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## Investigating the Role of Historical Public Squares on Promotion of Citizens' Quality of Life

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### Abstract

Public Square is one of the main pillars in social life that has effects on the social quality of the urban public space, and improving the level of social interactions of the citizens. Considering the effect of public space in quality of social life, in many modern cities, the public squares that have recently designed and constructed aren't responsive for social needs, improvement of communications and the social relations of citizens. This matter appears because of poor conditions of cities during modernization and lack of attention to cultural, sociological and psychological needs, therefore analysing the contributing factors on urban quality of successful historical public squares for improving citizens' quality of life can introduce a guideline for designers and planners to solve contemporary urban problems. In this research, that has been developed based on descriptive procedure, the characteristics of Naghshe-Jahan Square as an active and vibrant historical public square has been examined to realize the effective factors on improving the quality of citizens' urban life. The results of research indicate that quality of citizen's urban life indicators in historical public square included visual aesthetic (Spatial continuity and hierarchy, emphasis on the axis of symmetry, balance and visual contrast, Sense of closure and introspection,

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Sense of wideness based on observer's field of view), functional qualities (Special location in city core, political, religious, economical, commercial, tourism, recreation, cultural, historical and social values of the square, pedestrian accessibility, inclusiveness of square to different social groups, various ages and genders). However, results show that, in developing the design for this historical public square, a comprehensive attention was paid to non-physical

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aspects like social beliefs, culture, traditions and religion. Therefore, Naghshe-Jahan Square in Isfahan, served as a multifunctional historical public space for improving the quality of urban life in the Iranian urbanism history.

## 1. Introduction

Discussions about Quality assessment of public spaces started from 20<sup>th</sup> century after the decline in public spaces; however, in Iran, public spaces became the focal point of planners and urban designers at the beginning of 21<sup>st</sup> century [1]. Although main focus of studies is on the physical qualities of public space, the use of traditional urban space typologies in “place making” has become a major preoccupation of planners, urban designers, and the developers to solve the contemporary urban problems [2]. Considering the fact that, urban quality is one of the significant factors in promoting citizen’s quality of urban life, recognition of the contributing factors for enhancing the quality of urban public spaces seems critical [3]. Historical public squares are open public spaces, which reflect cities’ identity and cultural background. They are where people gather and social life takes place since the ancient times [4]. In the last few decades, many public squares have lost their function and role due to the changes in use of public spaces [5,6]. Naghshe-Jahan Square is one of the most well-known and important squares in Iran that several studies have been done about it till now. Numerous papers and books have referred to the history of this ancient Iranian square and in particular, the historic buildings formed the square; however, fewer studies have been done on the analysing the current urban quality of the historical public square as urban public space. For promoting citizen’s quality of life in Naghshe-Jahan square, there are two major questions: 1) Which factors are influencing the citizen’s quality of urban life in Naghshe-Jahan Square? 2) Which strategic approaches can enhance citizen’s urban quality of life in historical public squares? For answering these critical questions in next sections, first the related literature will be reviewed.

## 2. Public open space’s contribution to citizen’s quality of life

The high quality public open space can make people stay longer with a wider range of activities [7]. The quality relates to the usability with some criteria depends on people needs and perception, if not, public open space becomes useless and unsuccessful [8]. One of the benefits of high quality public space is its potential as a venue for social events. Well-managed festivals and other events can have a very positive effect on the urban environment, drawing the community together and bringing economic, social and environmental benefits [9]. Squares, in particular, can reintroduce the kind of civil society that has been lost in too many cities [10]. Quality of life in urban area is the outcome of people interaction with urban environment [11]. Many studies indicate that urban public space is one of important urban elements, which give a positive contribution to quality of life [12, 13, 14, 15]. Majority of studies show how urban public space relates to physical and psychological health [16, 17, 18], Social interaction and cohesion [5, 19, 7, 20]. For instance, the research carried out by Cattell and others [15] shows that a wide range of everyday urban public space was perceived as having a positive influence on both individual well-being and community life. As a place for many kinds of activities, urban public space gives some advantages for quality of life, such as psychological and physical health, recreation’s benefits and the fulfillment of needs for a pleasant urban environment [21, 22].

### 2.1. Influencing Qualitative criteria on Quality of Citizen’s Life

Urban public spaces are the most important spaces for understanding the perspective of the citizens about the city and making collective memory. Based on related literature review, Citizens’ quality of urban life can be categorized in three major groups: Functional Qualities, Visual Qualities and Spiritual Qualities. Lynch [23] believes that The readability, or ‘imageability’ (in Kevin Lynch's term) of a city results from the recognition of larger urban patterns, organizations, and elements. Importance of visual qualities in public open spaces leads to readability of city forms. In addition, public open spaces have the direct impact on user’s experience about urban landscape [24]. Carmona [25] believes that urban form and appearance should satisfy the wide range of people who are willing to experience it. Symbolic public spaces are most important component of the identity in the considered spatial coordinate. One of the public space’s theorists Hana Arednt (1958) analysis the space in two senses: The space for attendance among others and the space between people to represent a clearer understanding of the realm of public policy as well as physical

public space of the city [26]. Zucker [27] is other theorist who concentrated on urban public squares. in his view, square is the mental stopover in urban landscape which enhances the social interactions of people and perceived by help of human movements through it. In Table 1 some of the contributing factors for improving quality of citizens' life have been categorized.

Table 1. Citizens' Quality of urban life Indicators.

Visual (Aesthetic) Qualities	Functional (Physical) Qualities	Spiritual (Non-Physical/Identitl) Qualities
Iconic Buildings in Surrounding	Special Location in the city	Creating sense of belonging to community and sense of place
Human Scale	Accessibility and Permeability	Reviving Collective Memory
Quality of Natural Environment	Providing active interaction with society and environment	Reflection of the sociocultural and ideological values
Urban Scale and Geometrical Properties	Responsive to human needs (Comfort, joy, security, enjoy, relaxing)	Sustaining in different historical periods
General Art	Multifunctional Use for different activities	Utilizing different human Sensations
View Axes Wideness	Attendance of Special social groups	Providing sense of identity
Responsive Environment to different people and groups	Providing facilities (Parking, Pavements, Urban Furniture, maintenance)	Formation in User's Visual image
Lighting	Inclusiveness to all users	Gathering place for national, religious, social and cultural events
Visual Aesthetics	Foot Accessibility pattern	Uniqueness
<b>Suggesting Strategies for Promoting Citizen's Quality of Life in Historical Public Squares</b>		

### 3. Introduction and Analysis the urban Qualities of Naghshe- Jahan Square

The central urban Public square in Abbasid Isfahan was a highly diverse space in the 16<sup>th</sup> century and remained the largest plaza in the world until the 20<sup>th</sup> century. Ringed by religious, governmental, and educational buildings and home to large markets and recreational activities, the plaza today hosts a similar mixes of functions and is occasionally used for political expression (Madanipour, 2003).

Table 2. Transformations in use and social activity of Naghsh-e Jahan square throughout the time

Era	Safavid Dynasty(1501-1785)	Qajar Dynasty (1785-1921)	Pahlavi Dynasty (1921-1978)	Contemporary Era
<b>Social Activities</b>	Political Activities, Religious Ceremonies, Commercial Activities,Traditional Gatherings, Military marches, Polo matches, Horse riding competitions, national festivals, religious festivals, Fireworks, Puppetry, Acting, Storytelling	Permanent Commercial Center, Temporary Fridays Commercial Center, military training, barrack, demolishing the green space in the middle of square	Revitalization of Square, easing accessibilities by foot and by car, creating fountain and planting in middle of the square, creating Green Space for recreational activities, civic activities	Restricting the entrance of cars in to Square, paving the square, decreasing the air pollution and visual barriers like traffic lights, bus station, bars and etc.

Naghshe-Jahan square is among the few remnants of these squares in Iran and a live pattern for Iranian public spaces that has been developed with a predetermined proportions and design in an urban scale. Focusing on the aim of the study, Quality of Citizen's urban life indicators (Table 3 & 4) have been discussed to analyze the current urban quality of this historical square, and then, some suggestions have been proposed for improving citizen's quality of life. Visual (Aesthetic) Qualities in Naghshe-Jahan Square included parameters like: Symmetry, Balance, Visual Contrast, Geometry, Sense of introspection, spatial continuity, hierarchy, and presence of natural elements. Functional (Physical) qualities included but not limited to parameters such as: Location in the city, vehicle/foot accessibility, current people activities and social values. Focusing on the importance of social interactions in promoting citizen's urban quality of life, Table 2 presents social activity transformations in the historical square during the history.

Table 3: SWOT Analysis (Strengths and Opportunities), Quality assessment and suggested strategies for improving citizen's quality of life in Naghshe-Jahan Square.

Strengths and Opportunities	Quality Criteria	Quality Parameters in Naghshe-Jahan Square	Suggestions for Improving Citizen's Quality of Life
S1: Naghshe-Jahan square is the most important monument on the UNESCO list.	<b>Visual Qualities</b>	VQ1: Demonstrating emphasis on the axis of symmetry and balance and visual contrast such as fountain and tree arrangement	- Flexible and multi-functional design in the middle of square for gatherings.
S2: Isfahan historical city core is the most important tourist destination.		VQ2: Presenting Instances of Spatial continuity and hierarchy such as the recess of the entrance, porticos of the lower floors and large Iwans	- Limiting the entry of all vehicles in historical square surrounding in the peak traffic hours.
S3: Isfahan bazaar is like an axial passage that connected Naghshe-Jahan Square to Old Square (Atigh Square).		VQ3: Take advantage of fountains, plants and natural elements in middle of square	- Planning for public transportation and designing multi-storey parking near the square.
S4: Good Quality Monuments in Square's Surrounding reflect the social and religious values of Islamic Architecture.		VQ4: Rectangular Geometry based on Iranian Architecture principles for urban public squares which proportion of the sides is 1 to 3.	- Restoration of residences and subway network for preventing migration from the historical core of the city.
S5: Vast field of vision for users when entering the historical square.		VQ5: creating Sense of wideness; since the ratio of height of the square to its width is 1 to 10.	- Holding Cultural, National and Religious Events in the internal space of the square.
O1: It can attract more foreign tourists because of its rich cultural heritage.	<b>Functional Qualities</b>	VQ6: Creating Sense of Closure and introspection regardless of squares wideness based on Traditional Iranian Courtyard houses model	- Create shopping centres far from the main square to prevent concentration of commercial establishments in the old city centre.
O2: Regeneration of historical surroundings of Naghshe- Jahan Square is an important issue to prevent immigration from city core.		FQ1: Special Location at the centre of the city of Isfahan; foot accessibility is provided through 15 streets	- Create a subway network far from the historical monuments and avoid constructing high-rise buildings in skyline of Naghshe-Jahan Square.
O3: Improving linkages to Naghshe-Jahan Square with subway and footpaths.		FQ2: Square includes political, religious, economical, commercial, tourism, recreation, cultural, historical, and social values.	- Organizing seminars, public meetings and workshops to increase the awareness of people about the values of historical square.
O4: Maintaining and restoring the spirit of the city based on principal elements of Isfahan style		FQ3: Current People activities are included: Public Friday Religious Gatherings, Picnic Area, Desirable for small businesses, Social Interactions, Shopping, Dining, Relaxing, Walking, Seating and gathering place for public events and festivals.	

One of the most distinguished qualities in Naghshe-Jahan Square is manifestation of spiritual (non- Physical) qualities, which are fundamental in formation of citizen's collective memory and visual images. Considering the fact that, continuity of use of this square during the history leads to enhance sense of belongings between citizens and users of the place, some presented qualities are: creating sense of presence in paradise, enhancing sense of unity, manifestation of social and religious symbolism in design by situating the mosque, palace and Bazaar in different corners of the square and considering the archetypes in square's geometry are some of the most important visual qualities (Table 4).

#### 4. Results and Discussions

As a brief, Naghshe-Jahan square is introduced as a success model for improving citizen's quality of urban life through visual, functional and spiritual qualities, which can be a guideline for designing new squares in contemporary era. Although, proposed suggestions for improving urban quality of historical Public Square should be considered by authorities and urban planners to promote citizen's quality of life in historical public squares.

## 5. Conclusions

As mentioned in previous sections, high quality urban public spaces can promote social interaction and social cohesion, which affect social bonding, social life and sense of community. Back to the main questions of research; which factors are influencing the citizen's quality of urban life in Naghshe-Jahan Square? Physical and non-physical factors are influential for improving citizen's urban quality of life; visual and functional qualities as physical indicators can influence spiritual (non-physical) indicators. Although, the most important factor for promoting social life in this historical square is its continuity during the history, which leads to enhance sense of belongings and identity between citizens and users of the place. However, as presented in SWOT analysis, there are current urban problems in this historical public square. Focusing on the second question of the study; which strategic approaches can enhance citizen's urban quality of life in historical public squares? Nowadays, lack of definition for new functions in square's envelopes and entry of vehicles in historical Public Square are major problem that authorities should take into account.

Table 4: SWOT Analysis (Weaknesses and Threats), Quality assessment and suggested strategies for improving citizen's quality of life in Naghshe-Jahan Square

Weaknesses and Threats	Quality criteria	Quality Parameters in Naghshe-Jahan Square	Suggestions for Improving Citizen's Quality of Life
W1: Lack of drainage and sewerage network in the Nagshe-Jahan square.	<b>Spiritual Qualities</b>	SQ1: it is a clear and beautiful expression of social and religious symbolism, innovation and uniqueness in urban planning.	-Reviving some of the traditional functions of the square such as fireworks at nights, playing traditional Iranian Instrument (Naghareh-Zani), Playing Iranian traditional games like Polo, Ghopogh Andazi, and traditional cafes like Sharbat Khaneh to preserve the socio-cultural identity of the square.
W2: Lack of parking space in the canter of historical canter of the city.		SQ2: Combination with the historical precedent (Old Square) through organic passage of grand Bazaar.	- Organizing various applications in terms of time, so that during the 24 hourse some spaces would be active in the square.
W3: Lack of proper public transport system leading to skewed traffic composition on the roads ended to historical square.		SQ3: The continuity of use of this square during the history leads to enhance sense of belongings between citizens and users of the place.	-Recreation Architectural values of main axis of the square (Grand Bazaar to Great Mosque) and elimination of all visual barriers.
W4: Concentration of major commercial activities within historical square surrounding, causing severe congestion		SQ4: Harmony between texture and colour of soil, brick, water, plant and turquoise dome as building's material has increased the sense of presence in the nature and symbolizes the paradise.	- Using Urban billboard which illustrates the transformations of the historical square throughout the time
W5: Lack of interactive information kiosks for travellers and tourists		SQ5: Presenting the symbolic combination between people, government and religion by situating the mosque, palace and Bazaar in different corners of historical square.	- Providing Appropriate lightings at night for historical monuments of the square's surrounding
T1: Height of surrounding buildings breaks skyline in Naghshe-Jahan Square.		SQ6: The main Square pattern is a resemblance of broken cross which is one of Mandala design patterns (Archetypes), The four buildings (Imam square, Bazaar Entrance, royal Ali Qapu Palace and Sheikh Lotfollah Mosque are the members of this broken cross.	- Decreasing Compulsory uses like police stations and offices in historical square's surrounding
T2: Vibration of subways is the main threats to heritage monuments.			- Using multiple benches to enhance social activities
T3: High growth rate of vehicles on roads ending to historical square causing congestion, delay, insecurity and pollution.			
T4: Lack of appropriate social gathering and national, international, cultural and religious programs to adapt the function of historical square with user's needs.			
T5: Existence of incompatible functions with the historical and cultural texture of square's surrounding.			

## References

- [1] Kokabi, Afshin, Mohammadreza Pourjafar, and AliAkbar Taghvaiee. "Planning urban quality of life in urban centers." *Fashname Jastarhaie Shahrsazi* 12 (2005).
- [2] Arefi, Mahyar, and Menelaos Triantafyllou . "Reflections on the Pedagogy of Place in Planning and Urban Design." *journal of Planning Education and Research* 25 (2005): 75-88.
- [3] Pourjafar, MohamadReza, and Fahime Dehghani. "Role of Regeneration of cultural landscape on Promoting Citizen's quality of life." *Naghsh-e Jahan* 1 (2012): 81-94.
- [4] Mehan, Asma. "Urban Regeneration: A Comprehensive Strategy For Achieving Social Sustainability in Historical Squares." *3rd INTERNATIONAL MULTIDISCIPLINARY SCIENTIFIC CONFERENCE ON SOCIAL SCIENCES AND ARTS S G E M 2 0 1 6*. Vienna: STEF92 Technology Ltd., 51 Alexander Malinov 12 Sofia, Bulgaria, 2016. 862-868 .
- [5] Mehan, Asma. "Public Squares and Their Potential for Social Interactions: A Case Study of Historical Public Squares in Tehran." *International Journal of Architectural and Environmental Engineering* (World Academy of Science, Engineering and Technology) 3, no. 2 (2016): 547 .
- [6] Mehan, Asma. "Manifestation of Modernity in Iranian Public Squares: Baharestan Square." Edited by DOI: 10.2495/HA-V1-N1-1-10. *International Journal of Heritage Architecture* (WIT Press) 1, no. 1 (2017 (Under Publishing)): 1-10.
- [7] Gehl, Jan. *Public Spaces And Public Life, City Of Adelaide*. Edited by Available At [Www.Adelaidecitycouncil. Com](http://www.adelaidecitycouncil.com). 2002.
- [8] Carr, Stephen. *Public Space (Cambridge Series in Environment and Behavior)*. Cambridge: Cambridge University Press, 1992.
- [9] Pugalis, L. "Achieving place quality." *URBAN DESIGN* 109 (2009): 14–15.
- [10] Woolley, H., S. Rose, and M. Carmona. "The Value of Public Space, How High Quality Parks and Public Spaces Create Economic, Social and Environmental Value." (London: CABE Space. ) 2004.
- [11] Das, D. "Urban Quality of Life: A Case Study of Guwahati" (<http://www.jstor.org/stable/27734702>, Ed.) *Social Indicators Research*, 88 no. 2, (2008): 297-310.
- [12] Nasution, Achmad Delianur, and Wahyuni Zahrah . "Public Open Space Privatization and Quality of Life, Case Study Merdeka Square Medan." *ASEAN Conference on Environment-Behaviour Studies, Savoy Homann Bidakara Bandung Hotel, Bandung, Indonesia, 15-17 June 2011* . Procedia - Social and Behavioral Sciences , 2012. 466 – 475 .
- [13] Madanipour, Ali. "Why Are the Design and Development of Public Spaces Significant for Cities." *Planning and Design* 26, no. 6 (1999): 879-891 .
- [14] Shirvani, Hamid. *The Urban Design Process* . New York: Van Nostrand Reinhold Company , 1985.
- [15] Cattell, Vicky, Wil Gesler, Nick Dines, and Sarah Curtis. "Mingling, Observing, And Lingerin: Everyday Public Spaces And Their Implications For Well-Being And Social Relations." *Health & Place* 14 (2008): 544–561.
- [16] Chiesura, Anna. "The role of urban parks for the sustainable city." *Landscape and Urban Planning* (Elsevier) 68, no. 1 (2004): 129–138.
- [17] Hansmann, Ralf, Stella Maria Hug, and Klaus Seeland. "Restoration and stress relief through physical activities in forests and parks." *Urban Forestry & Urban Greening* (Elsevier) 6 (2007): 213-225.
- [18] Pacione, Micheal. "Urban environmental quality and human wellbeing—a social geographical perspective." *Landscape and Urban Planning* (Elsevier) 65 (2003): 19-30.
- [19] Hajmirsadeghi, Reihaneh Sadat, Shuhana Shamsuddin, and Amir Foroughi. "Design’s factors influencing social interaction in public squares." *European Online Journal of Natural and Social Sciences* 2 (2013): 556-564.
- [20] Cohen, D.A., S. Inagmi, and B. Finch. "The built environment and collective efficacy." *Health & Place* 14 (2008): 198-208.
- [21] Maller, Cecily, et al. "Healthy Parks, Healthy People: The Health Benefits of Contact with Nature in a Park Context." *George Wright Forum* 26, no. 2 (2009).
- [22] Kaplan, Rachel, and Stephen Kaplan. "The Experience of Nature : A Psychological Perspective." New York: New York: Cambridge University Press, 1989.
- [23] Lynch, Kevin. *The image of the city*. Cambridge : MIT Press, 1960.
- [24] Pakzad, Jahanshah. *Theoretical Foundations and Urban Design Process*. Tehran: Department of Housing and Urban Development, First Publish , 2006.
- [25] Carmona, Matthew. *Public Places, Urban Spaces: the dimensions of urban design*. Architectural Press/Elsevier, 2010.
- [26] Madanipour, Ali. *Public and private spaces of the city*. New York: Routledge Press , 2003.
- [27] Zucker, Paul. *Town and Square; from the agora to the village Green* . Massachusetts: The MIT Press, 1970.