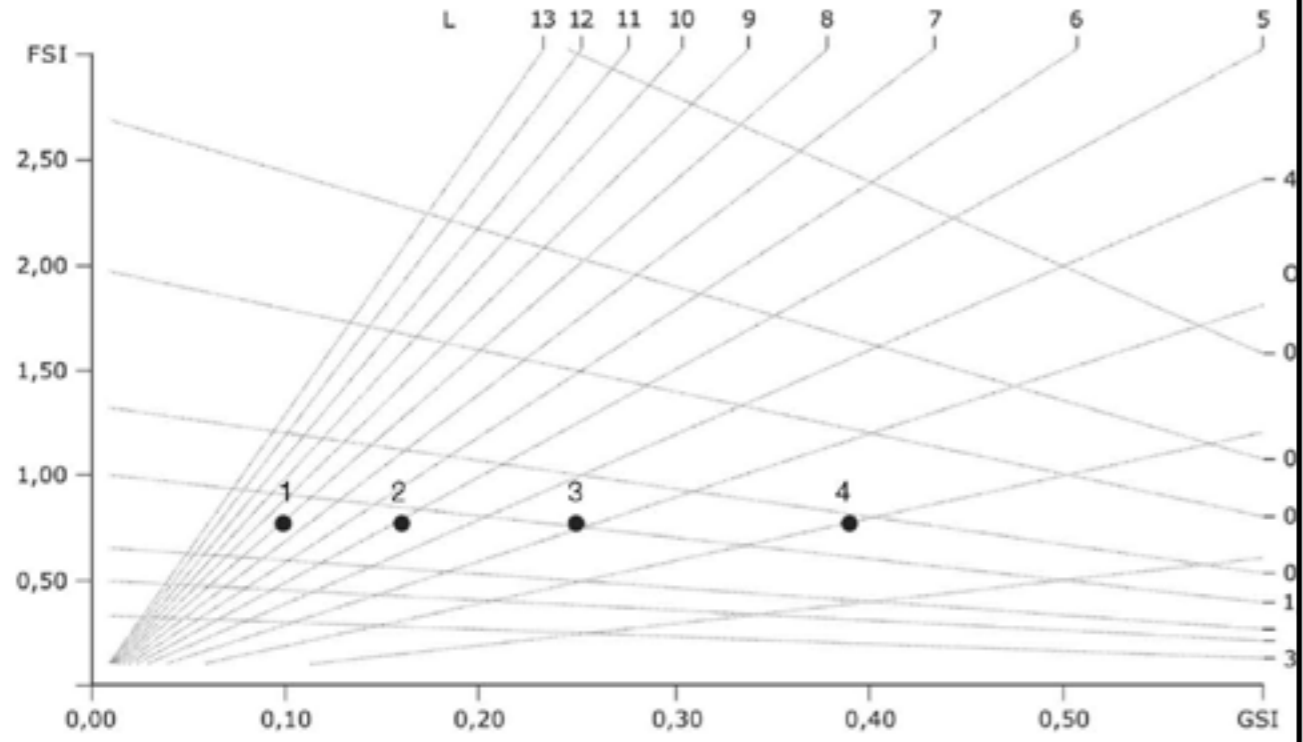
$L = (1 / GSI - 1) / OSR$

L

$FSI = 1 / (OSR + 1 / L)$

OSR

$GSI = 1 / (L * OSR + 1)$

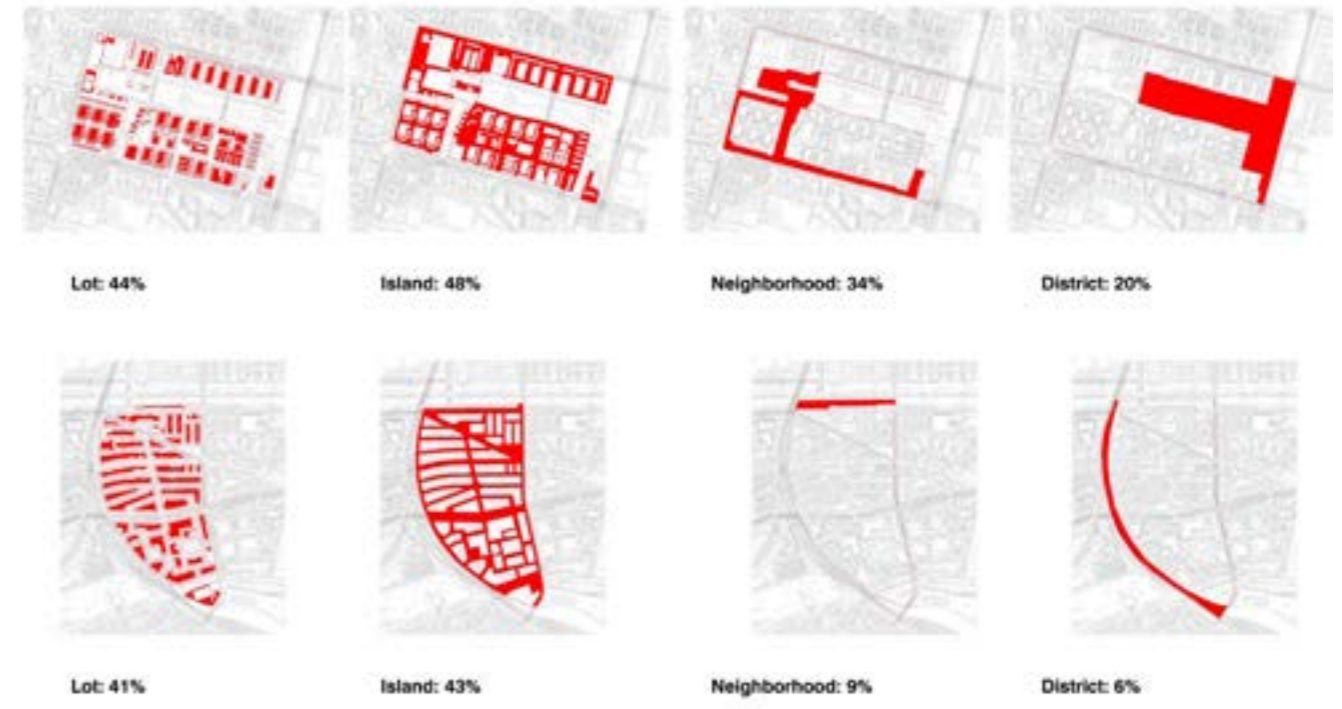


Four examples in the Spacemate.(source: Berghauser et. al,(2005),p.89)

'Tare space'- non-built area

The relationship between different scales (aggregations) is of great importance. Spacemate is used at all scales – from building to district–to define or 'tare space' which is added or subtracted when there is a switch of scale.

Tare Space



Tare Space at different aggregations(source: Berghauser et. al,(2012),p42)

Typologies; investigate the degree to which a relationship exists between the variables and the various building typologies.

"When grouping the different residential areas in the Spacemate chart, it is evident that clusters are formed that display similarities in terms of spatial structure."¹

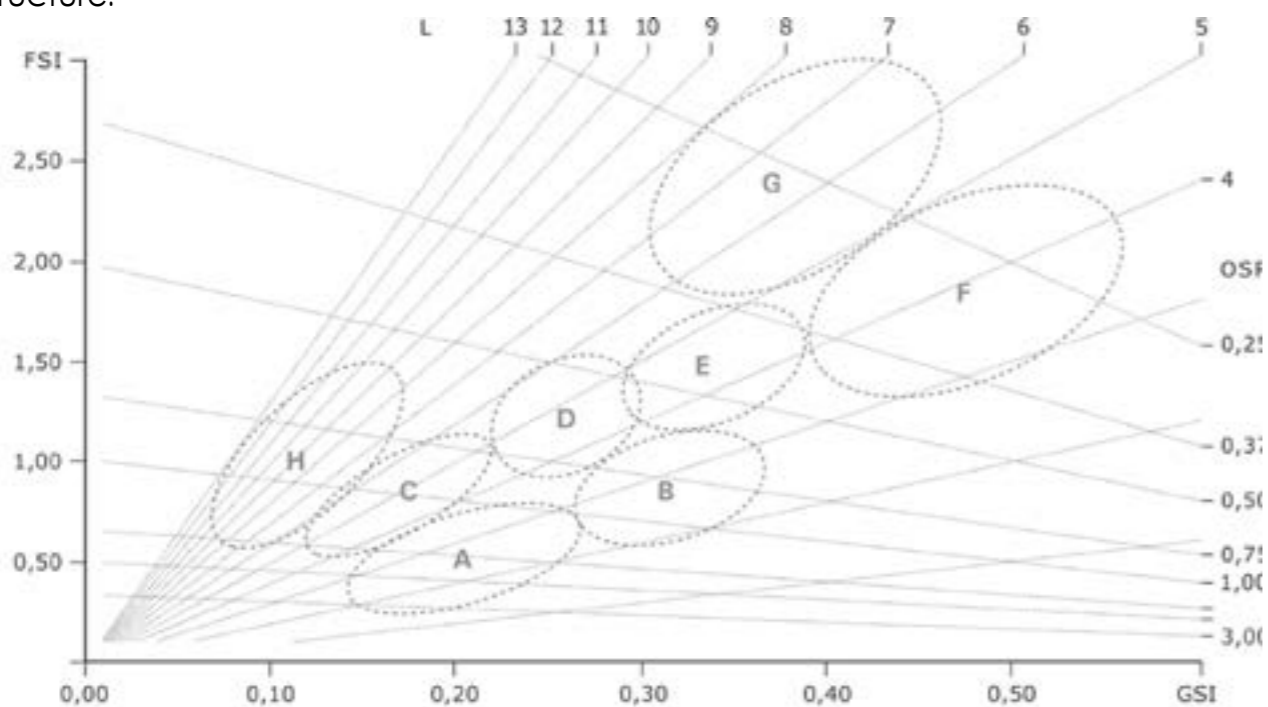
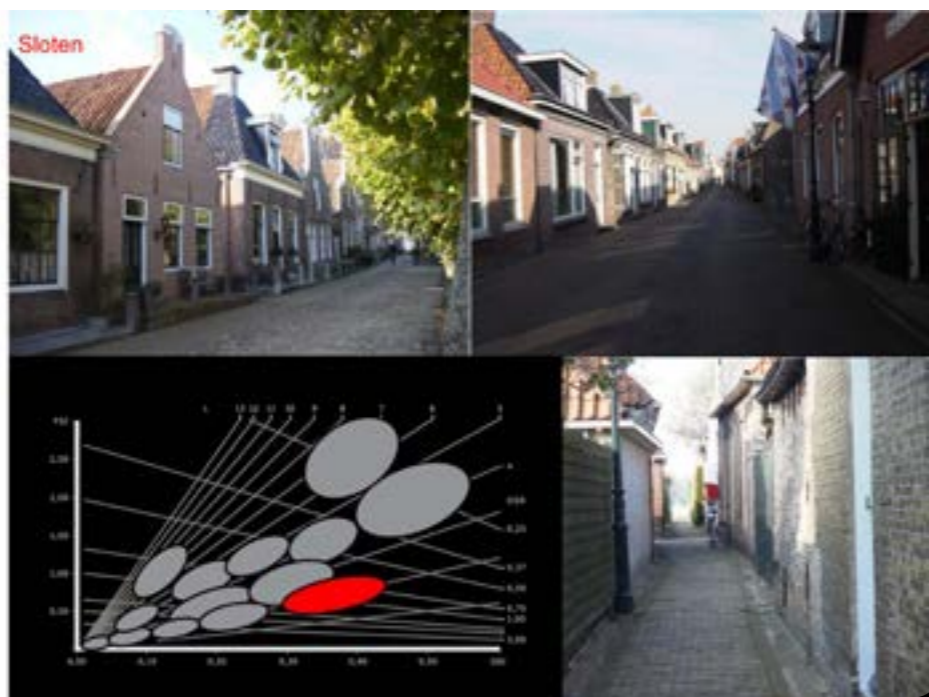


Figure 6. Land development typologies:

- A. Low-rise spacious strip developments blocks
- B. Low-rise compact strip developments blocks
- C. Mid-rise open building blocks
- D. Mid-rise spacious building blocks
- E. Mid-rise compact building
- F. Mid-rise closed building
- G. Mid-rise super blocks
- H. High-rise developments

Typologies (source: Berghauer et. al,(2005),p.62)

Typologies examples (source: Berghauer et. al,(2012),p.62)

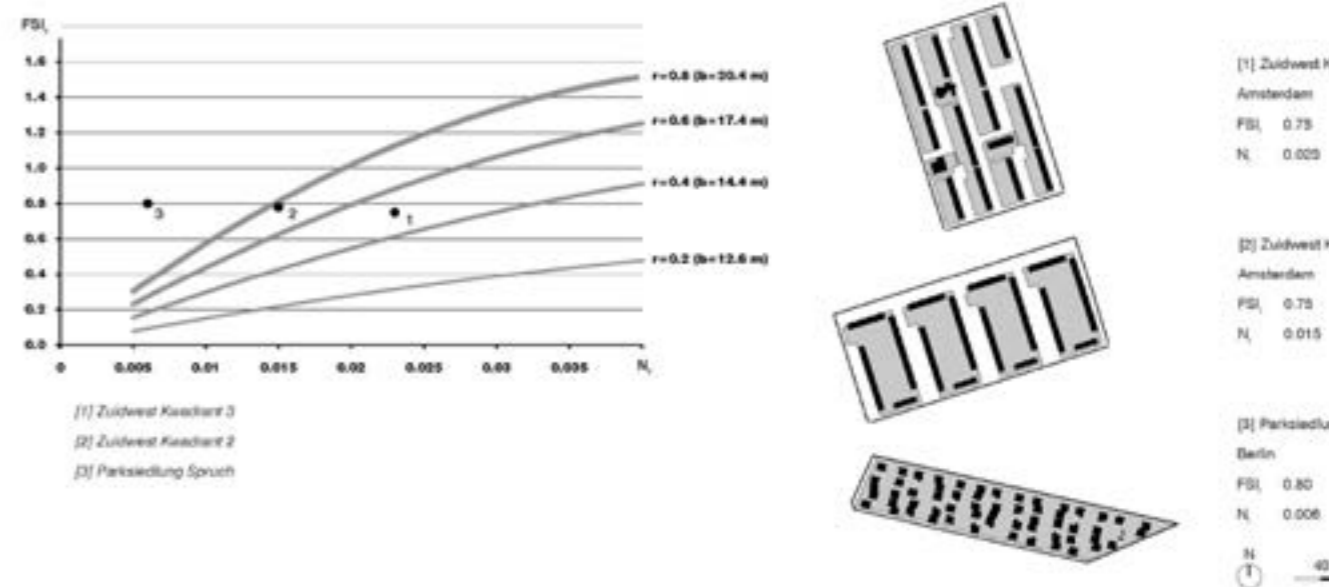


1- Berghauer et. al,(2005),p.62)

Space mate can be used to investigate and describe the "behavior", or the performance, of urban forms or the performance, of certain factors.

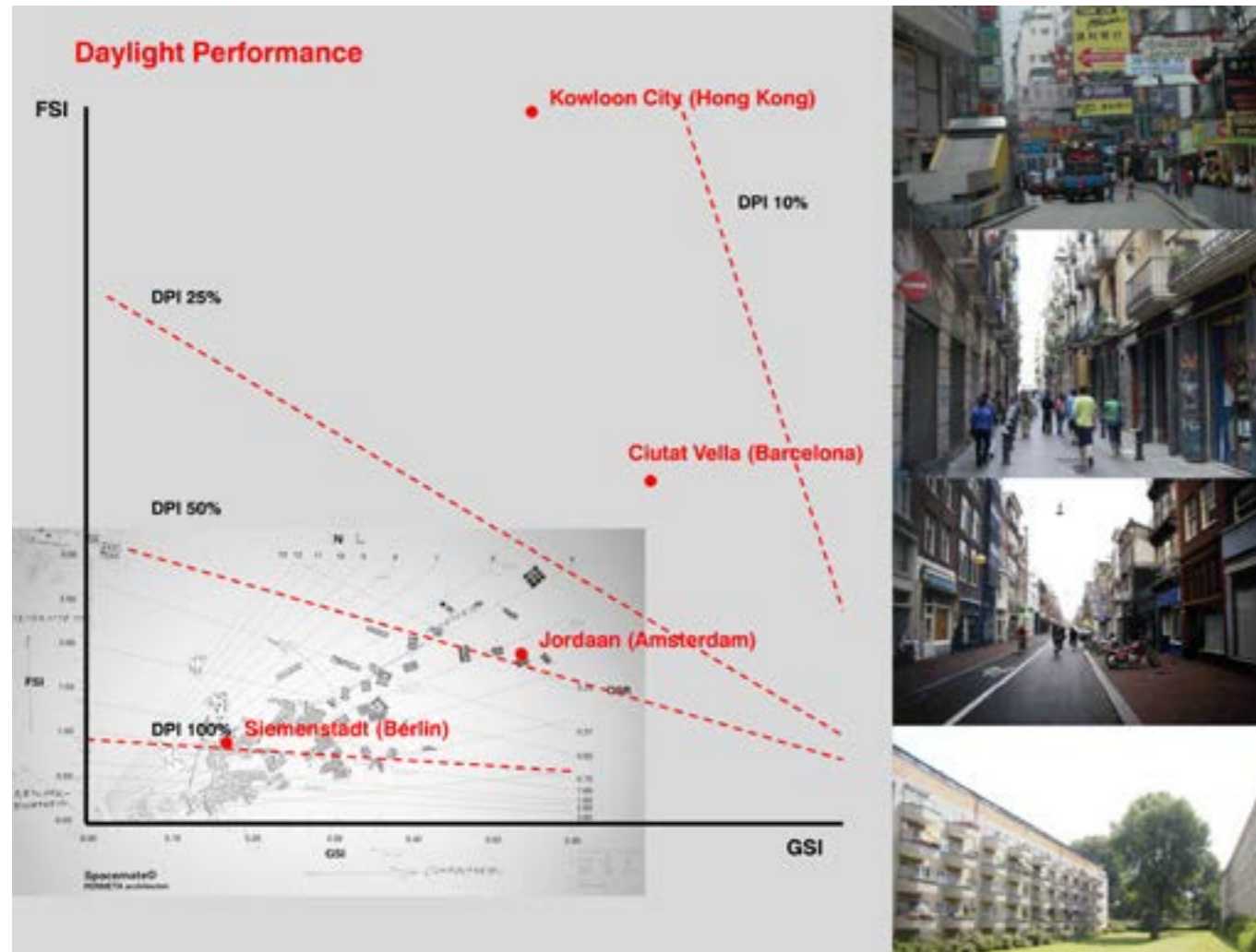
" Examples of such properties are private exterior space, urbanity, programmatic blending, parking, light access, accessibility, energy consumption, pollution and water management. The behavior of these properties can be described by performance indicators. These performance indicators can produce important information about which problems and possibilities can be expected for different densities (positions in the Spacemate) Every performance indicator can be viewed as a descriptive layer that, when combined with the others, can be used to clarify different qualitative aspects of urban environments, as well as identifying conflicting programs."¹

Parking Performance



Parking performance indicators (source: Berghauer et. al,(2012),p.66)

1- Berghauer et. al,(2005),p.66-67)

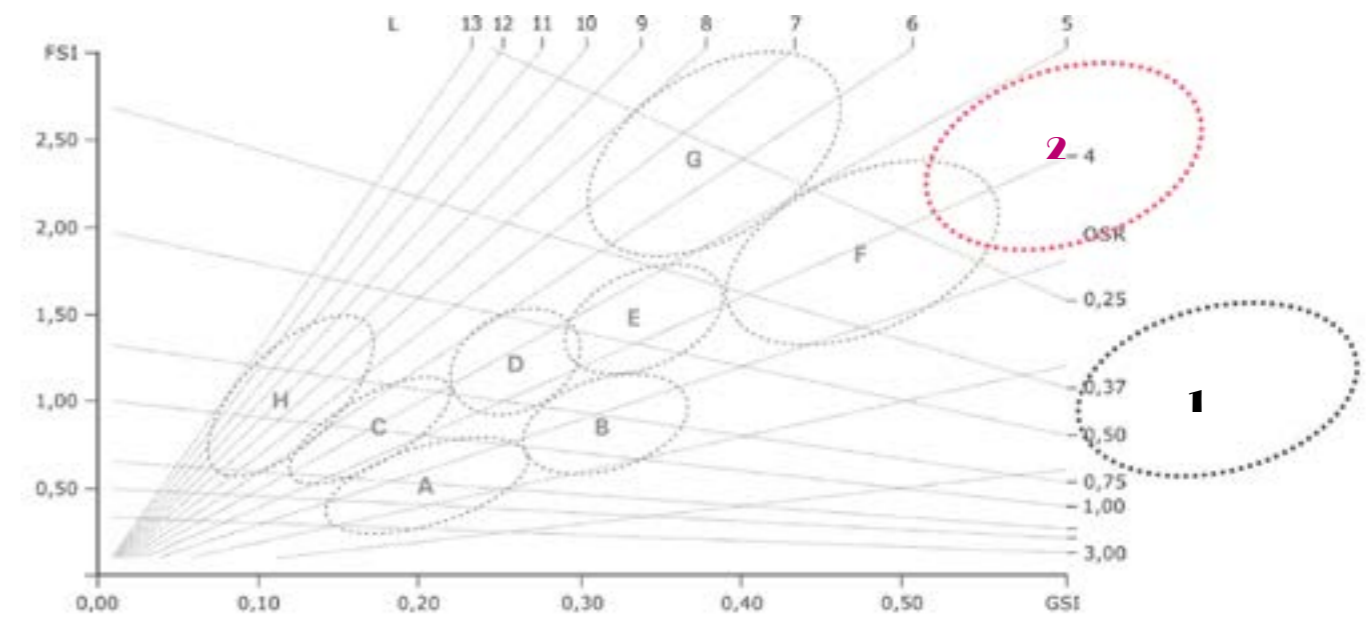


examples of day light performance (source: Berghauser et. al,(2012),p.68)

The context of Isfahan project is different from the standardized categories(A to H) of EU cities defined on the spacemate. The existing context is more compact(higher GSI and less intense. Therefore the existing situation is defined in on the spacemate.

The proposal is providing higher density:

- higher intensity, lower compactness and more floors($FSI/GSI=L$)
- To preserve the identity of context: $L(\text{no. of floors}) \leq 4$, preserve compact atrium style plots



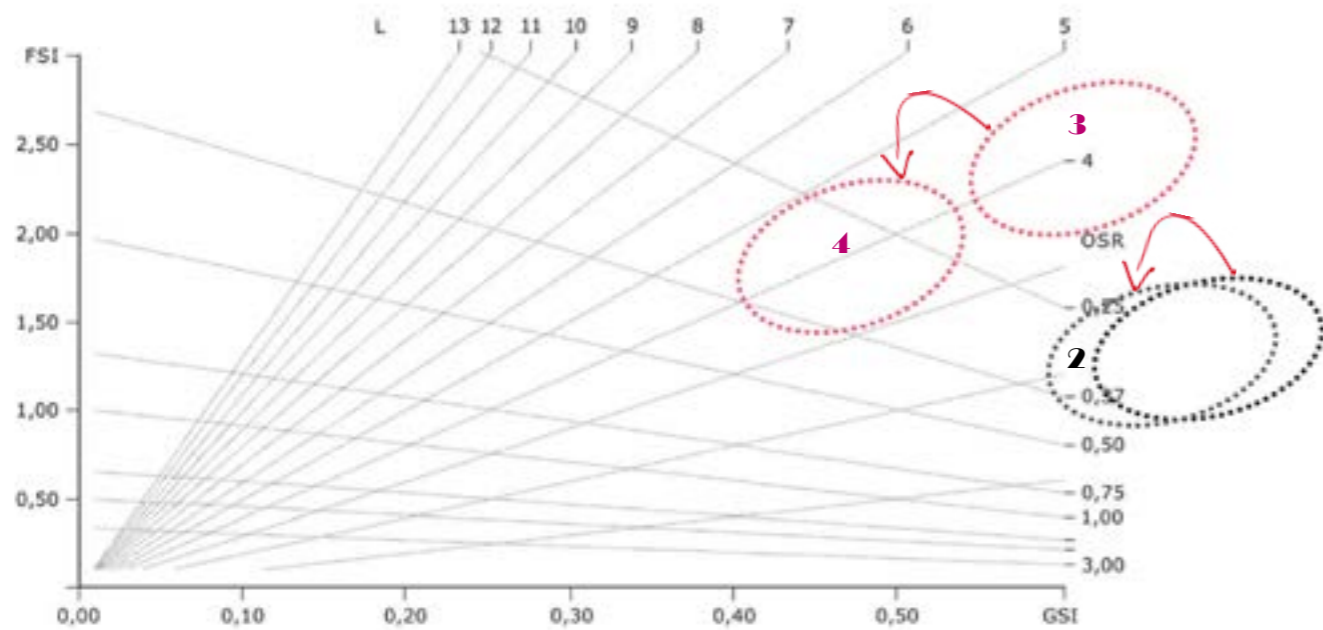
52 Localization of the 1-existing development and 2-proposed redevelopment , in spacemate

Tare(non-built space) (diagram)

The project differs considerably in terms of tare space (un-built space at different levels.) In order to preserve the identity of area, the compact atrium style for the plots that was originated from the context was chosen with GSI = 0.6

However, at the scale of district, because of green corridors, the pedestrian plaza and places, provision of parking lots and public outdoor places, unbuilt space(tare space percentage and OSI) increases considerably. This increase insures more ecological social, economical sustainable approach(increase in light, public places, parking lots, open private spaces...)

1



53 Localization of 1-the existing development at plot level , 2-the existing development at strict level,3- proposed redevelopment at plot level,4- proposed redevelopment at distinct level in spacemate; the existing development does not vary at plot an district level which indicates dense plot design in a very compact context while the proposed redevelopment which indicates the compact atrium style for the plots in a context that provides unbuilt public spaces.

Scenarios

5 representative scenarios focus on redevelopable plots:blighted,dismissed and degraded plots,testing different **densities** resulting in renovation or conservation of the plots. They differ in terms of GSI (built area in the plots) and the height of the developments.

To preserve the identity it is decided to follow the inner-courtyard style architecture of the context which is also the best solution for the hot-dry climate condition of the context.

GSI is considered as average of 60% which is the highest percentage permitted to be built. to 70%(which is not institutionally allowed but tested to see the spacial results)

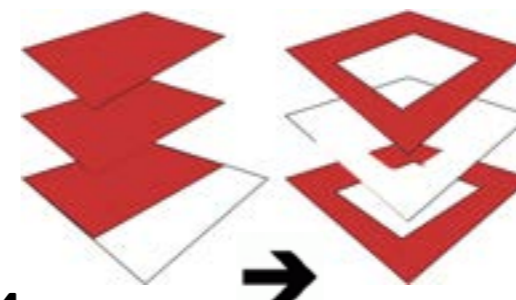
The height of the developments vary between 2-4 floors.

The target is optimizing a density which provides enough floor space for calculated floor area required for the mixed-used community in this context while achieving the highest spacial,scial,environmental and economical p productivity.



redevelopable plots:blighted,dismissed and degraded plots

WHICH PLOTS SHOULD BE RENOVATED AND WHICH SHOULD BE CONSERVED IN ORDER TO SATISFY THE NEEDS OF THE MIXED USED INTEGRATED COMMUNITY?
 WHICH NEW DENSITIES ARE SUGGESTED FOR THE REDEVELOPABLE PLOTS?



54 following the inner-courtyard style architecture in the renovated plots(source:author's drawings)



55 GSI of 60% and 70% are tested in the scenarios(source:author's drawings)



56 heights of 2,3,4 floors tested in the scenarios(source:author's drawings)

Scenario 1

60% of the plots would be built.(GSI=60%)

Decide to build the redevelopable plots in average of 2 floors as the average the existing buildings

1-1-all the blighted and dismissed plots should be refilled

Error!

1-2-The square meters still required(468810 sqm) is more than the square meters available(381160 sqm) in all the degraded plots

>>It is not possible to build the re-developable plots just in 2 floors and satisfy all the floor area required for new mixed used development

1-3-As all the redevelopable plots should be refilled(and still there is more need floor area)there would be no conservation! and preservation

Scenario 2

60% of the plots would be built.(GSI=60%)

Decide to build the redevelopable plots in average of 3 floors , not to go much further than low rise area's skyline but provide more square meters than scenario 1 which is not applicable;a bit denser and set free more land for restoration.

2-1-all the blighted and dismissed plots should be refilled

Error! 2-2-109% of the degrade plots should be renovated to meet the required floor area.this means that there is not enough floor area for meeting the requirements of the project

>>It is not possible to build the re-developable plots just in 3 floors and satisfy all the floor area required for new mixed used development available in all the degraded plots

2-3-As all the redevelopable plots should be refilled(and still there is more need floor area)there would be no conservation! and preservation

Scenario 3

60% of the plots would be built.(GSI=60%)

Decide to renovate the targeted redevelopable dismissed and degraded plots in average of 3 floors and the blighted plots in average of 4 floors (54% of the redevelopable plots); set free more land for conservation

3-1-all the blighted and dismissed plots should be renovated/refilled

3-2-replacing 68% of the degraded plots would meet the project's needs.

3-3-28% of the degraded plots would be restored and conserved.

scenario 4

60% of the plots would be built.(GSI=60%)

Decide to build the redevelopable plots in average of 4 floors ,

4-1-all the blighted and dismissed plots should be renovated

4-3-replacing 40% of the degraded plots would meet the project's needs.

4-3-60% of the degraded plots would be restored and preserved.

variables Scenarios	GSI(percentage of built space in plots 60%-70%	Height (no. of floors) 2-4 floors			percentage of the plots renovated			percentage of the plots conserved		
		blighted plots	dismissed plots	degraded plots	blighted plots	dismissed plots	degraded plots	blighted plots	dismissed plots	degraded plots
Scenario 1	60%			Error!	100	100	100	---	---	---
Scenario 2	60%			Error!	100	100	100	---	---	---
Scenario 3	60%				100	100	68	---	---	32
Scenario 4	60%				100	100	40	---	---	60
Scenario 5	70%				100	100	10	---	---	90

58 table comparing the 5 scenarios

scenario 5

70% of the plots would be refilled(GSI=70%)

Decide to build the redevelopable plots in average of 4 floors ,

5-1-ll the blighted and dismissed plots should be refilled

5-2-replacing 10% of the degraded plots would meet the project's needs.

5-3-90% of the degraded plots would be restored and preserved.

next 3 pages:

59 SCENARIO 3,4,5, VISUALIZED AND COMPARED IN 3 PERSPECTIVES

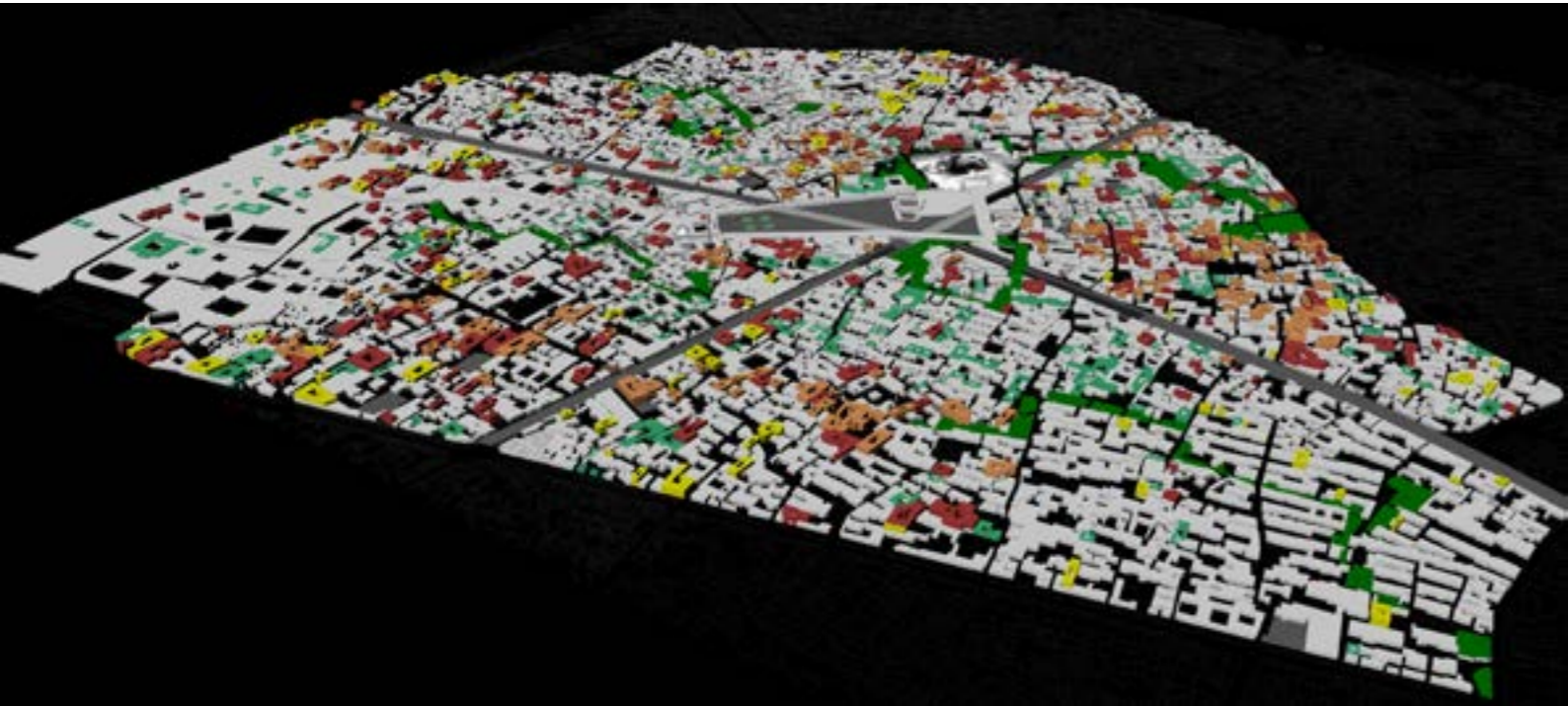
scenario 4 spurs a more coherent spacial organization



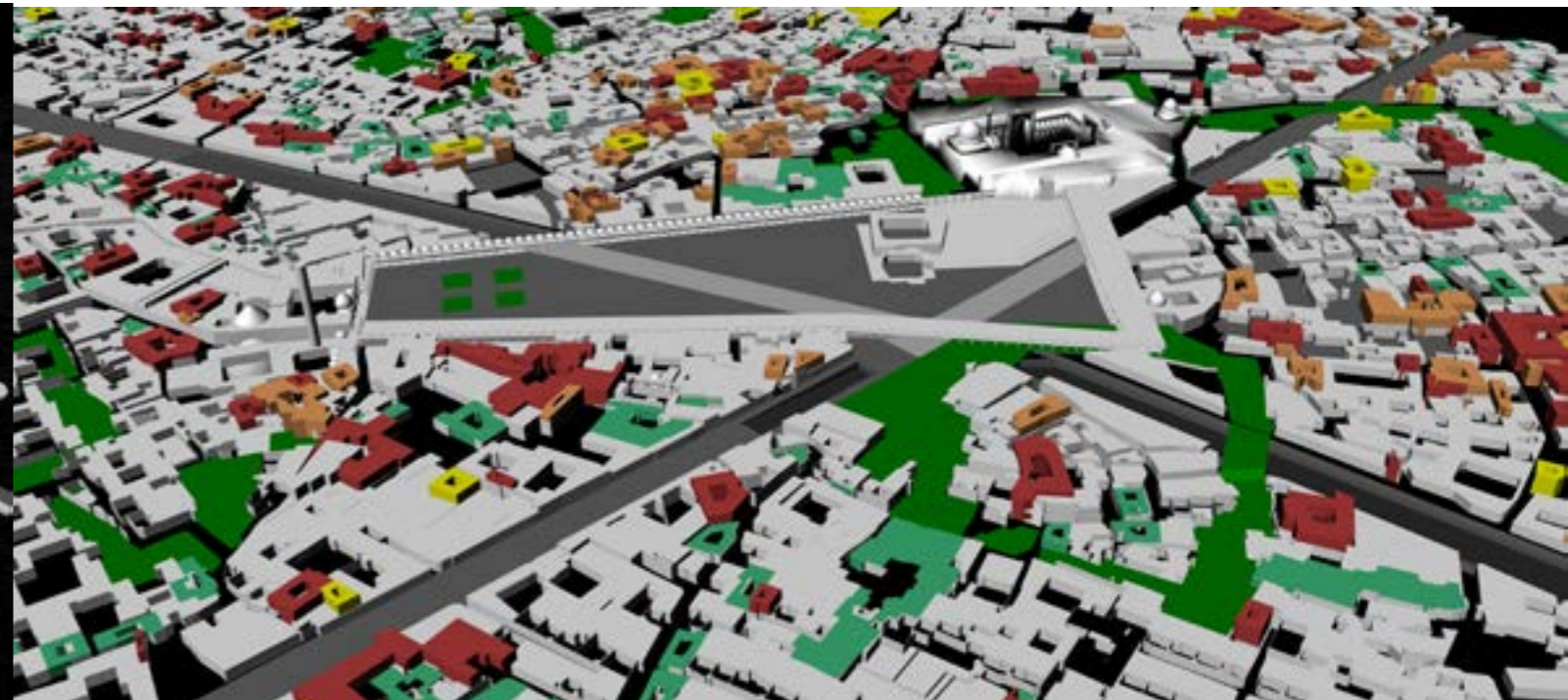
scenario 3



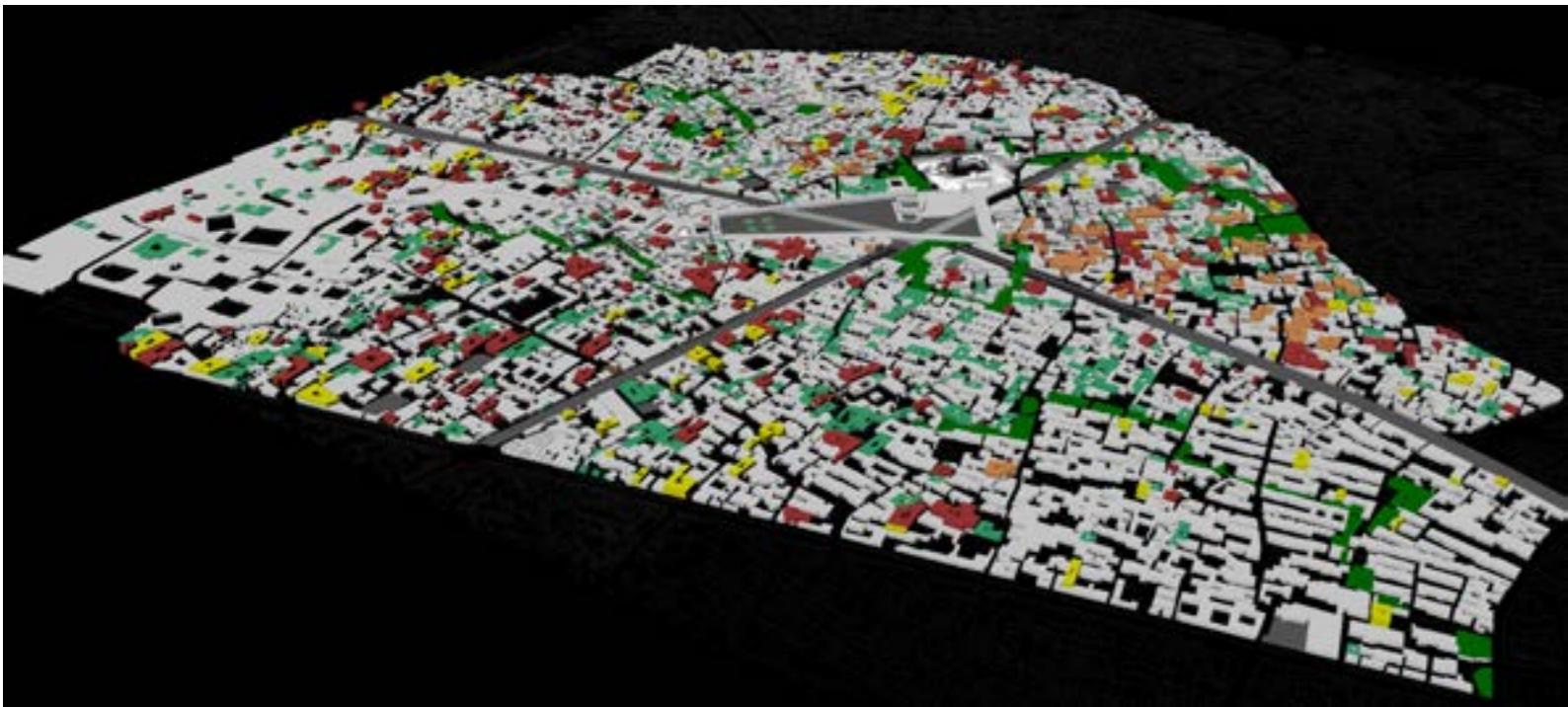
scenario 3



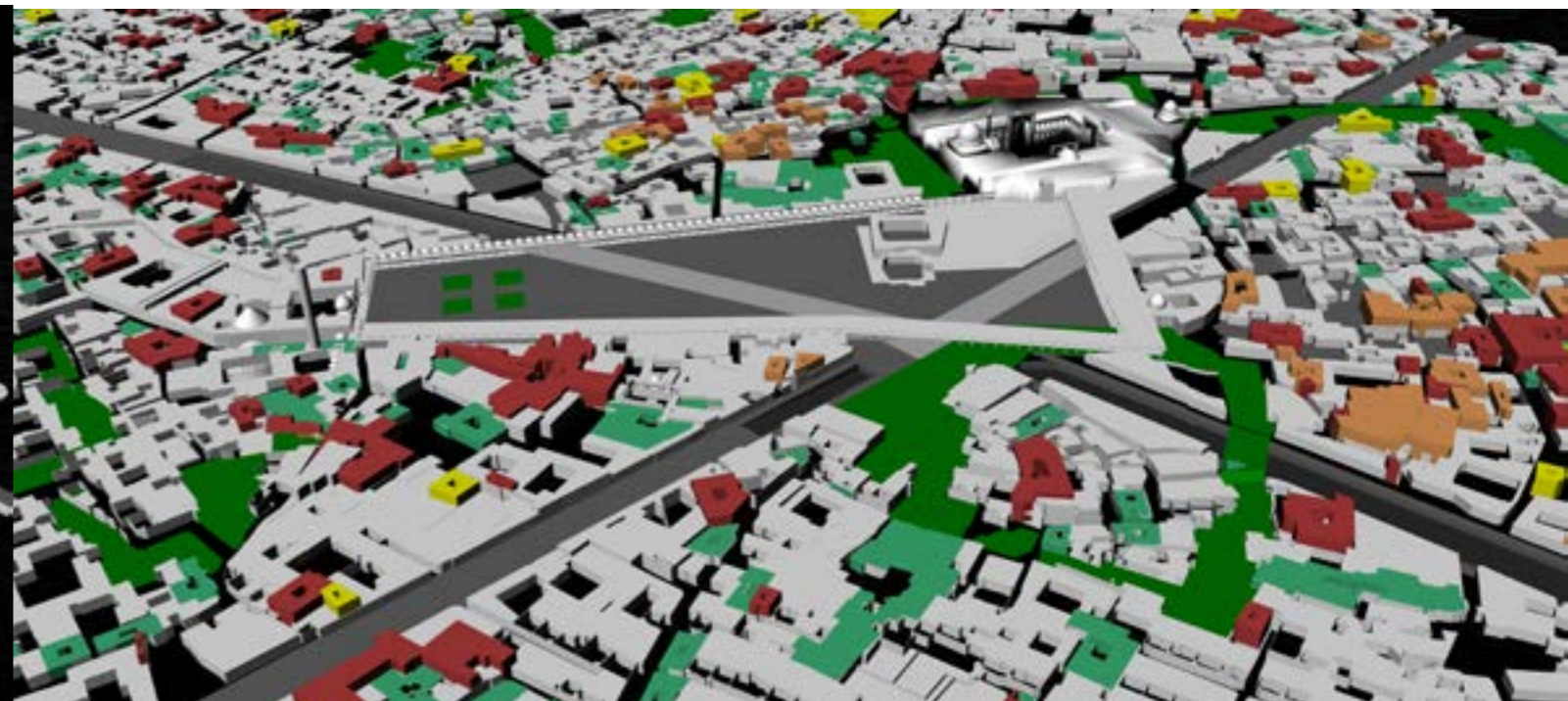
scenario 4



scenario 4



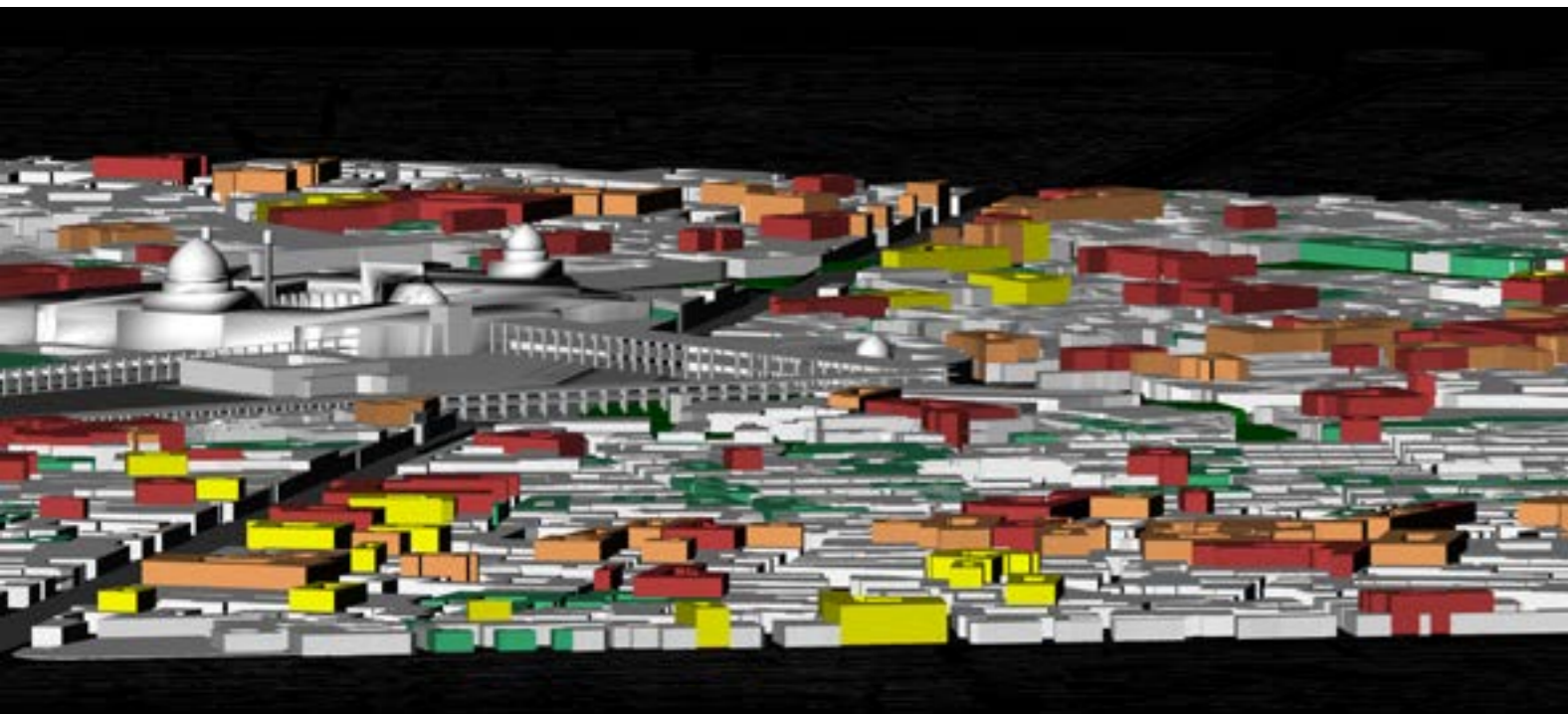
scenario5



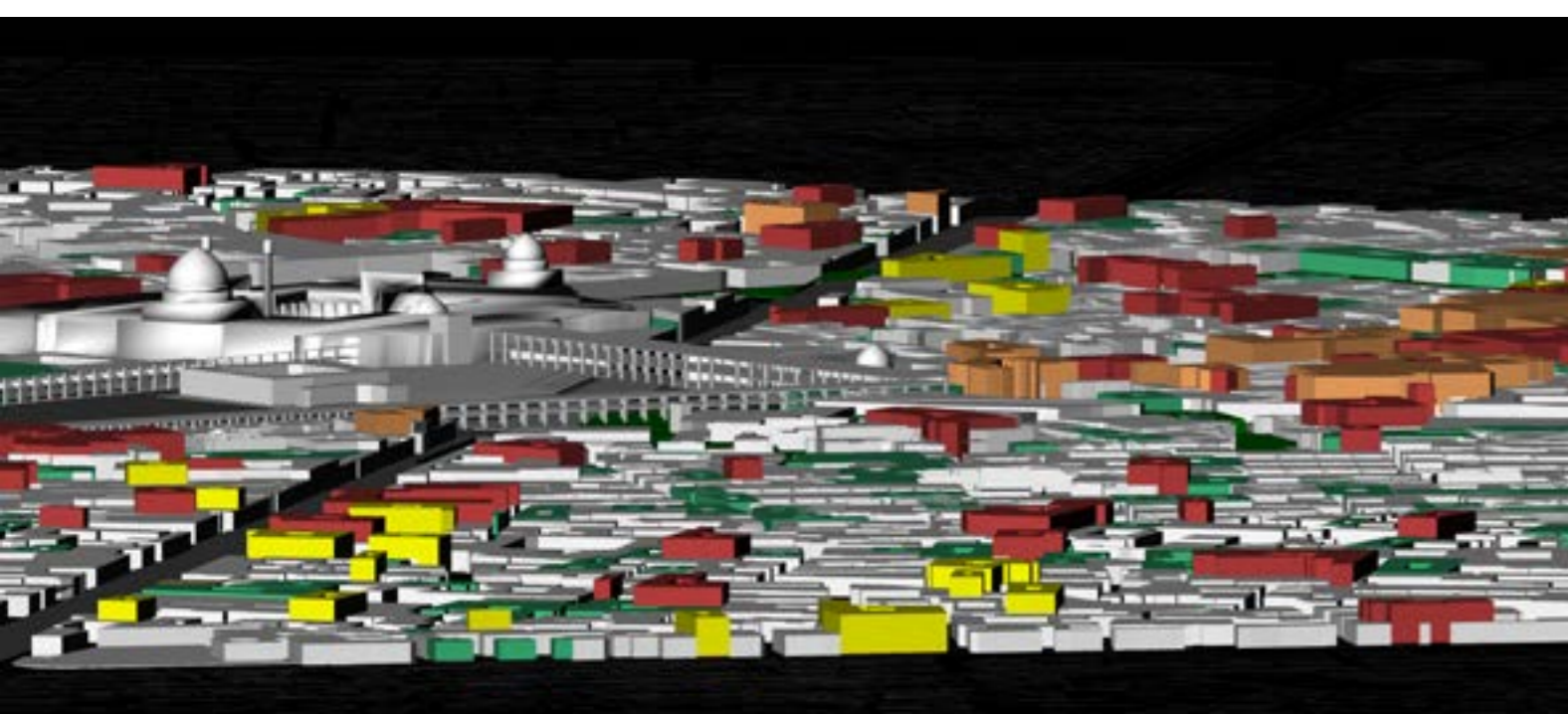
scenario5



scenario 3



scenario 4



scenario5

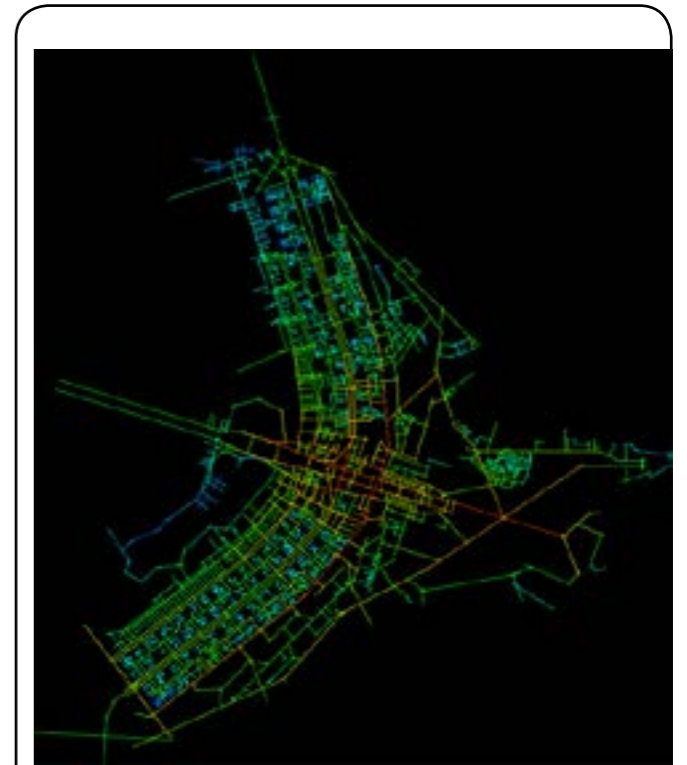
21-2-Urban Performance evaluation FROM AN SUBJECTIVE TOWARDS AN OBJECTIVE APPROACH

After proposing several scenarios, they should be evaluated to optimize the solution for the project. Evaluation could be implemented through subjective vs. objective approaches.

Subjective approach does not discuss the **relationships between human cognitive representations and spatial configuration of the urban environment.** "Lynch's concept of legibility has been fundamental in the urban design, planning, architecture, and environmental design fields for a few decades. Lynch argued that a strong legible city could facilitate humans' orientation in the city. However, urban design research has also criticized Lynch's work for ignoring **the relational characteristics between physical elements** of the urban environment and legibility."¹

On the hand, objective evaluation suggests that the **more intelligible an area is, measured by objective values of spatial configuration, the more legibly it is reflected in a human's spatial cognition.** Space syntax method is the most known objective method for evaluation.

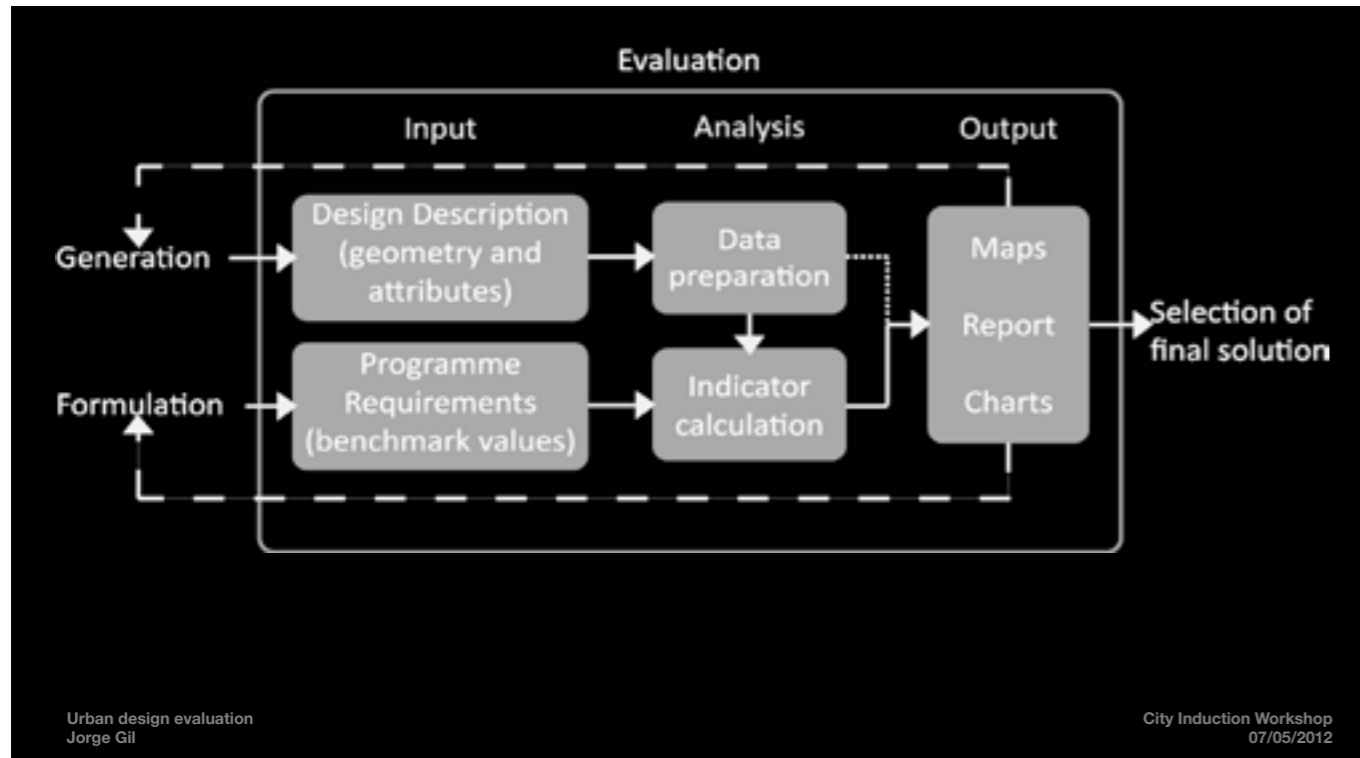
"The term space syntax encompasses a set of theories and techniques for the analysis of spatial configurations. Originally it was conceived by Bill Hillier, Julianne Hanson and colleagues at The Bartlett, University College London in the late 1970s to early 1980s as a tool to help architects simulate the likely social effects of their designs."²



Map of axis lines in the city of Brasilia. The ramp of colors shows the global integration of the different streets, measuring the accessibility of a topological line for the entire system according to the spatial analysis of the syntax space. (source: http://en.wikipedia.org/wiki/Space_syntax)

Objective evaluation has been a recent issue of study by planner as George Gil and Berghauer Pont, M. and P. Haupt from Delft university. These planners propose "measuring" the relational characteristics between physical elements "by calculating and analyzing "indicators" in order to evaluate and predict the urban performance.

1-http://repository.lib.ncsu.edu/ir/handle/1840.16/4411?mode=full&submit_simple>Show+full+item+record
2-http://en.wikipedia.org/wiki/Space_syntax



229. objective design process by analyzing indicators proposed by George Gil (source: Gil, 2012)



230. example of a diagram evaluating urban development (source: Gil, 2012)

Isfahan project performance evaluation

in this unit, first a subjective evaluation of the project is presented based on the objective results of the parametric tool. (area required for the redevelopments and plot area required to be renovated or conserved..)

Then, moving towards the objective field, in succession of "Spacemate-measuring densities" in previous section, an objective evaluation is introduced based on the knowledge of the relations between physical density, urban form and urban performance.

Setting and analyzing "performance indicators" and precise measurement of physical elements and their relational characters at different scales is possible through algorithmic and associative approaches.

As an example we can sum up the GSI and tare space as indicators at different scales in Isfahan project, by the grasshopper tool for each scenario and propose measures as "numbers" and then analyze them. In this way we can make a table of indicators measured which affect urban performance and optimize a solution through an objective approach.

In this project the "spacemate" diagram has been used to measure the physical elements and their relational characters; indicators as: GSI and tare space. Accordingly, the differences of the urban performance between the scenarios at neighborhood scale would be presented and one scenario would be selected as an optimized solution.

Further steps can be taken in setting and measuring performance indicators" in detail and provide a table of measures which can indicate performances precisely

Checklists can be used for a set of benchmark indicators of urban performance.

Experts as LEED administrators and planner George Gil have suggested checklists that are scored upon for urban assessment. These benchmarks could be assessed both subjectively and objectively.

In this project as general strategies and spatial, economical and institutional tools are shared between different scenarios and the five scenarios proposed differ in terms of densities proposed: GSI (built area in the plots) and the height of the developments, they are assessed in the differing aspects related to differing densities (upon the targets of the project and problems which are indicated in the area).

“Leadership in Energy and Environmental Design (LEED) consists of a suite of rating systems for the design, construction and operation of high performance green buildings, homes and neighborhoods.”¹

LEED® FOR NEIGHBORHOOD DEVELOPMENT 110 TOTAL POINTS POSSIBLE

SMART LOCATION & LINKAGE 27 POSSIBLE POINTS		GREEN INFRASTRUCTURE & BUILDINGS 29 POSSIBLE POINTS			
PREREQ 1	Smart Location	REQ	PREREQ 1	Certified Green Building	REQ
PREREQ 2	Imperiled Species and Ecological Communities	REQ	PREREQ 2	Minimum Building Energy Efficiency	REQ
PREREQ 3	Wetland and Water Body Conservation	REQ	PREREQ 3	Minimum Building Water Efficiency	REQ
PREREQ 4	Agricultural Land Conservation	REQ	PREREQ 4	Construction Activity Pollution Prevention	REQ
PREREQ 5	Floodplain Avoidance	REQ	CREDIT 1	Certified Green Buildings	●●●●●●
CREDIT 1	Preferred Locations	●●●●●●●●	CREDIT 2	Building Energy Efficiency	●●
CREDIT 2	Brownfield Redevelopment	●●	CREDIT 3	Building Water Efficiency	●
CREDIT 3	Locations w/ Reduced Automobile Dependence	●●●●●●●●	CREDIT 4	Water-Efficient Landscaping	●
CREDIT 4	Bicycle Network and Storage	●	CREDIT 5	Existing Building Use	●
CREDIT 5	Housing and Jobs Proximity	●●●	CREDIT 6	Historic Resource Preservation and Adaptive Reuse	●
CREDIT 6	Steep Slope Protection	●	CREDIT 7	Minimized Site Disturbance in Design and Construction	●
CREDIT 7	Site Design for Habitat/Wetland & Water Body Conservation	●	CREDIT 8	Stormwater Management	●●●●
CREDIT 8	Restoration of Habitat/Wetlands and Water Bodies	●	CREDIT 9	Heat Island Reduction	●
CREDIT 9	Long-Term Cnsrvtn. Mgmt. of Habitat/Wetlands & Water Bodies	●	CREDIT 10	Solar Orientation	●

NEIGHBORHOOD PATTERN & DESIGN 44 POSSIBLE POINTS		INNOVATION & DESIGN PROCESS 6 POSSIBLE POINTS			
PREREQ 1	Walkable Streets	REQ	CREDIT 1	Innovation and Exemplary Performance	●●●●●●
PREREQ 2	Compact Development	REQ	CREDIT 2	LEED Accredited Professional	●
PREREQ 3	Connected and Open Community	REQ			
CREDIT 1	Walkable Streets	●●●●●●●●●●			
CREDIT 2	Compact Development	●●●●●●			
CREDIT 3	Mixed-Use Neighborhood Centers	●●●●			
CREDIT 4	Mixed-Income Diverse Communities	●●●●●●●●			
CREDIT 5	Reduced Parking Footprint	●			
CREDIT 6	Street Network	●●			
CREDIT 7	Transit Facilities	●			
CREDIT 8	Transportation Demand Management	●			
CREDIT 9	Access to Civic and Public Spaces	●			
CREDIT 10	Access to Recreation Facilities	●			
CREDIT 11	Visitability and Universal Design	●			
CREDIT 12	Community Outreach and Involvement	●●			
CREDIT 13	Local Food Production	●			
CREDIT 14	Tree-Lined and Shaded Streets	●●			
CREDIT 15	Neighborhood Schools	●			

REGIONAL PRIORITY CREDIT 4 POSSIBLE POINTS		
CREDIT 1	Regional Priority	●●●●

40-49 POINTS: CERTIFIED 50-59 POINTS: SILVER 60-79 POINTS: GOLD 80+ POINTS: PLATINUM
FOR MORE INFORMATION SEE THE LEED REFERENCE GUIDE FOR GREEN NEIGHBORHOOD DEVELOPMENT

The LEED-ND Rating System was created by the Congress for the New Urbanism, Natural Resources Defense Council, and the U.S. Green Building Council.

LEED for Neighborhood Development offers designations for many types of projects and phases of development. Projects may constitute whole, multiple, or portions of neighborhoods, and may be single- or mixed-use. A three-stage certification model corresponds to the phases of the development process:

Stage 1 – Conditionally Approved Plan: Projects that have not completed the entitlements, or public review, process can earn this designation, envisioned to help gain support from the local government and the community.

Stage 2 – Pre-Certified Plan: Fully-entitled projects or projects under construction may earn this designation, which can help secure financing, expedite permitting, or attract tenants.

Stage 3 – Certified Neighborhood Development: Constructed projects can certify that the final built project meets all attempted prerequisites and credits.

230.suit for assessing fo Neighborhood Development
(source: <http://www.usgbc.org/ShowFile.aspx?DocumentID=10504>)

5 evaluation fields for each scenario are recognized:spacial,social,economical,ecolog ical and administrative. For each field several benchmarks has been defined and the maximum score possible out of 100 is presented in the following table. The sum f all maximum scores in each field is 100.

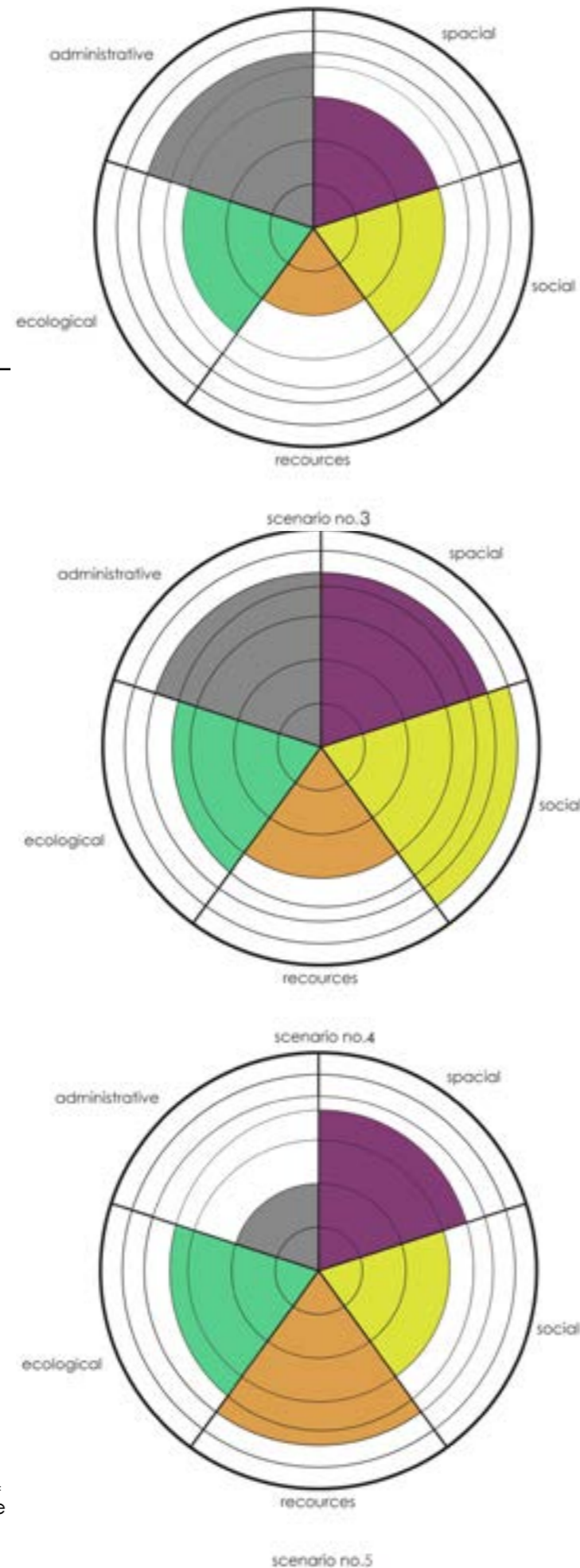
fields	scores
spacial	
<ul style="list-style-type: none"> provision of the area required for new residential and non residential for the proposed for the integrated mixed used community preservation of the identity of the context provision of open spaces spacial and visual coherence percentage of the redevelopable plots conserved vs. the renovated 	required 25 25 25 25
social	
<ul style="list-style-type: none"> provision of the area required for new residential and non residential for the proposed for the integrated mixed used community high intensity the degree of integration and social mix the provision of public spaces 	required 40 30 30
economical	
<ul style="list-style-type: none"> provision of the area required for new residential and non residential for the proposed for the integrated mixed used community provision of active densities adaptive reuse percentage of the redevelopable plots conserved vs. renovated optimum management of resources 	required 20 20 30 30
ecological	
<ul style="list-style-type: none"> provision of the area required for new residential and non residential for the proposed for the integrated mixed used community percentage of the conserved plots vs. renovated ones provision of open spaces ecological well being of the places formed by proposals low compactness 	required 30 20 20 20
administrative	
<ul style="list-style-type: none"> institutional feasibility the restrictions on the proposals presented by administration are considered 	60 40

Subjective evaluation

“This idea proposes building replacement rules to preserve and link the neighborhood, generate a variety of functions, increase density and a change in the relation of each building with the public space.”

As in scenario 1 and scenario 2 refilling all the redevelopable plots with proposed density would not satisfy the need of the project(783900 sqm new residential and non residential) and does not meet the prerequisite indicated “provision of the area required for new residential and non residential for the proposed for the integrated mixed used community”,they are removed from the alternatives which are being scored.

The overall score would be 100 in each of the 5 fields and though a complete circle would be the ideal choice.The optimum alternative would be the closest option to a circle.(100-100-100-100-100) Comparing scenario 3,4, and 5 results shown,scenario 4 is selected for the re-development project.



60 diagrams showing evaluation of scenarios 3,4 and 5 in five indicated fields.scenario 4 is closer to the ideal circle diagram. (source:author’s drawings)

towards objective evaluation

Assessment of scenarios in spacemate

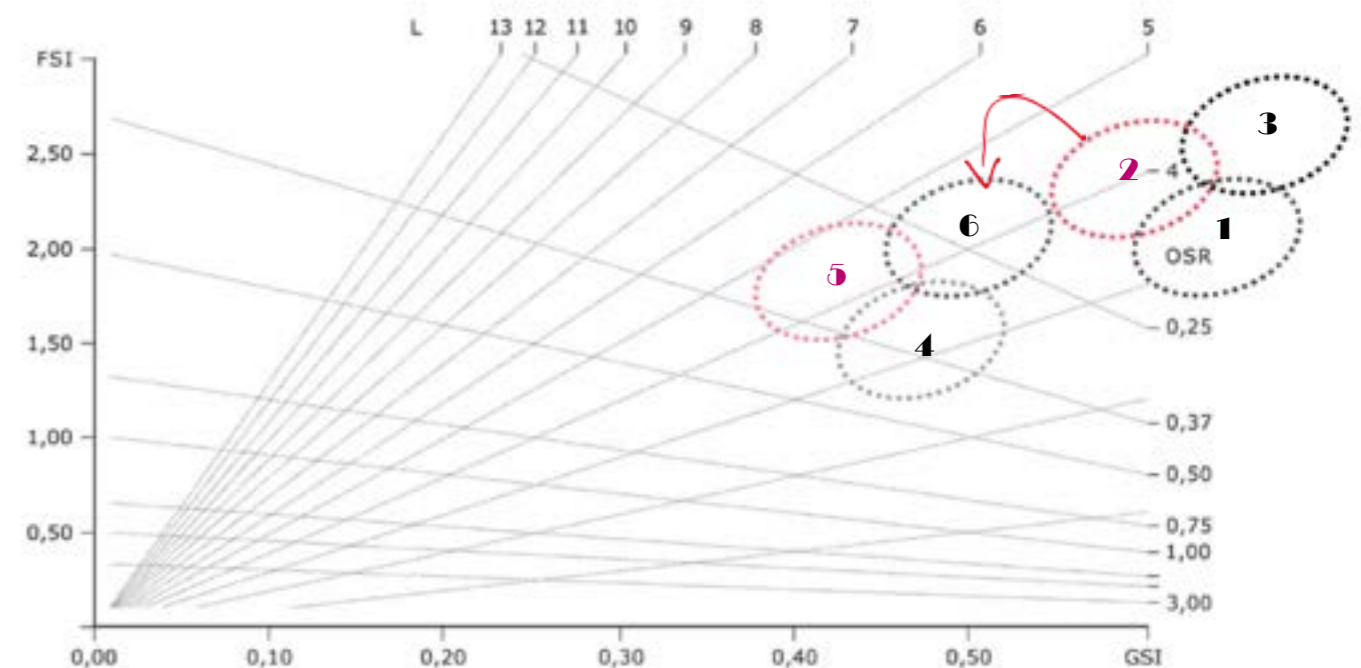
scenarios 3,4,5 which meet the area required for the integrated mixed used community are modeled both at plot and distinct scales in spacemate.

Scenario 4 insures lower GSI and therefore more unbuilt open and public space.

Scenario 3 proposes lower height at same intensity and therefore high GSI ; more degraded plots to be redeveloped and less conserved.

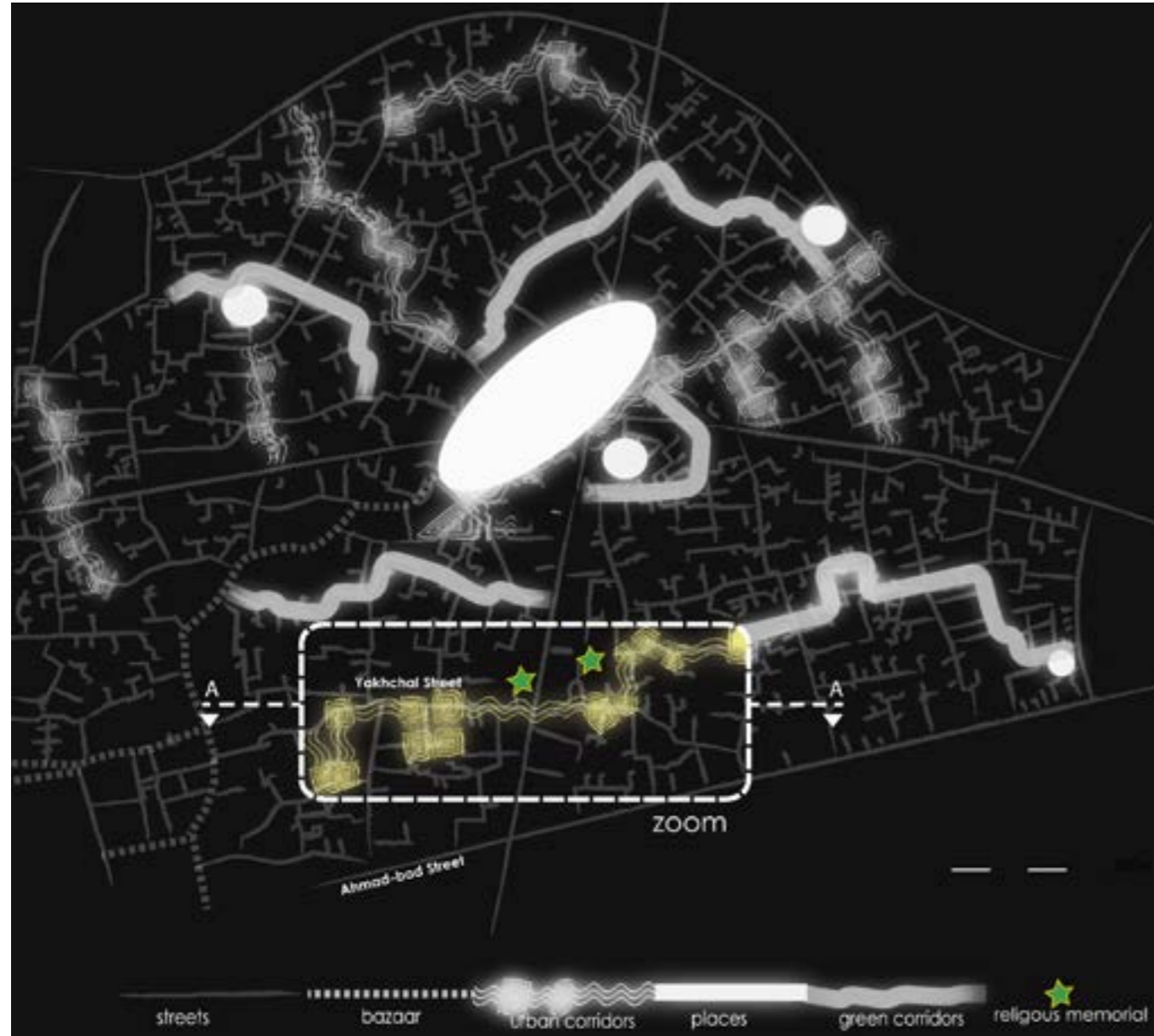
Scenario 5 proposes the same height and intensity as scenario 4, but the GSI is defined 0.7 which means a very compact context at plot scale which is not permitted even by the municipality. High FSI indicates more density in fewer redeveloped plots.

Among 3 Scenarios No.4 is the optimized one according to the both approaches evaluated. It is more socially, economically and environmentally viable.It provides integrated vibrancy.



61 modeling of 3 scenarios:1-Scenario 3 at plot scale 2-Scenario 4 at plot scale 3-Scenario 5 at plot scale 4-Scenario 3 at distinct scale 5-Scenario 4 at distinct scale 6-Scenario 5 at distinct scale in spacemate. Scenario 4 insures lower GIS and therefore more unbuilt open space. A shift towards left is seen at neighborhood level.(source:author’s drawings)

21-3-A **ZOOM** in a decentralized urban of mixed used spaces



62 A zoom on urban axe..It links residential neighborhoods on 2 sides of Hatef Street to a green corridor on west. (source:author's drawings)

As a practical result of all the interventions discussed, an urban axe is zoomed in and elaborated. This axe starts around bazaar entrance on north east of Naghsh-e-Jahan square, follows Yakhchal Street, passing 2 religious memorial (Imamzadeh Jafar and Imamzadeh Ismaeel). It links residential neighborhoods on 2 sides of Hatef Street to a green corridor on west. There are many blighted, dismissed and degraded plots along this axis which are potentials for new redevelopment. (renovation and conservation) in order to promote a network of decentralized active

uses, link the neighborhood, generate a variety of functions, increase density and a change in the relation of each building with the public space. According to scenario 4: blighted, dismissed and 68% of the degraded potential plots would be renovated with an average of 4 floors and GSI of 60%, as a network of mixed used (commercial, office, residential plots). 32 percent of the degraded plots would be conserved and improved. with the existing average height of 2 floors and GSI of 70%. Potential redevelopable plots in a buffer of 100 meters to the urban axe are targeted for renovation.



63 The scheme above shows existing situation. The sketch below depicts potential plots for redevelopment. According to scenario 4: blighted, dismissed and 68% of the degraded potential plots would be renovated as a network of mixed used (commercial, office, residential plots), 32 percent of the degraded plots would be conserved and improved (source:author's drawings)

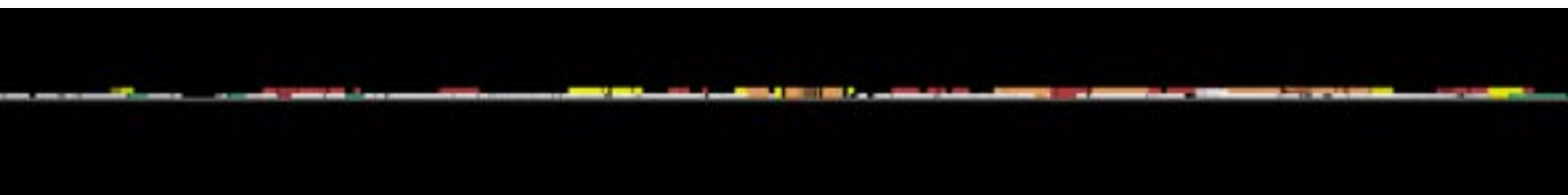


64 According to scenario 4, potential redevelopable plots in a buffer of 100 meters to the urban axe are targeted for renovation to provide a network of mixed active uses. The sketch presents plots targeted for renovation (adaptive reuse-change of density) in red and plots intended for conservation (improvement and preservation) in green.

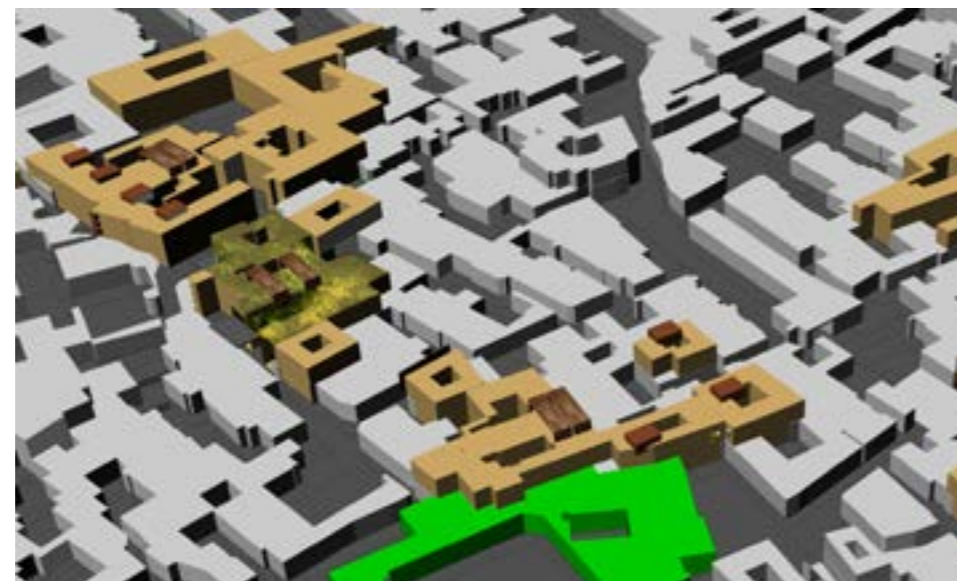


66 Aerial view of the urban axe, looking from south east; a network of mixed used redevelopments (source: author's drawings)

All the spacial, economical and institutional tools explained previously are integrated as an urban project in promoting the urban axes; Infill mixed used projects, requalification of the neighborhood, requalification of the valuable individual plots, promoting public places, streets and infrastructure modifications are implemented as spacial tools to redevelop the neighborhood.



65 Section A-A: According to scenario 4: blighted, dismissed and 68% of the degraded potential plots would be renovated with an average of 4 floors and GSI of 60%, and 32 percent of the degraded plots would be conserved and improved. with the existing average height of 2 floors and GSI of 70%



67 zoom-in perspectives of mixed used developments(source:author's drawings)













An example of redeveloping a dismissed place to a design district; the example shows how renovating an old dismissed district is rehabilitated by activating a network of artistic activities. Although Isfahan project does not only focus on artistic activities but the idea of a network of active uses rehabilitating a degraded context is similar to this case.



















































































Organisation in Design is a studio dedicated to managing a broad spectrum of tasks for designers, design studios and other design related companies. The founders of Organisation in Design Margriet Vollenberg, Margo Konings and their team have over 10 years of experience in scouting and organising locations for exhibitions in Milan. In 2009, Organisation in Design started working on the project Ventura Lambrate, after being introduced to the Italian collector of contemporary art, cultural entrepreneur and architect, Mariano Pichler. Since 2000 he had been working on a major project to redevelop Milano's Lambrate industrial area. The first Ventura Lambrate, the new design district in the city of Milano during the Fuori Salone, was created by Organisation in Design and launched in April 2010. Since the successful launch of Ventura Lambrate, Organisation in Design has been invited to organise Ventura Projects all over the world. (source: http://www.venturaprojects.com/?page_id=31)





uses

- parking 
- artistic activity 
- music 
- movie/theater 
- restaurant/bar 
- retail 
- office 
- incubator/research 
- residential 
- temporary accommodation 
- data bank 
- sport facility 

uses \ plot no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
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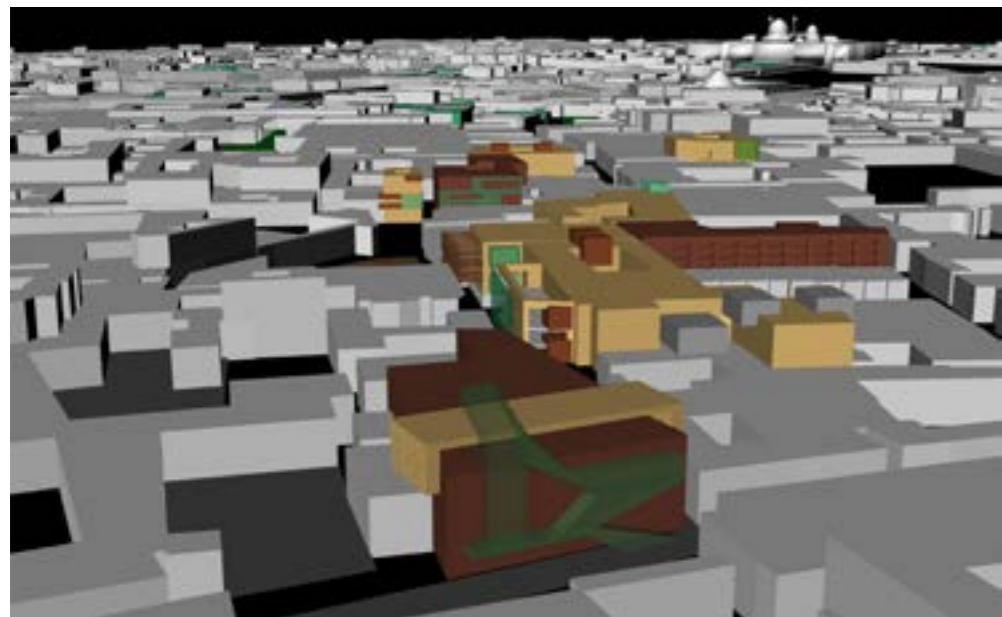
68 the scheme shows a network of different uses provided through the redevelopment project. The opposite table shoes concentration of different activities in renovated plots coded on the sketch map. (source:author's drawings)

The redevelopment is mixed used both at plot and district levels. Ground floor levels are used as local shops and pilot courtyards ;accommodating meeting points ,places for live performances and events,expositions and exhibitions. First floor levels are used as offices/studios and the 3 rd and 4th floor as residential units. Live/work building;;support businesses like: research centers,offices,studios,residents' data banks,community-based multimedia centres,delivery platforms like exhibition and expositions,temporary accommodation for visitors, shops,irestaurants and cafès are all linked and integrated,rehabilitating the area s an urban axe.

69 localization of 5 perspectives representing the mixed used neighborhood in following views(source:author's drawings and photomontage)



1-mixed used buildings redeveloped on adjacent blighted and degraded plots on Yakhchal Street



2-a view from south towards Jameh mosque-mixed used renovated



3-mixed used building redeveloped on a dismissed plot on Yakhchal Street



4-local squares attribute to street and neighborhood modifications on an urban axe provides local "places"for residents to be present and interact.An example of improvement of a local square in the project area as forums for commercial activity and social interaction .



5-view from entrance of the quarter on Yakhchal- conserved existing plots and the mixed used renovated degraded plot.Retail uses provided on ground floors -offices on first floors and residential on upper floors provide flows of people,money and information,rehabilitating the area.

22-ACTORS

The stakeholders: government, public corporations and private sector, partner through the provision of human resource, knowledge, funding, maintenance, political support and proposals for the implementation of the strategies. This results in the creation of a network of actors that exchange professional knowledge and methods for the best possible implementation of "Integrated Vibrancy".

Considering IMR & RO Partnership model and its relevant, the proposal is to pursue but modify and improve the structure already laid out by IMR & RO that has succeeded in achieving political and virtual legitimacy. Integrating other possible public and private partners (according to their background and capabilities) and establishing public-private partnerships is proposed.

Negotiation with the **Aga Khan Trust for Culture (AKTC)** to enter the project in the Historic Cities Support Programme (HCSP), and establish partnership with them is a proposal for Isfahan project.

Therefore the partnership structure of the project would be:

1-Government sector:

- **Renovation & Restoration Organization of Isfahan Municipality** which activates the project, organizes the whole activity, revitalizes the old textures of the city and would be the initiative financier
- **Infrastructure and urbanism Ministry of Iran**—as in the general project regenerating the dilapidated context in Isfahan, intervenes as financier financier.
- **Province of Isfahan**—as in the general project regenerating the dilapidated context in Isfahan, intervenes as financier financier.
- **Heritage Preservation And Tourism Organization**—provides organization, knowledge, funding and implementation and maintenance in the field of rehabilitation and especially requalification of degraded heritage.

IMR&RO partnership model

Strategic management of the project was led by a committee which was formed once a month. The members of the steering committee were determined by the mayor and were consist of the following persons:

Managing director of the fruit and vegetable organization as the project manager and recommender, mayor of the third district, one of the social relations experts and loans affairs of Imam Khomeini relief foundation, one first class attorney for juridical consults, the head of Guild Affairs Association of Isfahan city, director of public relations in (FVO&RCO) of Isfahan, and the head of (IMR&RO). Performance committee of this practice also is determined by the managing director of (FVO&RCO).

Head of the project group and its director are the member of steering committee and project group, so strategy and performance, coordinate well.1

source: <http://www.unhabitat.org/bestpractices/2008/mainview04.asp?BPID=1905>

The Aga Khan Historic Cities Programme (HCP) promotes the conservation and re-use of buildings and public spaces **in historic cities in the Muslim World**. HCP undertakes the restoration and rehabilitation of historic structures and public spaces in ways that can spur social, economic and cultural development. Individual project briefs go beyond mere technical restoration to address the questions of the social and environmental context, adaptive re-use, institutional sustainability and training. (source: http://archnet.org/library/documents/one-document.jsp?document_id=8613)

- **Third District Municipality of Isfahan;** intervenes as organizer and developer of the project under the authority of general municipality of Isfahan It is the responsible arm for ensuring the availability of resources, acting as an mediator and coordinator for projects.
 - **Isfahan Islamic council organization;** provides institutional services and determines the members of the project steering committee
 - **Real estate registration Organization of Isfahan**—intervenes in institutionalizing and registering of the property possessions in the area
 - **telecommunication, water, electricity and gas organizations.** provide and modify basic facilities in the redevelopment project
 - **Housing and Urbanism Department of Isfahan**
The reference organization active in organization and implementation of urban project in Isfahan. New developments in Isfahan should observe the general rules of this organization
 - **Fruits and vegetable organization** organizing for vendors, retailers and reorganizing the occupations which have already, transferred.
- ### 2-Public Corporations:
- **Iran's civic and renovation organization** which has the greatest role and responsibility in context based modifications
 - **Isfahan Civic And Residential Organization** is one of the managing, implementing and professional organizations of Ministry of Housing and Urbanism of Iran which was established in 1997 and joined 7 other actors forming Iran's professional civic and restoration in 2003. Isfahan Civic And Residential Organization now acts according to the policies of Ministry of Housing and Urbanism.
 - **Imam Khomeini Relief Foundation;** reorganizes the poor vendors & retailers in a view point of win-win, present of technological and human resources Recognition of poor trade men and provide them some loans with a low interest.

- **A Professional steering committee** which is formed once a month .he members of the steering committee were determined by the mayor according to law. At least one representative from each partner of project.

Head of the project group and its director are the member of steering committee and project group.

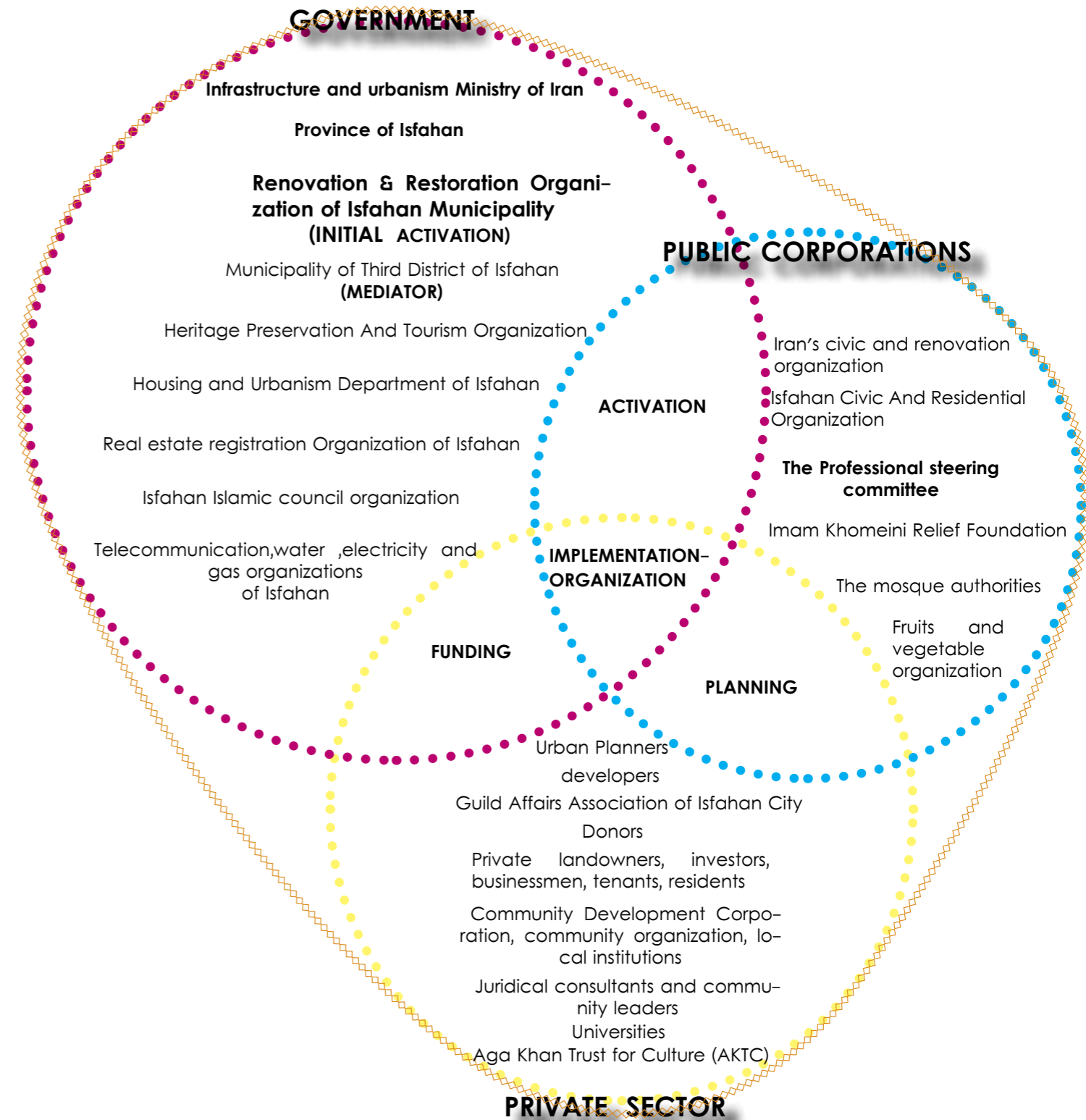
- **the mosque authorities** could intervene in legitimizing information dissemination, linking different actors, searching new finances and donors, and accordingly implementation of the project

3-Private sector

- **Guild Affairs Association of Isfahan City** ;preparing the list and quality degree of the current occupations which have trade permission or not and also in classification of the occupations in this region.
- **Urban Planner(S)** technical plan the redevelopment project
- **private landowners, investors, businessmen, tenants, residents** providing and negotiating the properties
- **donors** provide funding
- **residents** who are served ,take active part in decision making and implementation of the relevant projects and policies
- **juridical consultants and community leaders** are consulted in possession and juridical issues in the process of planning and implementing the project
- **Community Development Corporation, community organizations**
- **Universities** play great role in leading pilot social,spacial and economical projects

Guild Affairs Association of Isfahan City

All the retailers in the bazaar are grouped according to their wares in separate quarters of the market into a number of people who are involved with the same kind of business or craft in a bazaar(Guilds).Usually in markets in the Islamic countries, such as the bazaar of Isfahan, these groups of traders with the same craft or business were located at one localization in bazaar . So it was very easy for people to find the best products with the best price in a place in a short time. There were several senf in the bazaar of Isfahan, such as coppersmiths, blacksmiths, shoemakers, and dryers.source: http://www.iranchamber.com/architecture/articles/bazaar_of_isfahan4.php



70 map of actors in Isfahan redevelopment project

23-MANAGEMENT AND PARTNERSHIP

This unit starts with a brief explanation of the difference between a project under process in a conservative regime like Iran, regime and a democratic one, provide some outlines for the management of project and end in proposals for improving participation of the community in the project as an important issue.

Informal planning¹

Informal planning is usually neglected in urban projects. But it happens in practice and in middle eastern conservative systems it is more prevalent compared to western democratic systems in which different actors have more chances to have voice.

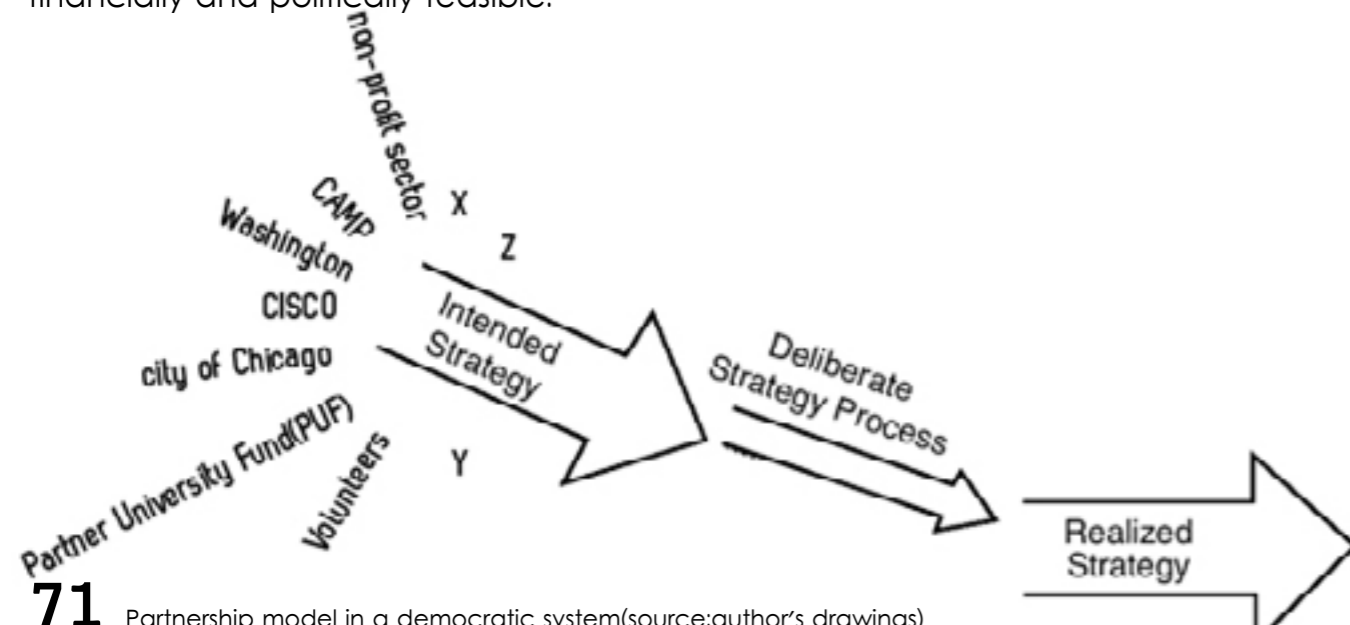
To understand this it's useful to recognize the difference between planning systems in a democratic system (like USA) and a closed system like Iran.

comparision

USA (Chicago, Illinois)

Governmental entities, advocacy organizations, educational, businesses, or other community-based groups all provide resources and funds for the project interactively. Some partners agree to take part in the project with some pre-requisites: in case the project fulfills certain aspects they take part in developing the project in those aspects.

The planned project would be modified according to different negotiations between partners. But these modifications make the project become virtually and financially and politically feasible.



71 Partnership model in a democratic system (source: author's drawings)

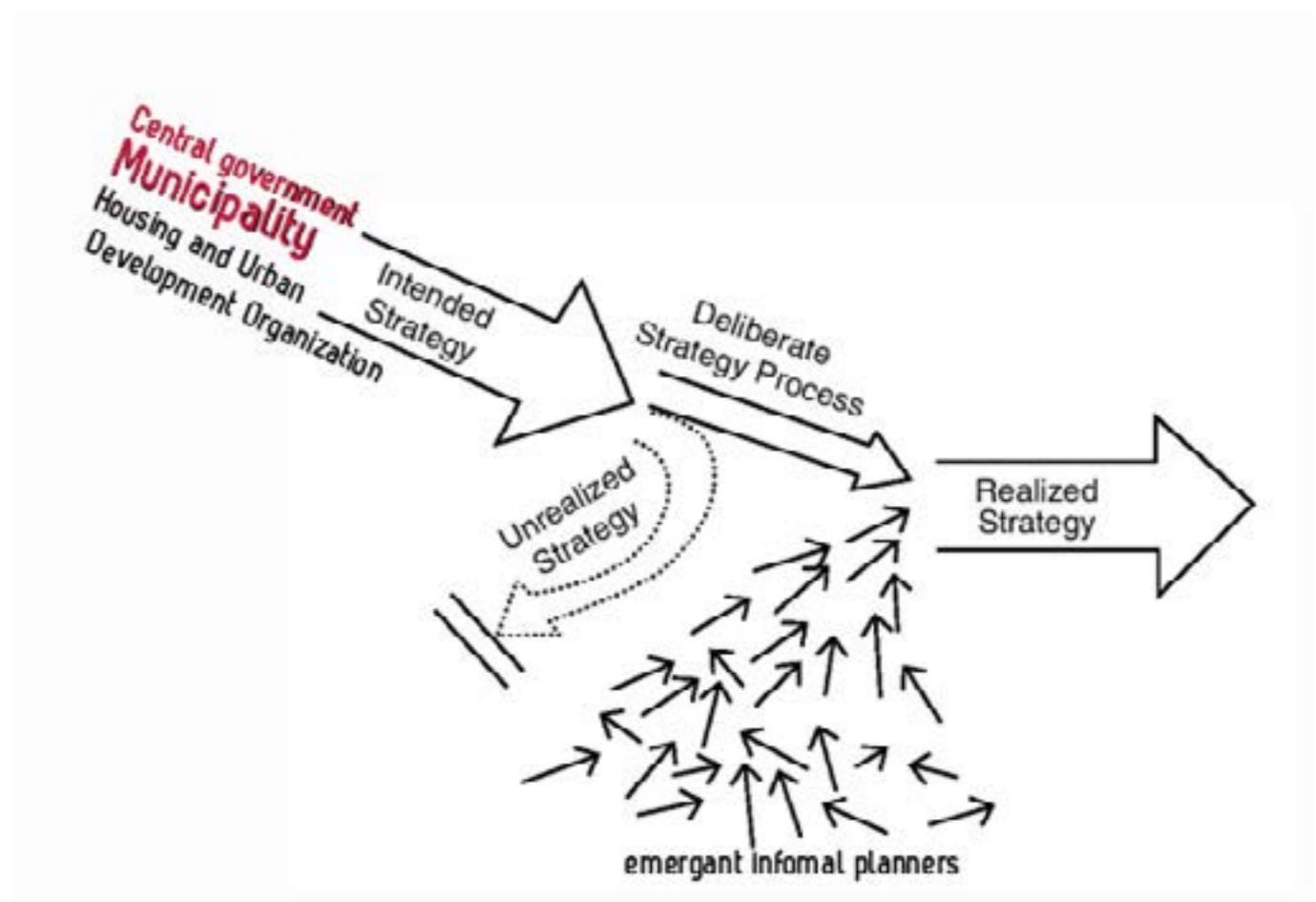
1-results of an intrview with Sanjeev Vidyarthi, Ph.D., Assistant Professor at CUPPA - University of Illinois at Chicago

Iran (conservative system)

The central governmental authority decides to plan a project.

Usually few institutional partners get involved in the project which threatens the feasibility of the plan. Further modifications by the "informal Planners" who were absent in the process of planning but are present in reality is significant. Examples are: users, associations, small politicians, small developers, the unemployed. But this is not what in reality happens.

People, associations, small politicians, small developers, the unemployed... use their influence and resources to change the plan informally according to their benefits. (as they did not have voice at the time of planning and implementation) An example could be an open space which is planned to be green and non-commercial. But would change its function as vendors, stalls and unemployed occupy it gradually.



72 Partnership model in a conservative system (source: author's drawings)

How can actors work across the three sectors ;commercial, nonprofit and community and across the three government domains ;cultural affairs, economic development, city planning? How can the project decrease the informal planning to minimum?

The alternative is built on the direct involvement of residents, community groups and local institutions towards a gradual rehabilitation of the existing residential and commercial property and a phased improvement of the urban environment. Success demands new shared governance systems and partnership models built around a common vision and understanding of the planning issues and opportunities.

Long range planning should be reflected by a multi-year document (a strategic plan) and short range by an operational plan.

In the point of view of creating a management structure, the partnerships between a hierarchy of stakeholders from the public and private sector, profit and non-profit, coming from various spatial and hierarchical scale is the main objective.

In co-operation with institutional partners and local institutions, both general issues and specific concerns should be discussed with national and municipal institutions, neighborhood representatives, local businessmen as well as with people living and working in the area.

These discussions help identify general planning policies and a number of pilot projects aimed at the improvement of

living conditions through the preservation and careful development of the area.¹

In the project , it will be vital to create a technical and management team dedicated to the project; Creating a network of institutions and related organizations as the steering committee A special team of experts of existing human resource.

The members of the steering committee were determined by the mayor according to law. At least one representative from each partner should be present.

The steering committee plays a role in brokering partnerships and collaboration among existing and potential investors, businesses, renters, developers, arts groups, all levels of government, and all citizens of the area to achieve the goal of economic, physical and social revitalization.

The Municipality of district 3 of Isfahan is the responsible arm for ensuring the availability of resources, acting as an mediator and coordinator for projects.

Interaction with residents

Project Interventions should seek to provide information, contacts and resources that will enhance existing assets and **help realize the aspirations of the people** most directly concerned. Users are important human resource in the urban redevelopment project who should be intervened in the project. An example is integrating the residents to improve their life by involving them in planning and management issues: traffic, management the community, providing safety.

interventions

- Referring to Aga Khan Trust for Culture (AKTC) the project proposes the concept of a **Community Development Corporation** in the neighborhood.

This body, will gradually become an independent, locally based entity, and it **facilitate co-operation between the government, local institutions and the private sector**. It will activate community resources within the framework of locally identified problems, needs. It will combine the mobilisation of resources, technical co-ordination, community affairs and institution-building with physical upgrading and environmental improvement activities.

CDC is comprised of elected representatives from **residents and representatives from project partners**, to improve services and quality of life for residents. The managers could be paid a percentage defined of community returns. The community management would be supported by local and municipal over-heads in terms of facilities' and guidance.

It would

- 1. manage and programmize cultural,commercial(market),social and planning issues of the area;**
- Provide a sense of community and belonging that would end in the residents trying to improve their community
- Facilitate formation of informal, virtual communities meetings-exhibitions, workshops on different social, cultural, environmental economical issues
- inform (local radio, newspaper)services .

the Aga Khan Trust for Culture (AKTC) and its partners, with support from the Cairo Governorate, in the rehabilitation project of the historical district in Cairo (Darb al-Ahmar). have introduced the concept of a **Community Development Corporation (CDC)** in Darb al-Ahmar. This body, **which will gradually become an independent, locally based entity, will facilitate co-operation between the government, local NGOs and the private sector**. As such, it will operate not so much as a traditional social agency dispensing subsidised services to identifiable target groups, but more as a self-sustaining, community-managed, private-sector initiative. It will activate community resources within the framework of locally identified problems, needs and priorities. It will combine the mobilisation of resources, technical co-ordination, community affairs and institution-building with physical upgrading and environmental improvement activities. Through this work, it will support the community and encourage the development of new entities capable of providing leadership, technical assistance, and management of local resources (THE AGHA KHAN TRUST FOR CULTURE,P.51)

- In urban redevelopment projects often a percentage of people do not agree with the interventions planned before the project would be finished and they would observe the positive consequences. In some cases, residents specially property owners prioritize their individual welfare and though solving their individual deficits to community welfare. However some people welcome the long term consequences of the project and contribute to it.

1. This supporting residents would be asked to reflect their understandings to the other residents of the neighborhood and spur them.
2. by negotiation with the owners of degraded plots, try to set agreement with them .For instance to give away a part of the lots for widening and modifying the streets in exchange for restoration , provision of facilities and façade restoration of their possessions.
3. The dissidents; the group who prioritize their individual welfare would be obliged to imitate the others or compelled to comply with the project according to the rules ratified.
4. It is very probable that private and public authorities would start to support the project after the primary positive achievements.¹

- organizing local institutions, community associations the unities of people and the owners of occupations
- Receiving the feedbacks of the residents of the implemented actions
- organizing the explanations workshops
- The role of media and advertisement is undeniable. Providing internet access and teaching the residents how to use new internet should be inserted in the community management programs.



The University Community Association (UCA) dates back to at least 1961 when residents formed this membership-based civic association to promote the interests of homeowners and other permanent residents of the area. In addition to UCA's interest in public policy issues affecting the area, UCA in recent years has encouraged civic spirit through social activities such as an annual ice cream social and a pancake breakfast. Membership dues are inexpensive. The president of the UCA board is Jonathan Riley..
(source:<http://campuspartners.osu.edu/index.php/university-district/civic-organizations>)

24-FINANCE

Existing situation

Government structure; Iran's decision making system is significantly concentrated on central government and municipality. Most of the decisions all over the country should be ratified by central parliament and the central government which is conservative in nature. Consequently, the more politically strong this actor is, the more it influences the planning process uniquely.

In this situation and in light of Iran's chaotic political and economical status there is much chance of large-scale projects getting short of budget and be stalled. (refer to "economic problems" unit) However planner proposes the practical tools for financing the project upon similar practices and the existing atmosphere apart from country's present political and economical problems which are out the scope of this project.

.More flexible and responsive municipal planning systems and capacities are required to cut through institutional time consuming bureaucracy.

The IMR&RO project is being financed by Isfahan municipality although other sectors were supposed to cooperate in funding. No mortgage has been ratified by central parliament of Iran to finance the project. Proposal.

In the first phase of implementation of the strategies, it is very important to have funding from the promoters, namely who will have the task of managing and coordinating the whole program of the actions.

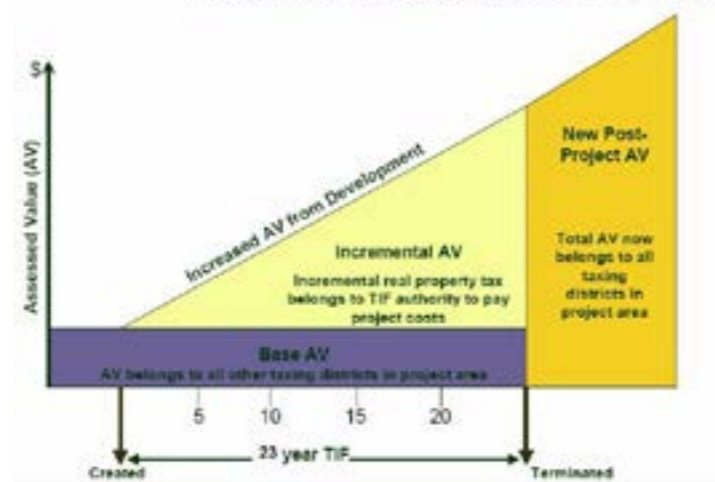
At the next steps, other actors should get involved in funding the project. Otherwise a project at this scale would not be implemented just by municipality's restricted funding. It will be possible to enable the procedures to reach the other sources as:

- integrating Housing and Urban Development Organization in the process as a financier
- integrating Heritage preservation and tourism Organization in the process as a financier
- activating the private sector as financier

Other mechanism to co-finance the project:

- co-financing programs using low-interest loans administered through special arrangements with owners (or tenants) and lending institutions for the projects
- participate in Joint ventures with other cultural and economical projects
- (TIF) Tax increment financing; tax increments within a certain defined district to finance the debt that is issued to pay for that. Tax Increment Financing offer based on projected revenue from uplifts in property value.¹
- Urban development banks; financing agency that resources the redevelopment of sites or districts by creative and strategic use of public sector lands and assets. Local governments assign to the bank land and buildings that have been difficult to sell, or have been off the market The lands are improved and marketed to targeted investors with a package of incentives. The bank generates revenue on a set percentage of the enhanced value of the land or asset upon sale, and invests that money in redevelopment of the site and marketing of the land
- Custom Partnership Arrangements: Custom programs may be arranged among willing partners to maximize investment opportunities
- dedicate Arts Funds, supported by dedicated portions of hotel and other types of taxes to support publicly-owned arts facilities

TIF Assessed Value (AV) Over Project Life



227.a diagram explaining TIF (source: <http://tifreports.com/2011/03/30/bad-deal/>)

Conclusion

The project starts from studying the existing situation of Isfahan historical city center which has been dilapidated spacially socially and economically. Some related projects to the area are reviewed. Consequently the drawbacks and resources of the urban area are highlighted in a SWOT table and main interpretation of the area is proposed;

The old plaza has been filled by invaluable constructions. The historically integrated urban fabric, has been isolated by modern streets, cutting the old bazaar of Isfahan as well.

The neighborhood has been ignored by spacially and consequently has degraded socially and economically.

The area could be considered as a 4 mono-functional residential quarters around a dilapidated bazaar separated from each other with modern streets which are not embedded in the context.

Although having potentials and strong background in usage of public spaces; bazaars, quarter centers, the main Saljuk plaza and local squares, the present users do not find sufficient public spaces to use and interact with each other.

This project area lacks the necessary hard and soft infrastructure and capacity to foster the activities and fluxes.

There is not required livability as there is no diversity and interaction between classes of people and the neighborhood.

However, the residents have deep sense of belonging. They need more interaction, more safety, more prosperity more diversity and more vibrancy.

In the second part of the book the redevelopment project is explained. Targets of the project are set focusing on revitalization of the area. Historical, spacial, social, economic and cultural resources for the project are introduced.

The boundaries of the project are set according to the demands and identified integrity of the area. Rehabilitation and revitalization is chosen as the project's approach and the "leading idea is proposed: Integrated vibrancy, MIXED USED INTEGRATED NEIGHBORHOOD connected through a decentralized urban mosaic of mixed used spaces on urban axis, green corridors, and places.

To fulfill the concept, six urban principles are targeted in the project: Connectivity, accessibility, security, critical mass, social interaction and promoting the economy.

The principles inspire five general strategies: rehabilitation, mixed used, integrated community, promoting public spaces, networks, cultural turn and creative economy. They are realized by strategic tools and actions. Creating a mosaic of urban mixed used, networked functions is emphasized in the strategies.

Next, spacial, economic and institutional tools to accomplish the five main strategies in the project are elaborated. The tools provide an integrated toolkit interlinked and overlapped at times spurring remedies for different problems.

This project focuses more on spacial planning tools and accordingly density testing scenarios. However they will only be of limited consequence to the district unless they are accompanied by an institutional framework. Institutional co-ordination and community involvement within a gradual process of economic improvement and physical rehabilitation must be viewed as the necessary ingredients through action plans and the pilot interventions.

Spacial tools are elaborated being practiced in the context:

In-fill mixed used projects; decentralised urban mosaic of mixed used spaces is infused in Potential redevelopable plots; blighted plots, dismissed plots and degraded plots recognized in the area urban axis which propose building replacement rules to preserve and link the neighborhood, generate a variety of functions, increase density and a change in the relation of each building with the public space; green corridors; A system of green corridors is proposed which connects the neighborhood and the existing green while providing new meeting places, social events and though more integration and safety.

Requalification of the neighborhood; improving, renovating and reconstruction of the main bazaar, secondary bazaars, streetscapes and provision of urban facility.

•

Requalification of the individual degraded plots; studies improving, renovating and reconstruction of individual dilapidated plots. Historically valuable plots would be improved/renovated. The blighted plots would be reconstructed. The dismissed would be renovated. A proportion of the degraded would be subject to renovation to meet the needs of new uses added to the existing uses and the rest would be conserved, improved.

Promoting public spaces; the intervention entails improving and activating the existing potentials for public spaces and providing new chances for users to be present and interact along urban axes and green corridors focusing on renovation of Saljuk plaza as a vibrancy multi functional pedestrian plaza, reminding its historical identity and acting as a linking center of the neighborhood. Small neighbourhood squares are targeted to simple low-cost improvements, designed to encourage informal contact and community life. Streets and infrastructure modification; an integrated network; The aim of infrastructure modification is preserving the nature of the old infrastructure and historical paths while reforming the deficits. Proposals for modifying the current situation are presented.

After setting the required toolkit the project advances to proposing a scenario for the redevelopment project. An associative parametric design method has been chosen to test different scenarios in terms of densities. Parametric associative planning empowers the planner to change one or more variable(s) (e.g. density), set in a flexible recorded process of design and observe the result and the final interface right after, as all the steps of design are linked associatively. The planner goes back and forth between leading idea-scenarios and alternatives to optimize a solution. (S)he plans an associative process once and tests scenarios through flexible recorded approach to compare solutions. Some specific values are set as inputs for variables according to the targets of the project and achieve outputs.

The "values" (in this project numbers) inserted for different variables are suggested upon the results of existing situation, the requirements of the project and feasibilities. These values could be replaced according to new requirements. (of another idea/project) and the whole process would be recalculated and visualized accordingly.

The practical process is divided in 3 steps implemented in grasshopper.

- 1- assessing the required residential and non-residential areas for a mixed used redevelopment
- 2- assessing the area of redevelopable lands available; blighted, dismissed and degraded plots
- 3- defining the redevelopable plots which are going to be renovated and conserved according to different scenarios.

Although unlimited scenarios could be tested by the tool, because of the targets of the project, not to destroy the identity of the area and upset the traditional context, it is determined to test 5 low to mid density scenarios. They would be materialized and their behavior would be evaluated accordingly and one scenario is prioritized as the optimized solution to the project.

A study of the relationship between density and spatial characteristics introduces the concept of performance indicators and suggests possible applications of spacemate as a control instrument and test framework for the planning and design practice.

5 representative scenarios focus on redevelopable plots: testing different **densities** resulting in renovation or conservation of the plots.

They differ in terms of GSI (percentage built area in the urban unit e.g. plot) and the height of the developments. To preserve the identity it is decided to follow the inner-courtyard style architecture of the context.

GSI is considered as average of 60% which is the highest percentage permitted to be built. to 70%

The height of the developments vary between 2-4 floors.

The target is optimizing a density which provides enough floor space for calculated floor area required for the mixed-used community in this context while achieving the highest spacial, social, environmental and economical productivity.

2 first low density scenarios are recognized impractical according to the tool's calculations.

The other scenarios, proposing higher densities in terms of number of floors and GSI are practical but vary in the square meters they suggest to be renovated or conserved.

The next phase would be performance evaluation which would be possible by assessing the outputs of the process to achieve a certain goal.

For prioritizing and optimizing the scenarios, they are evaluated, moving from a subjective approach to a subjective one.

First a subjective evaluation of the project is presented based on the objective results of the parametric tool. Providing Checklists is highlighted for a set of benchmark indicators of urban performance, both objective and subjectively.

In the objective evaluation of the scenarios, 5 evaluation fields for each scenario are recognized: spacial, social, economical, ecological and administrative. For each field several benchmarks has been defined and the maximum score possible out of 100 is presented in the following table. The sum of all maximum scores in each field is 100. The scores would be presented on pie charts.

The overall score would be 100 in each of the 5 fields and though a complete circle (100-100-100-100-100) would be the ideal choice. The optimum alternative would be the closest option to a circle.

Comparing scenario 3, 4, and 5 results shown, scenario 4 is selected for the redevelopment project.

Then, moving towards the objective field, in succession of "Spacemate-measuring densities" in previous section, an objective evaluation is introduced based on the knowledge of the relations between physical density, urban form and urban performance.

the "spacemate" diagram has been used to measure the physical elements and their relational characters; indicators as: GSI and tare space.

Accordingly, the differences of the urban performance between the scenarios at neighborhood scale would be presented and one scenario would be selected as an optimized solution.

Scenarios 3, 4, 5 are modeled both at plot and distinct scales in spacemate.

Scenario 4 insures lower GSI and therefore more un-built open and public space.

Scenario 3 proposes lower height at same intensity and therefore high GSI ; more degraded plots to be redeveloped and less conserved.

Scenario 5 proposes the same height and intensity as scenario 4, but the GSI is defined 0.7 which means a very compact context at plot scale .

Among 3 Scenarios No.4 is the optimized one according to the both approaches evaluated. It is more socially, economically and environmentally viable..

As a practical result of all the interventions discussed, an urban axe is zoomed in to illustrate the implementation of the tools to provide a decentralized network of mixed used places according to scenario 4

To determine feasibility of the proposal, The last units refers to partnership, management model and finance of the project. Stakeholders: government, public corporations and private sector, partner through the provision of human resource, knowledge, funding, maintenance, political support and proposals for the implementation of the strategies. This results in the creation of a network of actors that exchange professional knowledge and methods for the best possible implementation of "Integrated Vibrancy".

After a brief explanation of the differences between a project under process in a conservative regime like Iran and a democratic one, provide some outlines for the management of project and end in proposals for improving participation of the community in the project as an important issue.

In the project , it will be vital to create a steering committee A special team of experts of existing human resource as well as Community Development Corporation. to promote participation and Interaction between users.

In terms of finance, a brief description of Iran's economy related to the project is presented followed by the proposal for financing the project:

In the first phase of implementation of the strategies, it is very important to have funding from the promoters,, namely . the municipality.

At the next steps, other actors should get involved in funding the project. Otherwise a project at this scale would not be implemented just by municipality 's restricted funding. It will be possible to enable the procedures to reach the other sources as: integratig specific organization, co-financing programs, joint ventures, Tax increment financing, Urban development banks; Custom Partnership Arrangements.

Further steps could be taken regarding more precise performance evaluation by evaluating more performance indicators and comparing them with standards set and optimizing them. Furthermore, improvement could be applied on the technical (grasshopper) tool process to simplify and more generalize the process. The last but not least is the role of the softwares like GIS in localization of different uses in the project that could be taken advantage of.

The final unit of the book, describes a systematic process of an objective performance evaluation approach and an example fulfilled by author in using GIS for localization of specific uses in a project.

FURTHER STEPS

More precise performance evaluation

In this project, 2 main indicators (for the specific project) GSI and tare space, 2 important indicators of the performance has been measured to discover the physical elements and their relational characters;

In cases that more indicators are required, further steps can be taken in increasing, setting and measuring performance indicators in detail and provide a table of values which can indicate performances more precisely

A range of software and programs could be used in data preparing, and analysis for performance evaluations.

The general process:

- 1-Data would be derived from geometry.
- 2-Benchmark equipment of the project and its indicators should be recognized.
- 3-Data would be assessed to find if the options meet the needs in each field and assess many points they gain. (calculations according to the plans by computer)
- 4-The optimized option could be chosen.

A range of software Postgre 9.0, PostGIS 1.5, QuantumGIS 1.6.0.

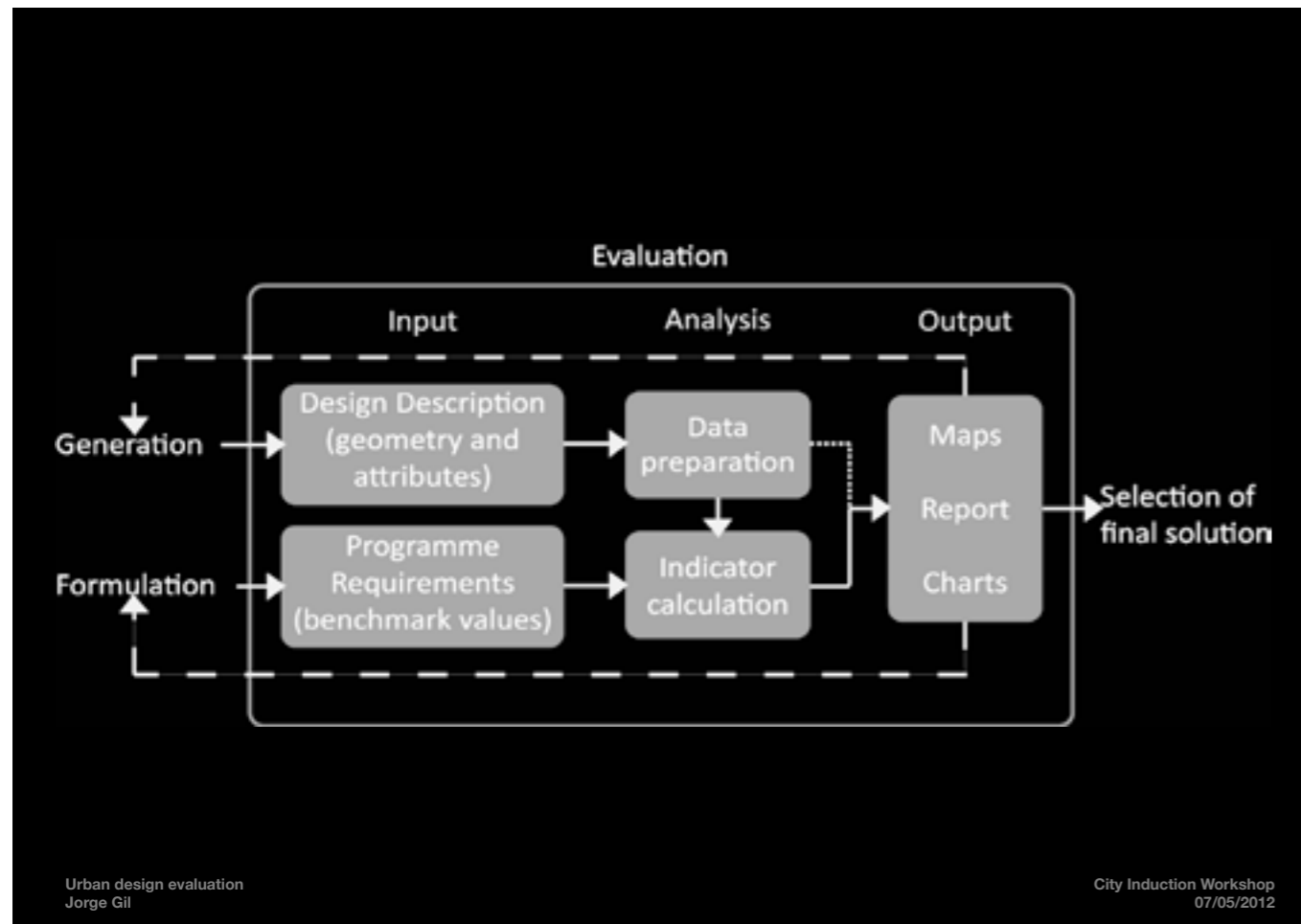


Diagram showing an objective performance evaluation approach (source: Gil, 2012), AutoCAD Civil3D and GIS are practical for this aim.

Precise selection specifications with GIS

In the process of choosing a site for new residential or non-residential use or a green area or corridor, some selection criteria should be applied in order not to detriment the historical heritage.

By using GIS this process could be accelerated with higher precision using a large variety of physical and demographic data. Criteria for choosing a plot for new redevelopment should be set. For instance

1. choose from blighted or invaluable dismissed lands (in previous step)
2. not to develop anything new in 100m distance around historical heritage, as the construction implementation in the adjacent plot may harm the heritage.

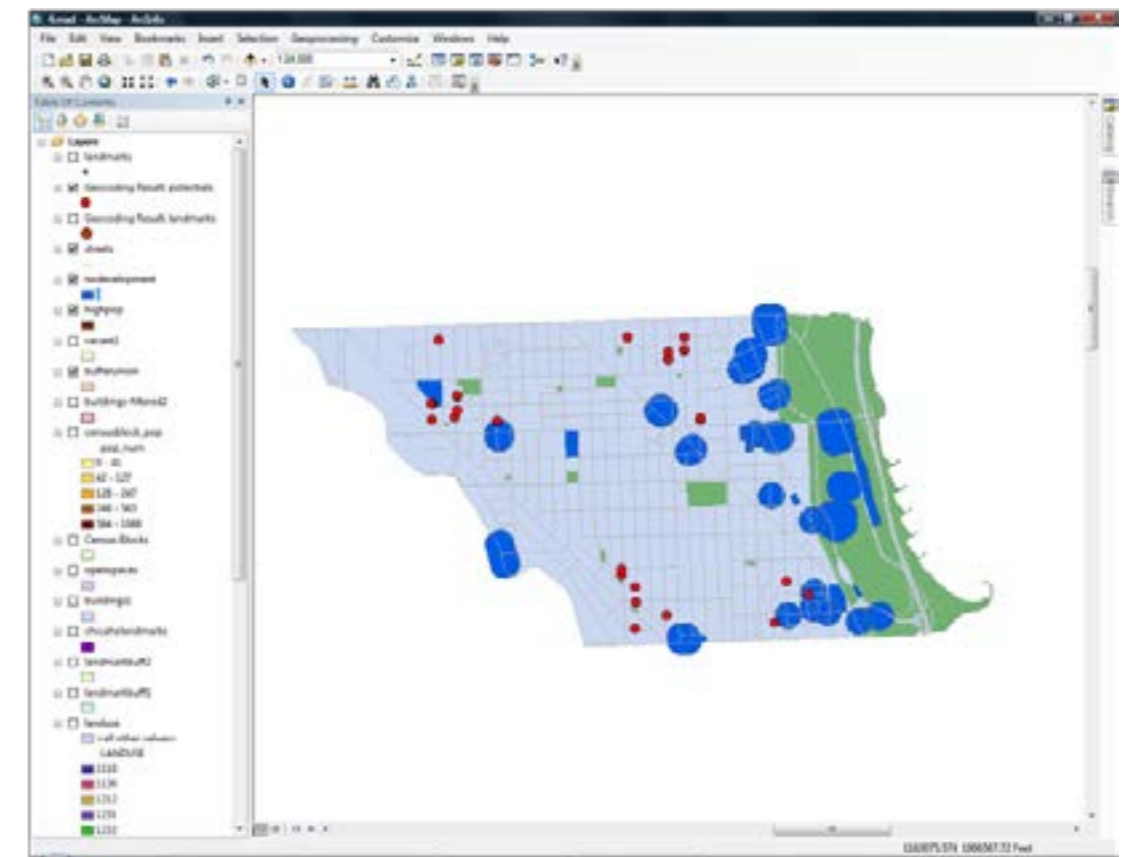
Unfortunately the required shapefiles and coordinate system's info. for this project has not been accessible. Therefore the process of choosing from ruins and dismissed lands and buffering the historical heritage was mentioned in planning without using GIS.

However, an exploratory process was implemented on a historical context in Chicago area which shapefiles and raw materials were at hand, to practice the process of defining required land for new redevelopment.

Other restrictions in the process of finding suitable plots for redevelopment (in the case of Chicago project; new green spaces) shall be defined as first:

3. Choose from areas which host older buildings (majority of buildings with more than 50 years)
4. Avoid new developments in high populated blocks
5. Avoid destroying non residential uses
6. Avoid new green fields in a close proximity to the existing.

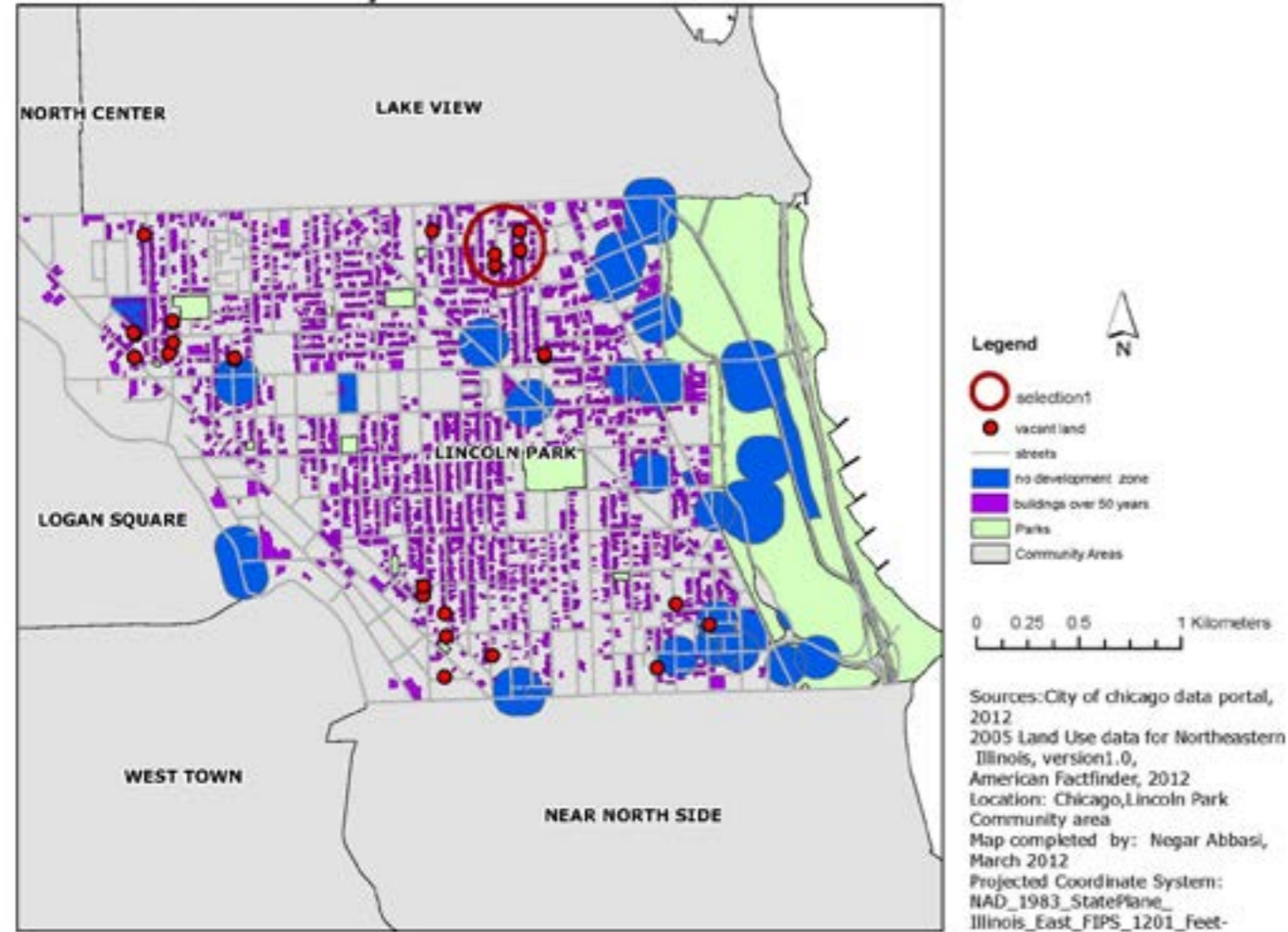
In this project it was decided to mark an area of 31500sqm as a final suggestion which could be expanded to suggesting several plots according to a hierarchy in Isfahan if needed.



In 3 steps of removing the alternatives the final location was chosen.

At the 1st selection stage, 7 potential vacant lands are selected (central north part of the site as they are not in the no development zone, accommodate a large number of buildings of over 50 and not in vicinity of an existing green space. (total potentials remaining :7 out of 33)

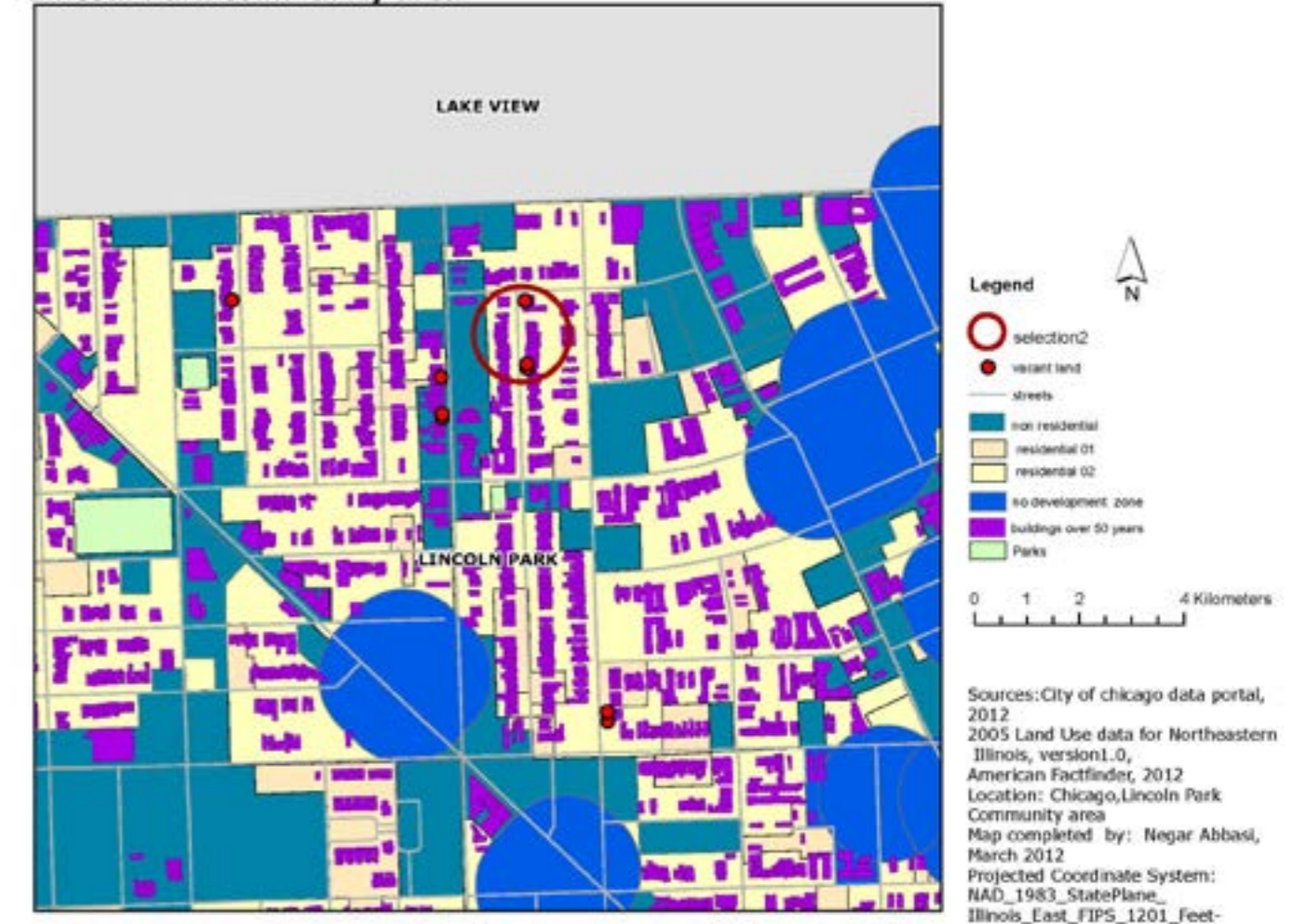
**Primary selection of a set of potential vacant land for a new green space
Lincoln Park community area**



73 primary selection of a set of potential vacant lands for a new green space

At the 2nd selection stage 4 more potentials would be omitted as they fall in non residential areas. (total potentials remaining :3 out of 33)

**Secondary selection of a set of potential vacant land for a new green space
Lincoln Park community area**

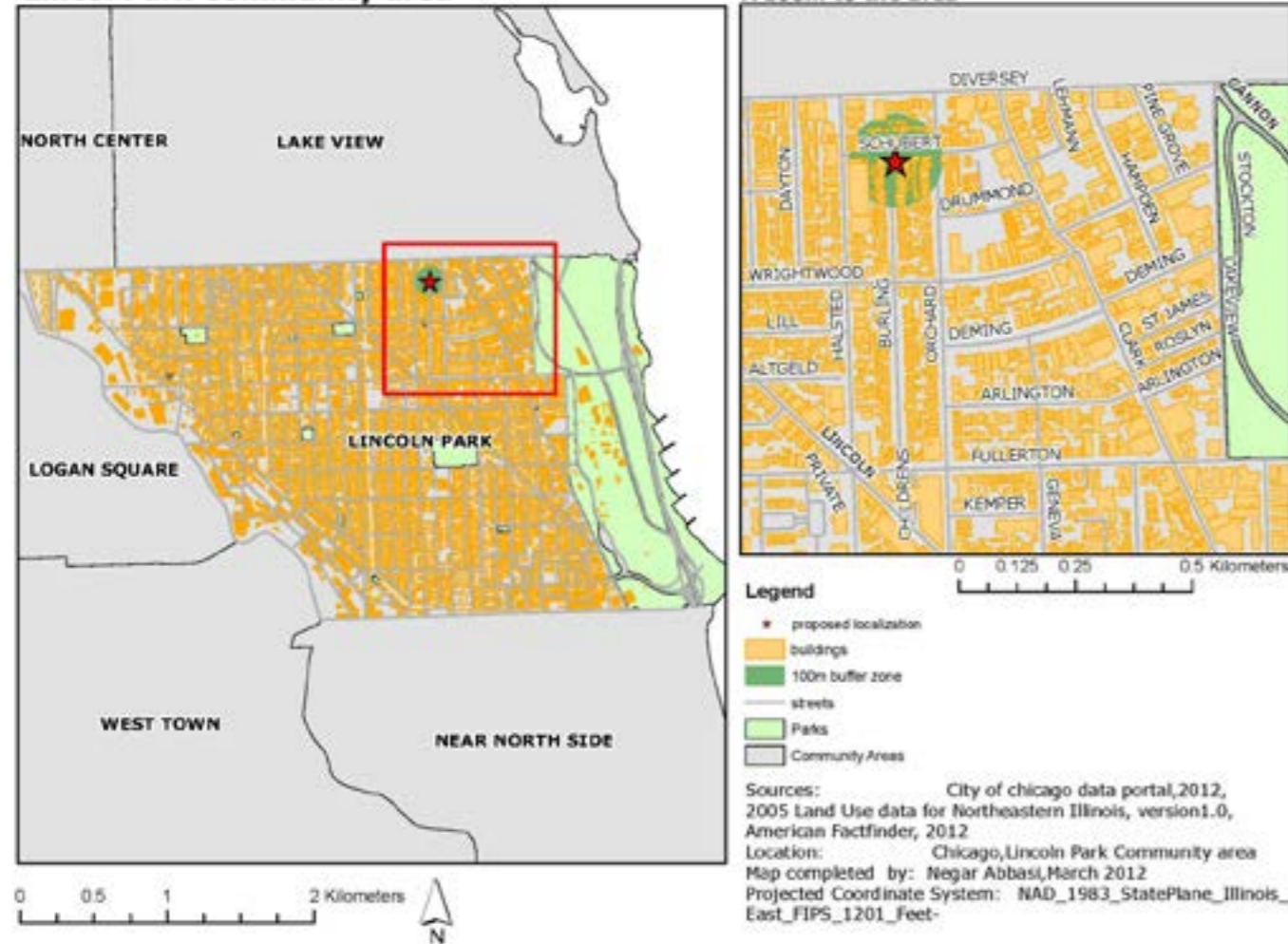


74 secondary selection of a set of potential vacant lands for a new green space

At the 3rd selection stage define how many sq.m of existing buildings should be destroyed if each would be chosen as the site-define the minimum ruining (total potentials remaining :1 out of 33)- the 1st option is chosen:(destroying 108 building with 183529.53 sqm)

The same process could be practiced in Isfahan to define were to redevelop and were not, according to the set criteria.

**Final Localization for a new green space
Lincol Park Community area**



75 final localization for a new green space in Lincoln Park, area

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