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Investigating the Nature of Urban Space Transformation in Historic Cities of Iran (Case Study: Isfahan)*

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Abstract

Problem Statement: A glance at the changes in the quality of urban spaces in our time would indicate the impact of outer forces that create new challenges in managing and improving the quality of urban space. Due to the power of these forces, transformations that once used to occur gradually throughout history are taking place much more quickly. Therefore, understanding the nature of urban transformation will open up new ways of coping with contemporary challenges for urban planners. A look at the existing literature shows that this issue has been treated insufficiently at the scale of urban space.

Aims: As a result of rapid urban transitions and subsequent fundamental transformations in urban spaces, there is a need for another form of urban space analysis that has received little attention in classical urban space analysis. Historic cities are a suitable context for this kind of analysis.

Methodology: The present study on the one hand analyzes the macro-level transformation of the city of Isfahan as a whole through an interpretive-historical method and, on the other hand, investigates the forces affecting the formation and transformation of new urban spaces in Isfahan through an analytical-descriptive approach and data collection methods such as document analysis, field observation, and interview.

Conclusion: The results indicate that the most important forces of transition of the urban space include political system, government, people, events, technology, environment, and time. Also, analysis of major transformations in the macro-structure of Isfahan indicates that, during the history of the development of Isfahan from the Seljuk era (1037-1194), until the last three decades and despite the negative trends in urban space transformations during the Pahlavi period (1925-1979), the process of transition in the city has mainly focused on the city center. In recent decades, however, the central and historical areas of the city have experienced rapid, temporary, and discrete transitions whereas urban spaces outside the city have been developed, which have contributed to the formation of two opposing forces of urban transformation.

Keywords: *Urban spaces, Urban Transformation, Historic cities, Isfahan.*

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Statement of Problem

Urban Transformation is a concept that refers to micro- and macro-level changes in a city over time which takes place in various dimensions through a number of inner and outer forces. A look at the transformation of cities suggests that the process of urban transition has been accelerating since the mid-20th century, and gradual changes have been replaced by sudden and irreversible changes. Following the transformation of the city's overall structure, urban public spaces also undergo transitions that are unpredictable. The political and social effects of urban spaces and cultural transformations of cities as well as their impact on the nature of public spaces over time is a matter of great importance (Madanipour, Knierbein & Degros, 2013: 10). On the one hand, the form and nature of urban spaces are always influenced by the transformation of the entire city and, more widely, the entire country and, on the other hand, an urban space as a force can also affect the general process of transformation and lead to changes in the nature of parts of a city, people's behaviors, or overall structure of the city. This mutual interaction requires a different form of urban space analysis that has been almost neglected in the literature. This new form of analysis can be called Urban Space Transformation Analysis. This issue becomes more important in historic cities where any transformation may lead to significant differences in the shape and nature of urban spaces. Transformation of urban spaces can have a positive or negative direction and somehow become a challenge. This should be considered in the planning and development of urban spaces; otherwise, any act of urban planning and design would lose its underlying coherence and intellectual foundations.

Based on what was discussed above, historic cities in Iran are a good context for understanding the concept of urban space transformation. Conducted in the context of Isfahan which one of the most important historic cities in Iran, the present study attempts to pioneer research into the concept of urban space transformation in contemporary Iranian cities and prepare a solid basis for developing a methodology for urban space analysis.

Literature review

The notion of urban transformation

Urban transformation is a continuous, long-term, deeply effective, and extensive process that affects a city over a long period of time and can be a source of future change. In one sense, urban transformation refers to infrastructural and fundamental transitions in urban fabrics that are old and deteriorating or require fundamental measures in the socio-economic and physical dimensions. Central districts of cities, industrial centers, brownfields, etc. that have lost their functionality are usually targets for spatial transformation. Therefore, both "transition" and "transformation" denote changes in the status quo (Yang, 2010: 25). The related literature does not make a clear distinction between the two terms. A review of the existing definitions of these terms can reveal the following significant differences:

- 'Transformation' is a continuous process, while a 'transition' refers to a shift from one system to another in terms of dynamics in the systems, which is not about the re-orientation of an existing trajectory, but about a new trajectory.
- 'Transformation' is more process-oriented, and 'transition' is considered as more of a turning point and a radical change or a jump from one state to the other (Fig. 1);
- 'Transformation' is a well-planned, continuous process mainly driven by endogenous forces (e.g. poverty, economic growth, governance); 'transition' is a non-linear change process mainly driven by

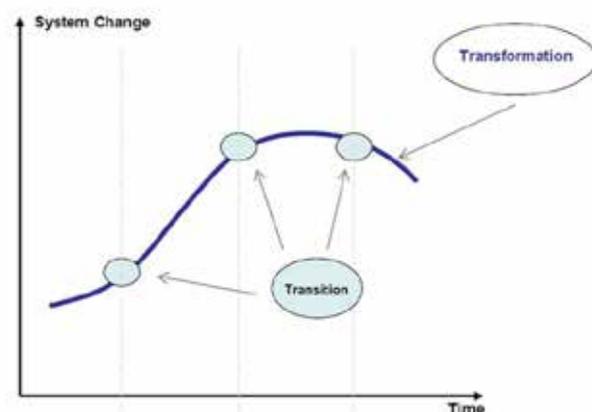


Fig. 1. Transformation and transition. Source: Yang, 2010: 27.

exogenous factors (e.g. fundamental changes to a political or economic system, energy crisis and climate change) (Ibid: 30).

The goal of urban transitions and transformations is to create new content in the urban context and improve social health. Urban transformation projects should provide a financial and economic source for local governments and stakeholders. Therefore, the main purpose of this approach is to make changes not only in physical dimensions, but also in all metropolitan dimensions with the aim of moving towards social, economic, and environmental rehabilitation (Cagla & İnam, 2008: 4). Sustainable urban transformation is not a local and small-scale field. Cities are transformed under the influence of a multitude of forces, but resilience and transition potential of a city depend on both inner forces, such as economic structures and geographic location, and outer forces being exerted on the city. Changing from modern and industrial to postmodern and global cities foregrounded the importance of urban transition and transformation (Gülersoy & Gürler, 2011: 13). Introduction of the notion of sustainability into the literature on urban transformation has resulted in the development of many new approaches. Sustainable urban transformation is a dynamic process in which, in all dimensions and substrates, both the old and new systems are influenced by the forces of change. Sustainable urban transformation is a concept resulting from the competition among economic, social, and environmental factors that aims at establishing a functional balance in all these areas (Yang, 2010: 49). From a comprehensive look at the process of urban transformation in different countries, we can infer that components which act as forces of change in cities are linked to a comprehensive process of urban change. Therefore, forces can be of different types, which can be revealed only through close inspection of the process of spatial change. It should be borne in mind that forces of transition of a space are not necessarily at a macro-level, but sometimes a small change in the urban furniture such as the Red Square of St. Gallen in Switzerland can prepare the basis for further change. But it is important to note that users' acceptance of change is a key element in the continuity

of urban space transitions. Historic cities have rich and valuable urban spaces that can act as the driving forces behind transitions and transformations. Looking at the experiences of historic European cities, one could claim that many urban transformations began from within the historic fabric, eventually leading to transitions at every economic and social level in the city. Therefore, in the twentieth century, urban transformation approaches were oriented toward historic fabrics and paved the way for the present conception of urban transformation. The concept of urban transformation is associated with three areas, i.e. historic preservation, urban regeneration, and new urban development (Gülersoy & Gürler, 2011: 11). This century has been one of the most influential periods of human history and has initiated many of the greatest urban transformations around the globe. Tremendous transition and advancement in all fields have caused the industry to powerfully penetrate into all aspects of societies. The cities of the 21st century have entered a new era that has brought about great transformations. Globalization not only creates social and economic changes in all layers of urban life, but also presents a new model of urban structure and urbanization.

Among contemporary experts, Källtorp¹ in his "Cities in transformation" (1997) refers to the phenomenon of transformation in terms of both outer factors and the inner processes of the city (Yang, 2010: 29).

Fig. 2 shows the inner and outer forces of urban transition and transformation according to research findings.

As can be seen in the Figure, the concept of urban transition is associated with internal domestic forces but, as we move towards large-scale external forces, multi-faceted urban transformations take place. The proposed model indicates the most influential forces of change in a city that can be divided into inner and outer forces (Fig. 3).

In spite of the emphasis of urban transformation literature on urban space changes as a result of macro-transformations of a city, there is a gap in the literature concerning the analysis of urban spaces in the context of urban transformation. On the other hand, in urban transformation literature, there has been less attention to how urban space transition might affect the macro-

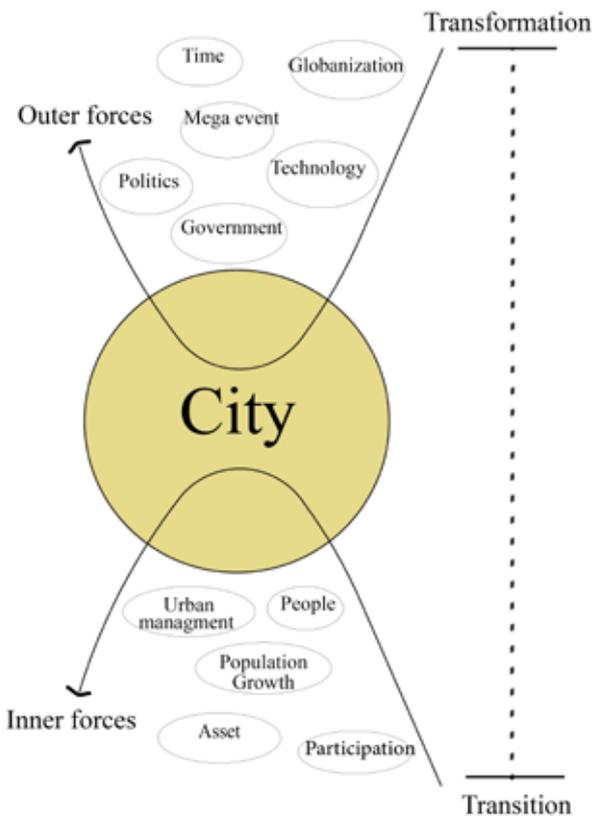


Fig. 2. Driving Forces of Urban Transformation. Source: authors.

level transformation of the city. In fact, we can talk about a cycle of transformation of the city and urban spaces (Fig 4). Examining and rereading this cycle can add new dimensions to the methodology of urban space analysis. An understanding of this cycle requires exploring real-world examples of the impact of urban spaces on the city’s transformation over time. The city of Isfahan is a good context for understanding the cycle of urban transformation and urban spaces.

Methodology

The literature on urban transformation mainly addresses macro-level issues in urban change, with only a limited number of studies dealing with the micro-scale of urban space. This shortage is more apparent in the transformation analysis methodology. This is the point of departure of the present study whereby it would be possible to understand and analyze urban space transformation as occurring both in the overall structure of the city and in the nature of urban space (Fig. 5).

As a major historic city of Iran, Isfahan provides a perfect

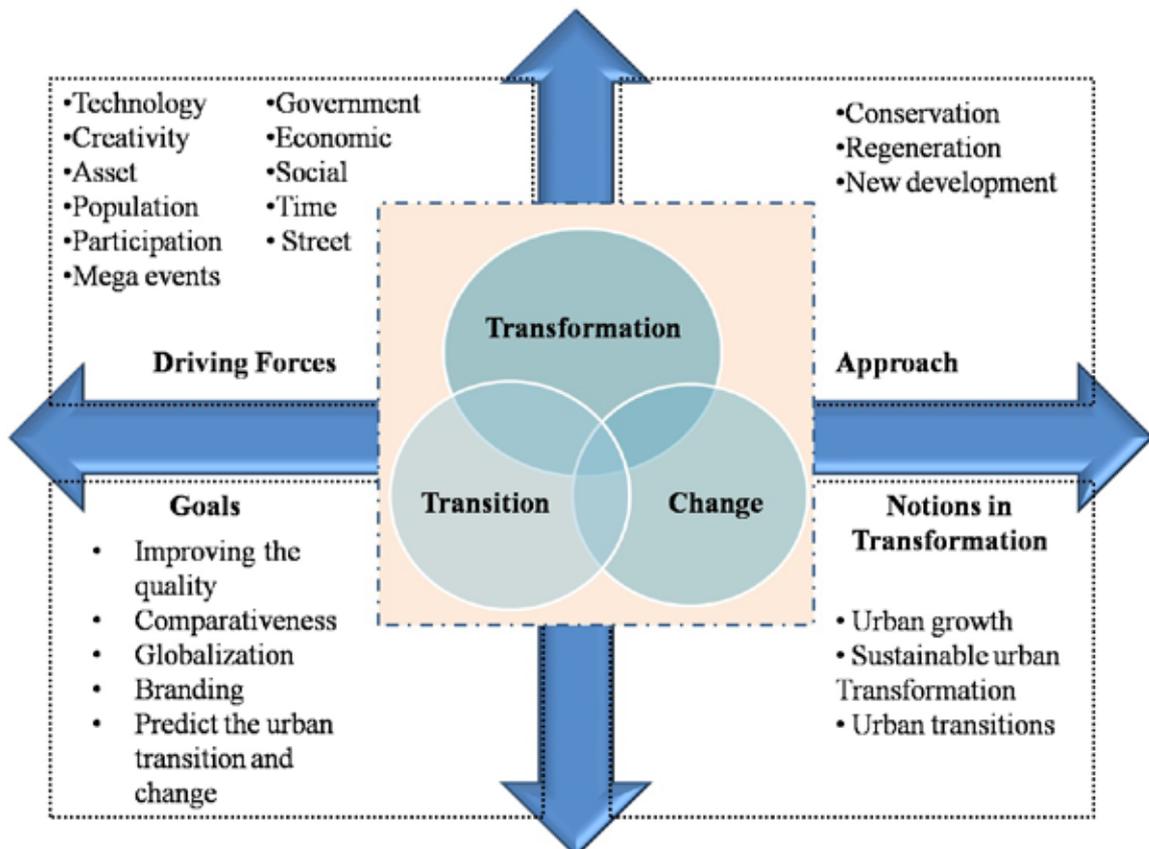


Fig. 3. Notions in Urban Transformation Literature. Source: authors

setting for the analysis of urban space transformation because historical evidence shows that the city’s urban spaces have been constantly changing since the Seljuk era. Formation of Atigh square in the Seljuk period, its changes in later periods, its destruction until recent decades, and its recent revival can be a good example that is indicative of the need for the analysis of urban space transformation.

According to Figure 6, our analysis covers both the macro-structure of Isfahan and the nature of new urban spaces. At the macro-level, urban structure analysis was conducted through a historical-interpretive approach based on urban changes in the most significant periods of development . Over the past two decades, Isfahan has undergone fundamental structural transformations as a result of physical and infrastructural development. At the second level of analysis (micro-level), the forces affecting the formation and transition of five new urban spaces in Isfahan were examined through an analytical-descriptive approach as well as document analysis, field

observation, and interviews with projects managers for the formation and transition of these spaces. These spaces have been the most important contemporary urban spaces of Isfahan since the 1990s, which was the beginning of the postwar period in Iran. So It can be a good basis of analysis of the city’s normal conditions. These spaces which are quite different in nature attract the population and draw the direction of urban development toward themselves (Fig. 7).

The importance of the selected projects in terms of their functional scale and novelty of spatial type is so much that each one acts as a pole of development in Isfahan. The City Center project, which is composed of multipurpose complexes, draws a large amount of population and activity into the suburbs and acts as a closed urban space with a focus on commercial uses. Soffeh Mountain Park was created as an urban space with a recreational function. In contrast to suburban projects, the new policies in historic districts such as the historical Imam Ali square (Atigh square) introduce new urban spaces in terms of extent and type of intervention into the historic fabric. Establishment of commercial and recreational towns such as Dreamland Center and Health Care Center is another kind of decentralization policy. Therefore, this level of analysis indicates how different forces influence the formation and transition of these spaces.

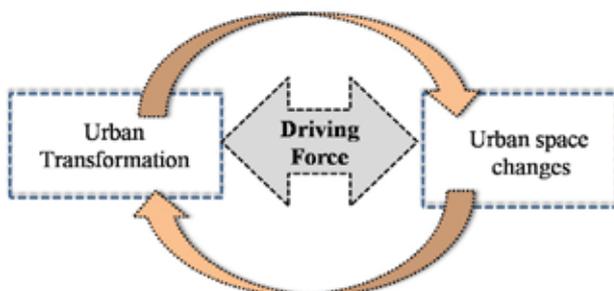


Fig. 4. Urban Space Changes in relation to the Urban Transformation Process. Source: authors.

Findings

Six major forces of urban change are mentioned in the literature on urban transformation. One of the

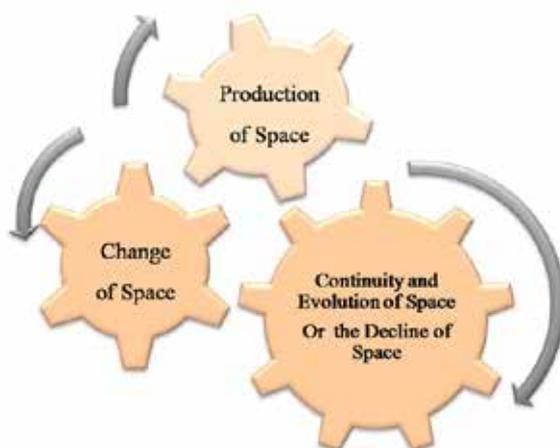
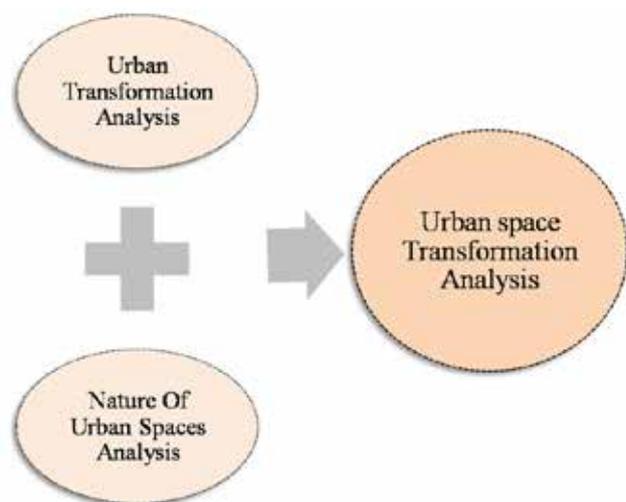


Fig. 5. Basic Concept of Urban Space Transformation Analysis. Source: authors.



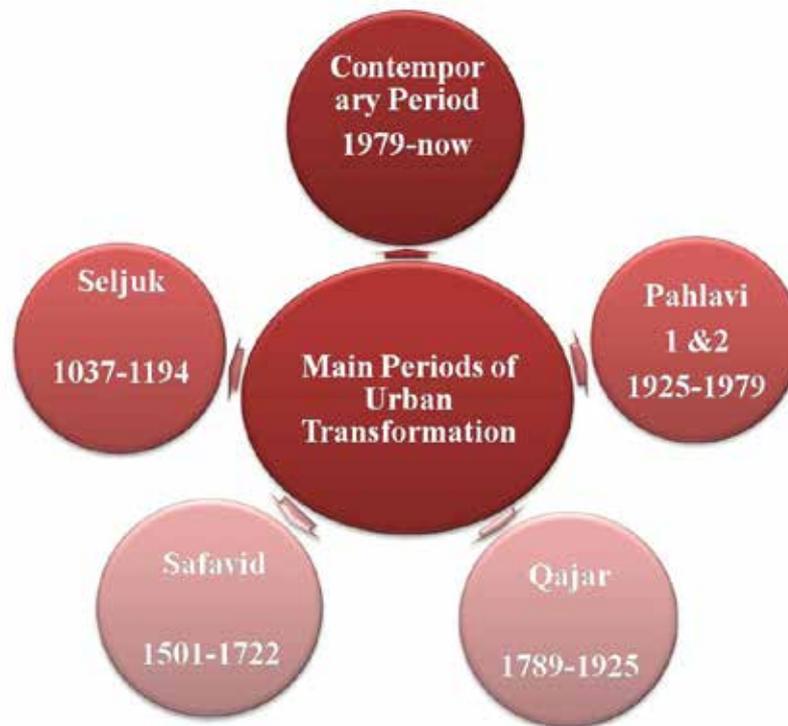


Fig. 6. Major Periods of Urban Change in Esfahan. Source: authors.

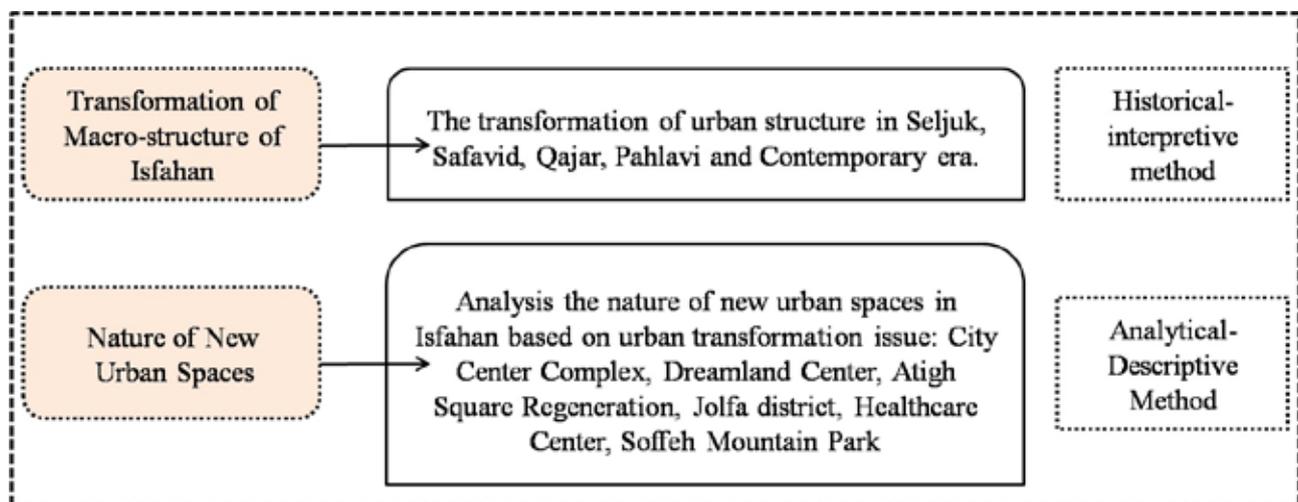


Fig. 7. The Method of Urban Transformation Analysis in Two Scales. Source: authors.

most powerful forces is macro-level policies of the government as well as comprehensive urban plans. In addition, people can act as a force of change at different levels. Population growth, public participation as a means of creating changes, and the local management of the residents of an area can result in urban transformation.

The environment alone can function as a powerful force of transforming the space. Environment refers to the

natural and existing potentials of an area or city. Harbors and waterfronts, natural lands, special or dominant uses of space, streets, valuable fabrics, and industrial spaces are areas that can be used to transform space in a certain period. Therefore, change always occurs within a time span. Space can be gradually transformed by different factors or due to public taste. With the passage of time, the assets of a city turn into values and capital. Therefore, time is itself a major driving force in shaping

and changing the spaces of a city. Also, micro- and macro-events such as the Olympics can turn into a force of transformation of urban and spatial structures (Fig 8).

Analysis of the Transformation of the Macro-structure of Isfahan

• Historical Analysis

The first level of analysis focuses on the main structure of the city and the types of urban spaces of Isfahan during the Seljuk, Safavid, Qajar, Pahlavi and contemporary periods. Due to the lack of documented evidence regarding the nature of spaces in different periods, their nature and identity are not analyzed and only their formation is discussed. The most important sources for studying the history and urban morphology of Isfahan are Shafaghi, Honarfar², and Chardin³ who describe the nature of the urban spaces. Until the early Islamic centuries, Isfahan was only composed of two neighborhoods called Jei and Yahoodiyeh. During the Sassanid rule, Jei was an administrative and governmental center with urban elements such as squares and bazaars. In contrast, Yahoodiyeh and the agricultural rural cores on the northern and southern sides of Zayandehrood acted as the city walls and were inhabited by ordinary people.

In the Seljuk era (1037-1194), Isfahan had a coherent and central structure and texture in which the main spaces and residential and governmental textures were placed surrounding the AtighSquare and the Jame Mosque. Therefore, if one wants to talk about the urban spaces in the Seljuq era, he must consider square, street, and markets as the most important spaces (Azarm, Ghalani & Ranjbar, 2017)

In fact, construction and development under the rule of Malekshah mostly took place in the northern part of the city around Kohneh square. Later on, no specific change occurred in this area in the Seljuk period. The wealth of the Seljuk Empire resulted in tremendous development in Isfahan. In general, the Bazaar of Isfahan along with its entire complex including Kohneh square and the congregation mosque created the structure of the city during this period. After choosing Isfahan as the capital of Iran and the establishment of a powerful Safavid government (1501-1722), the main structure of Isfahan was formed. Formation of the Chaharbagh

recreational axis as well as the construction of Naghsh-e Jahan square and connecting it to Kohneh square were among the most important measures adopted in urban spaces. The construction of Naghsh-e Jahan square, which was a ceremonial place for the government, guided the future development of the city toward this place and further toward Hezar-jarib orchards across the river. The construction of Jolfa neighborhood for the Armenians created a new wave of development in the southern part of the city. Of course, the effect of the urban patterns prior to the Safavid period on the transformation of Isfahan should not be understated. The Safavid pattern, however, divided Isfahan into two sections which would spread on both sides of Zayandehrood (Shafaghi, 2002: 302).

In the Qajar period (1789-1925), no new urban space was created and emphasis was put on the architecture and construction of traditional houses. In fact, Isfahan experienced the most stagnant period of its history under Qajar rule (Shafaghi, 2002: 320). In the Pahlavi era (1925-1979), with the arrival of the symbols of western modernity in Iran such as cars, streets began to be developed in Isfahan. Among the most influential changes in the urban structure in this period was Abdul-Razzaghstreet, which broke the connection between the bazaar and Atigh square and initiated further transformations in the area. The development of the city progressed southwards, with being stretch charbagh axis towards the north. In addition, many factories and industrial spaces began to appear in Isfahan. In this period, Isfahan faced great industrial transformations. This trend continued until the Islamic Revolution. In the course of Iran-Iraq war, no change was made in the structure of the city, but from the 1990s onwards in the so-called 'Construction Era', reform and development of the city began (Fig. 9).

The following table shows the results of the historical analysis of urban transformations in Isfahan since the Seljuk period based on aerial maps and historical books focused on changes in urban structures and spaces.

Even after more than 400 years, the structure of the historic center and essentially the entire city is still based on two perpendicular axes, i.e. Chaharbagh and Zayandehrood, which also form the border of districts 1



Fig. 8. Driving Forces of Urban Transformation. Source: authors.

and 3. As the chief element of the spatial configuration of the historic center, the axis of the bazaar and Chaharbagh has a unique and important role. This axis begins at Atigh square in the center of the Seljuk Isfahan and goes through Naghsh-e Jahan square to connect to Safavid Citadel. Then it connects the neighborhood of the court, i.e. DarvazehDowlat, to the southern gate of the city, i.e. DarvazehShiraz. This magnificent urban axis has led to the development of the city towards the south of the river. Thus, based on a large urban development plan in the Safavid era, a spatial and physical, memorial organization and a ceremonial axis were built in Isfahan which still maintain their sustainable values and can also be used for contemporary development of the city. The most important buildings, complexes, and historical and natural spaces of the city are located in these two areas. Following are some examples.

- Commercial axis: Isfahan’s historic bazaar and numerous smaller bazaars that are attached to it.
- Urban space: Nagsh-e Jahan square and Kohneh square (Atigh square).
- Historic complex: Safavid Court neighborhood that borders Sepah street on the north, Naghsh-e Jahan square on the east, Chaharbagh street on the west, and the streets of Amadgah, Goldasteh, Behesht-aeen, and Sa’di on the south. It contains several famous historic monuments registered as world heritage sites including Chehelsotoun and Alighapou.
- Structural axes: Chaharbagh-e Abbasi and

Chaharbagh-e Khajoo.

- Historic bridges: Allah-verdi Khan, Khajoo, Marnan, and Jou’ee.
- Religious monuments: Congregation Mosques, Imam Mosque, the school and mosque of Shah’s mother (Chaharbagh).
- Historic and cultural areas: Darb-e Kooshk, Seyyed Mosque, Ali-gholi Agha Mosque and Passage.
- Natural axes: Green axis and Zayandehrood River, the historic Madiha network, and Nazhvan Natural Park (Bavand Consulting Engineering, 2003).

According to Table 1 and the map of urban structure development in different eras, it seems that the overall transformation of Isfahan has led to the creation of new urban spaces including a variety of squares, recreational and commercial spaces, and local-scale urban spaces. A historical-interpretive analysis of the transformation trend of urban spaces in Isfahan would indicate that this trend has basically focused on previous developments and important urban centers. This trend mainly started in the Safavid period as a result of the establishment of new urban structures and spaces. The point to be noted in this regard is the presence of a permanent look at the urban spaces of the past and considerable concern about how future urban spaces should be created and integrated into the existing structure. Although this trend continued well into the Pahlavi era, its focus shifted towards building service axes and connecting them to the backbone of the city’s structure (Fig.10). After the Islamic Revolution (from the 1990s onwards), the process of transformation changed and was pursued sporadically in different parts of the city. In the process of urban transformation, all the values and characteristics of a city, including the old and new fabrics, have to change within a continuous and coherent framework. Over the last few decades, however, Isfahan has experienced another type of change. Inner and historically-oriented developments have mainly aimed at facilitating urban life. The consequence of this approach has been construction of new service axes and increased travels in historical districts. Moreover, analysis

of aerial maps of the central and historic districts shows that the process of transformation in these areas has been tending towards increased floor area and decreased empty lands and open spaces, which does not conform well to the integrity of the urban structure. The continuation of this process has led to unsustainability and emergence of heterogeneous and inefficient tissues. In the last decade, a different approach based on urban regeneration has appeared in the country and in Isfahan, which has manifested itself in the physical revival of the structure of the historic Isfahan. Two major projects in line with this approach are physical renovations of Chaharbagh axis and building Goldasteh Street in the central fabric parallel to Chaharbagh Street in order to facilitate traffic. Another similar project is the physical revival of Atigh square with the aim of creating open urban spaces. Due to its low spatial quality, however, this square suffers from low public attendance and liveliness and does not conform to the normal routine of urban life. In fact, this project has simply created a large pedestrian area which is in sharp contrast to the lively atmosphere of its counterpart neighborhood in the southern part of the city which is called Jolfa. Thus, Jolfa neighborhood with its high quality and utilization of the potential of its rich fabric has overshadowed Atigh square and reduced its functionality on the urban scale. Therefore, at a macro-level of analysis, it can be concluded that lack of planning for the use of traditional and historical fabrics and decentralization policies have led to forces that have increased exogenous development around the city and slowed down the development of central districts.

• Analysis of New Urban Spaces

In recent decades, a number of new urban spaces have been created in Isfahan. These spaces are often built for economic, commercial, and recreational purposes in the suburbs. Construction of Isfahan City Centre which is a dominantly commercial complex Soffeh Mountain Park has created a pole of development in the southern part of the city. On the other hand, in the central parts of the city,

development is oriented towards the revival of historical spaces such as axes and squares. The most important project in recent years in this area has been the revival of the historic Atigh square. The huge amount of destruction in the old fabric of this project has created a new urban space that has brought about fundamental changes in the structure of the city as well as its surrounding neighborhoods. Therefore, the second level of this study is based on previous knowledge, content analysis, and the nature of new urban spaces formed in Isfahan.

In this level, after observing and interviewing with project managers, the survey was conducted for sectors involved in projects as well as public participation. Afterwards, the most effective forces of transformation which have contributed to the formation of new urban spaces in Isfahan were examined through a micro-scale analysis, with focusing on the basis of the phenomenology of space. On a large scale, a number of these projects have created different identities for spaces that can create dynamism and integrity through proper planning. The construction of Nazhvan Aquarium, the large City Center of Isfahan, and the International Conference Center are examples of metropolitan changes with the aim of tourist attraction and dynamic economic production.

Regeneration of Atigh square (Imam Ali) and City Center Complex are two different examples of development inside and outside the city. A thorough analysis of these two projects could perhaps reveal the reasons behind the relative failure of the former and the success of the latter. It can be inferred that the process of development and spatial transition in Isfahan is essentially exogenous. It is important to note that, according to the conducted analyses, inner developments which are based on regeneration policies are merely physical, and no other method is used to regenerate identity for space (Azarm, Ranjbar & Marti Casanovas, 2017: 173)

In the present study, the forces affecting the new urban projects were investigated through field

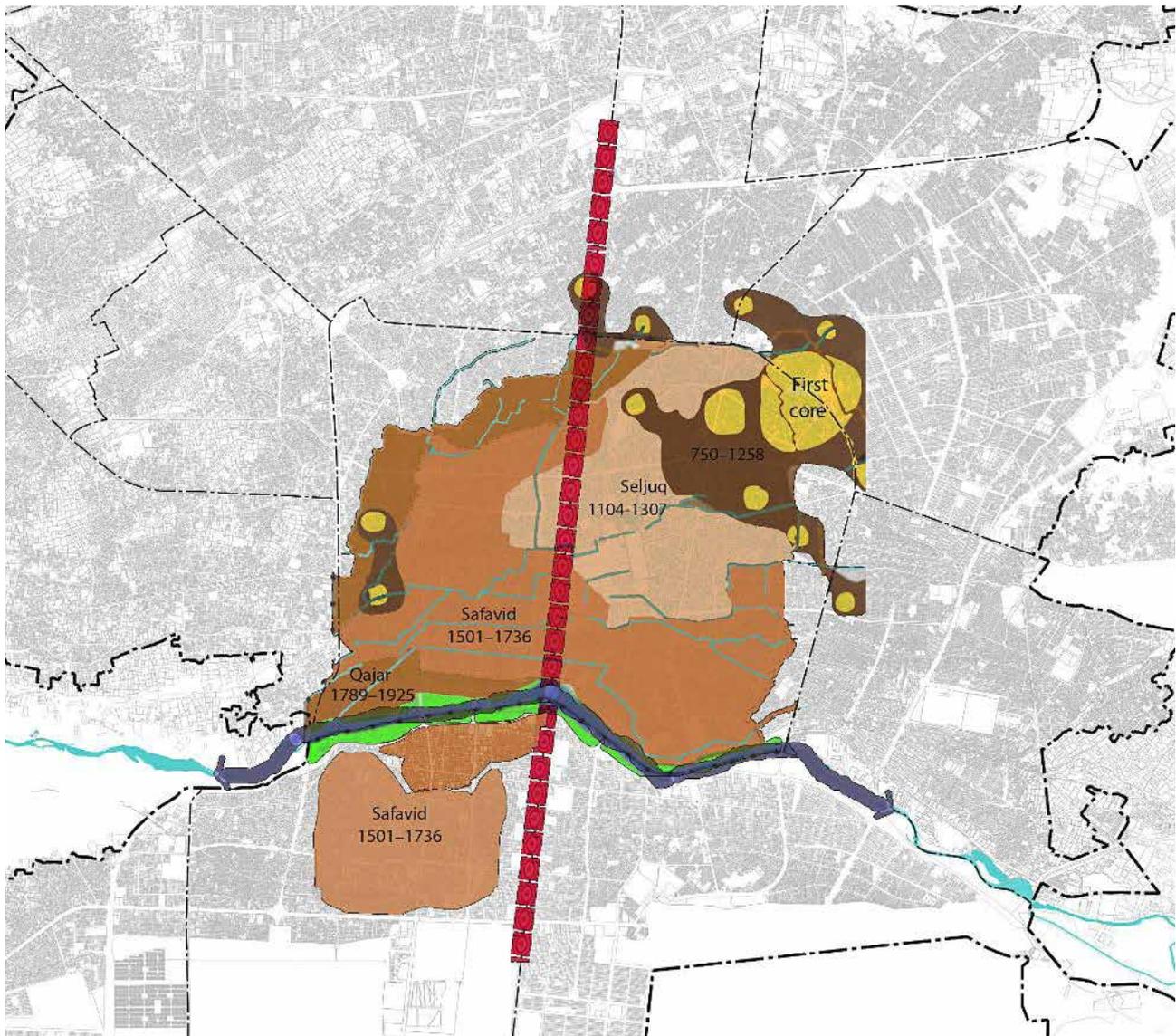


Fig. 9. Urban Development of Isfahan in Different Periods. Source: Azarm, Ghalani & Ranjbar, 2017.

observation, document analysis, and interviews with urban authorities. Table 2 summarizes the results of the analysis of effective forces in each project.

In general, all projects focus on foreign investment and the use of modern construction technology to prepare for competitiveness and attract more tourists. For example, in the revival of Atigh square, the most important forces that defined the project were the physical context of Atigh square (the force of the environment), the decisions of management bodies (government), the specific style of construction of the walls (technology), and the gradual increase in the quality of the fabric

(time).

Conclusion

In the context of global changes, urban transformation is accelerating so rapidly and in so various ways that it will have a multitude of positive and negative consequences. In fact, cities are in need of urban transformation management, an area that has been less addressed in the Iranian context. An understanding of urban transformation as part of the process of urban management and planning requires an understanding of forces that affect the different aspects of development in a city. This means that identification of effective forces in the



Fig.10. Isfahan Safavid era (right) and Pahlavi era (left), two major Urban Transformation periods of Isfahan. Source: Shafaghi, 2002

transformation of a city entails consideration of two perspectives: the nature of the inner forces of space that can guide the process of transition; and second, an extra-spatial perspective that is primarily concerned with outer urban forces which are affected by national and global changes can ultimately lead to fundamental transformation of a city.

The results of the transformation analysis of the city of Isfahan as a major historic city could provide an investigation for rethinking urban transformation management in other cities. The most important results can be summarized as follows:

- According to studies on the relationship between urban spaces and the transformation of a city, the value and role of urban space in the mechanisms of urban transition should be noted. The role of urban space in initiating transition and transformation in the city depends on the potential strengths of that space.
- In urban space analysis, the layer of spatial transformation analysis should be considered as a superior analytical layer in urban design literature because the transformation is a time-bound process

and the different transition layers in a city may affect each other.

- Transitions in Isfahan are two-fold, i.e. exogenous development including construction of recreational complexes in the suburbs and endogenous development which refers to physical changes within historic districts. In both of these developments, a lack of cultural spaces is obvious.
 - The formation of mega-malls in the suburbs of Isfahan has been one of the most influential forces in the transformation of the city in the last decade. Lack of economic success in the central urban spaces of Isfahan like Hasht-Behesht Commercial Complex, on the one hand, and the rapid development of mega-malls like Isfahan City Center, on the other hand, necessitates a further investigation into the relationship between mega-malls and reduced economic investment in central districts. This topic can be further investigated in more detail and by means of quantitative methods.
 - As suggested in our results, the main forces of change in the urban spaces of Isfahan are the environment and the government.
- Based on a new approach to the issue of urban transformation, this study highlighted the necessity

Table 1: Urban Space Transformation in Different Eras. Source: authors.

Era	Urban Space Transitions
<p>Seljuk (1037-1194 A. D.)</p>	<ul style="list-style-type: none"> • Urban square and commercial axis such as bazaar
<p>Safavid (1501-1722 A. D.)</p>	<ul style="list-style-type: none"> • The construction of new urban square respecting the old square • Connect the old square to the new square by the commercial axis of the market • Stretching the city structure to the south by building new neighborhoods • Create garden and tourism axes • Create city bridges as new urban spaces by considering moving sequences • Create a hierarchy of soft and hard spaces starting from the bazaar to the gardens • Create public squares
<p>Qajar (1789-1925 A. D.)</p>	<ul style="list-style-type: none"> • Construction of buildings and pavilions • Destruction of urban gardens • Construction new streets and cut historic areas • Destruction of historic urban squares
<p>Pahlavi (1925-1979 A. D.)</p>	<ul style="list-style-type: none"> • City development to the south • Designing the waterfronts • Construction of factories and industrial spaces • Decentralized developments • Construction of megamalls • The design of recreational spaces
<p>Islamic Revolution (1979- now A. D.)</p>	<ul style="list-style-type: none"> • Reconstruction of historic fabric of Isfahan (Safavid period) • The design of urban squares and pedestrian zones • Construction of new street and axis in central zones of Isfahan

of studying and analyzing the transformation of urban structure and urban spaces over time in historic cities. Because historic cities have been transformed throughout a long period of time, close inspection of previous transformations can help to understand and manage future changes. The central point of this study, which is not adequately mentioned in the international literature, is the

role of urban spaces in the transformation of the city as a whole and the need to focus on the urban transformation cycle. This study introduces a new method for analyzing urban spaces called “Urban Space Transformation Analysis”.

This paper paves the way for future research in other urban spaces of Isfahan as well as other Iranian historic cities. Thus, future developments should be based on

Table 2. Driving Forces of new Urban Spaces in Isfahan. Source: authors.

Urban Space	Driving Force					
	Technology	Government	Event	Environment	People	Time
Imam Ali square (atigh square)						
Health care center	✓	✓		✓		✓
Dreamland center	✓	✓			✓	
Jolfa Neighborhood	✓	✓	✓	✓	✓	✓
Dreamland center	✓	✓				
Soffeh mountain	✓	✓		✓		✓
City center complex	✓			✓	✓	

previous studies of transformation mechanisms in order to result in sustainable urban transformation. Through further studies that combine quantitative and qualitative methods, this line of research will provide experts and authorities with useful findings to make more efficient development policies.

Endnote

1. Källtorp O. et al. (eds.). 1997. Social and Symbolic Change of Urban Space. Cities in Transformation - Transformation in Cities. Aldershot.
2. Honarfar, Lotfollah (Historical Treasure of Isfahan's Monuments).
3. Chardin, Jean.

Reference list

- Azarm, Z., Ranjbar, E. & Marti Casanovas, M. (2017). *Urban Design Guideline in Middle Urban Fabric Based on Analyzing Public Space Transformation (Case study: Bid Abad District)*. Unpublished Master Thesis. Iran: Tarbiat Modares University.
- Azarm, Z., Ghalani, Z. & Ranjbar, E. (2017). Transformation of Public Spaces and Changing Pattern of Mobility in a Historic

City. Case Study: Isfahan, Iran. *22nd International Conference on Urban Planning and Regional Development in the Information Society GeoMultimedia*. Vienna, Austria. Available from: <https://core.ac.uk/reader/132316750> (Accessed 9 Nov 2018).

- Bavand Consulting engineering. (2003). *Tarh- e Tosee- ye Isfahan- e Tarikhi*. (Booklet). Isafahan: Isfahan municipality.
- Cagla, H., & Inam, S. (2008). *A Study on the Urban Transformation Project Format Done By the Leadership of the Local Government in Turkey*. Integrating the Generations FIG Working Week. Held in Stockholm, Sweden, 14-19 June 2008. Available from: https://www.fig.net/resources/proceedings/fig_proceedings/fig2008/papers/ts02e/ts02e_05_cagla_inam_2805.pdf (Accessed 22 Nov 2018).
- Gülersoy, N. Z. & Gürlür, E. (2011). Conceptual challenges on urban transformation. *ITU A/Z*, 8(1): 10-24.
- Madanipour, A. Knierbein, S. & Degros, A. (2013). *Public Space and the Challenges of Urban Transformation in Europe*. New York: Routledge.
- Shafaghi, S. (2002). *Goghrafia-ye Esfahan [Geography of Esfahan]*. Isfahan: Isfahan University.

- Yang, Y. (2010). *Sustainable urban transformation driving forces, indicators and processes*. Doctoral dissertation. ETH: Zurich. Available from: <https://www.research-collection.ethz.ch/bitstream/handle/20.500.11850/152445/eth-2323-02.pdf> (Accessed 22 Nov 2018).

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