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Research Article

THE MEASUREMENT OF LIFELIKENESS ASPECTS OF IMAM ALI SQUARE THROUGH SWOT TECHNIQUE

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ABSTRACT
Since past, the squares have been the location of varied governmental and public activities. Different squares such as Naqsh-e Jahan Square signify the fact that location of governmental structures such as Ali Qapu Palace or religious places such as Sheikh Lotfollah Mosque beside the market, as the economic lifeline of the city, guarantees the sustainability of different activities within the square. One of the recently reconstructed squares of Isfahan is Imam Ali Square. Lifelikeness (i.e. Zendevari in Persian) as a framework consists of sustainability principles of architecture of squares in ancient cities of Iran which guarantees the sustainability of these structures. Therefore, the objective of present study is to measure the aspects of lifelikeness of Imam Ali Square. In this regard, the SWOT technique is used to assess the lifelikeness status of Imam Ali Square. The results show that in 8 layers of lifelikeness analyzed in Imam Ali Square, 10 strengths, 8 weaknesses, 8 opportunities and 9 threats exist. It should be noted that regarding the 8 lifelikeness layer the respective total scores of 38.7, 32.4, 28.7 and 34.8 for strengths, weaknesses, opportunities and threats signify Imam Ali Square of Isfahan has undesirable condition from perspective of lifelikeness. The results of SWOT analysis show that the sum of weaknesses and threats with score of 67.2 has higher level than sum of strengths and opportunities with score of 64.4.

Keywords: *Imam Ali Square, Isfahan, Lifelikeness, SWOT Technique*

INTRODUCTION
The Measurement of Lifelikeness Aspects of Imam Ali Square through SWOT Technique the Imam Ali Square includes a set of different political, economic, and social structures and it has exerted significant influence on Iran of the last few decades. It should be noted that although the title "square" is used to refer to this recently reconstructed building but its economic applications have extensive dimension and as a result, it have significant functional similarities with the "market" (Agha and Motadayene, 2015). Market one of the most influential structures integrated in the body of society. Markets were the most important communication pathways in old cities and they had the highest traffic of citizens. The markets were the most significant communication channel of the cities where people come and products and capital flow. They acted as the center through which the citizens are made aware of information, news and advertisements.
The news was mostly announced by a number of beadles or news criers in main city market (Bani, 2010). The initial nucleus of the city was formed around the significant city gate and developed along main pathways.
The market development along with setting and organization of spaces depend on function and economic development of the markets. Regarded as a primary element of the cities and assigned a distinctive position in Islamic architecture of Iran, the market is made of two rows of numerous opposite shops that are connected by a significant roof (Agha and Motadayene, 2015). In civil constructions, the market was so significant that after the mosque it was regarded as the main nucleus of the alleys. In major cities, each alley had few small markets and one major market to satisfy the public requirements. Considering the significance of the market and its critical riles, the types of materials used and its formation layers were highly significant (Ahari, 2002). As a result, the present study aims to examine the lifelikeness aspects of activity, construction, materials, association with environment, aesthetics and public requirements. The present paper attempts to determine the strengths, weaknesses, opportunities and threats of 8 lifelikeness layers of Imam Ali Square.

Significance

One of the significant discussions regarded analysis of lifelikeness approach to traditional squares is the analytical outcomes for current business centers. On the other hand, realization of high levels of certain principles such as people-centeredness and static knowledge in modern architectures provides the conditions for satisfaction, user-friendliness and welcome of new designs among the people of present era. From another viewpoint, this issue adds to the significance of approaching the problems of development and what accompanies it based economic, social and environmental sustainability (Madah *et al.*, 2012).

Literature Review

It should be initially noted that the lifelikeness approach in architecture is a new issue that should be analyzed and imposed on all architectural concepts through application of new scientific methods. Referring to the subjects rose regarding the objective of present study, it essential to offer a definition of lifelikeness. In fact, lifelikeness is a quality developed during the balance of forces within the context of sustainable development. When the equilibrium of economic, social, cultural and environmental aspects with living conditions of the public in interaction in patters of behaving with the nature, a form of lifelikeness will develop which could be perceived through its varied layers. Lifelikeness consists of 25 layers and selection of the layer(s) is influenced by interaction of inner pulse and outer pulse. It should be noted that numerous studies on markets and squares have been conducted so far each of which examined the aspects of the market from a certain viewpoint. The economic, political, socio-cultural, and physical analyses along with certain concepts such as specialized markets as in oil market or black market are included with this framework. What the authors of present study intend to do is to review the aspects of lifelikeness approach based on different layers of lifelikeness for a market with multiple functions, its position and functions. Considering the novelty of the subject, we refer to two studies in this regard.

In a paper called *Analysis of Lifelikeness Approach in Rural Houses of Mountainous Regions of Iran* (Javam and Irvani, 2015), the authors analyzed the lifelikeness layers in a qualitative manner and through survey. The results suggested that attention to the natural factors of water and soil based on climatic design including orientation, form of the building, location of the building, association of empty and full spaces along with other architectural characteristics are distinctively significant from viewpoint of lifelikeness. In addition, the results show that cities and villages are completely constructed based on the context and attention to the environment. Therefore, the authors of present study believe that the equilibrium of architecture and environment could act as a contributive factor for the work and for the context. The buildings of the villages are properly interacting with their context and environment and due to the interaction; they attain equilibrium with the environment.

In another study called *Zendevari (Lifelikeness) a New Framework Derived from Sustainability for Development in the Built Environment*, Iravani (2015) compared two cities with relatively similar climatic conditions but different social, historical and cultural conditions (i.e. Zavareh in Iran and Santa Fe in United States). The relative similarities of climatic layers of the architecture in the two cities justified the relative similarity of climatic sub-layers of architectures of the two cities. These similarities exert the highest influence upon physical façade of the buildings but the distribution and association of interior spaces were mostly influenced by social layers that led to significant differences between the two cities in this regard.

In the structure of all major cities, market and square play highly significant roles as the main hub of activity and primary route of the city. This significant communicative aspect contributed to a setting where, beside of main mosque, large seminaries and business offices were established in the market squares (i.e. Timcheh in Persian) and all public and other significant activities were developed beside the squares. Therefore, the communicative and urban roles of the square made it a social and communicative space beside of its economic aspect (Rajabi, 2009; Kim, 1998). Therefore, the square and market are not mere commercial and economic places but the interaction of different social groups exists in the square too and square is regarded as one of the most significant progressive realms of culture, religion and economy.

MATERIALS AND METHODS

Methodology

Based on the previously conducted studies, in the present study qualitative and analytical methods, field surveys and documentary studies were used. After data collection through questionnaire (9 experts and based on quick Delphi panel technique), the SWOT technique was applied for data analysis. SWOT is a valuable instrument for analysis. To determine the significant lifelikeness layers of the squares, reference to the national documents and asking for experts' comments were done. Based on the results of other studies and face-to-face interview with community of experts, a list of strengths, weaknesses, opportunities and threats based on 8 lifelikeness layers (i.e. economic, social, spatial-geometric, legal, aesthetic, communicative and educational) was developed. It is noteworthy that based on received comments of experts regarding the layers of lifelikeness construct as well as attainment of proper and effective result in analysis of the concept in traditional markets, 8 layers were selected. In fact, it should be noted that considering the high level of involvement of the 8 layers in realization of lifelikeness of Imam Ali Square and the association of internal and external pulse of the concept, it is expected to obtain highest equilibrium through selection of 8 out of 25 layers and to reinforce the center. In addition, the opinions of interviewees showed that the selected 8 layers for realization of the concept of lifelikeness analysis of the square extend to the other 25 layers and provide the condition for attaining equilibrium of internal and external pulse of lifelikeness. By using questionnaire, the weight of each item representing strengths, weaknesses, opportunities and threats was determined from viewpoint of experts. To determine the weight of each element of SWOT, the five-point Likert scale (i.e. 5: very much, 4: much, 3: average, 3: low, and 1: very low) was used.

RESULTS AND DISCUSSION

Analysis of Results

After formulation and extraction of data from field and documentary studies, interview and questionnaire, the SWOT analysis was used to measure the limitations (i.e. weaknesses and threats) and advantages (i.e. opportunities and weaknesses). The SWOT analysis was done to define and implement the lifelikeness approach in Imam Ali Square consistent with its applications.

- Determination of the most significant strengths of lifelikeness layers in Imam Ali Square
- Determination of the most significant weaknesses of lifelikeness layers in Imam Ali Square
- Determination of the most significant opportunities of lifelikeness layers in Imam Ali Square
- Determination of the most significant threats of lifelikeness layers in Imam Ali Square

Analysis of Internal Factors Affecting Lifelikeness Approach in Imam Ali Square

Table 1: Internal Factors Affecting Change of Status and Function of Imam Ali Square

Lifelikeness Layer	Strengths	Weaknesses
Economic	-Varied products and items -Ordering and product-based separation	-Decentralized economic currents
Social	-Social centers	-Lack of targeted society's welcome of acquisition of available shops
Spatial-Geometric	-Different technical techniques of structure building -High density and fitness of geometrical shape of the market	-Fragile physical structure -Environmental risks
Legal	-Judicial and governmental places in market -Fair individuals among businessmen	-Lack of familiarity of the public with varied functions
Aesthetic	-Varied decorations -Application of elements of color, water and light for decoration	
Communicative	-Verbal connection among the public	-Change of communicative role due to pervasiveness of media
Dynamic	-Debate centers such as seminary	-lack of activity spirit in square
Historical		-Change in identity of square through non-identity materials

Source: Authors of Present Study

Analysis of External Factors Affecting Lifelikeness Approach in Imam Ali Square

To identify the opportunities and threats, the external environment of the market was examined based on 8 lifelikeness layers the results of which are shown in table 4.

Table 2: External Factors Affecting Change of Status and Function of Imam Ali Square

Lifelikeness Layer	Strengths	Weaknesses
Economic	-Development of tourism activities and planned visits -Willingness of private sector to diversify	-Interruption of ambient setting in development with economic perspective
Social	-Increased willingness of urban people to visit	-Demographic density and inessential traffic around square -Increased frequency of social offences as number of clients rises
Spatial-Geometric	-Different materials and ideas to decorate and shape form(s)	-Increased possibility of structural subsidence due to high weight and sinking of underlying lands
Legal	-Factors willing to use the potentials of the square in governmental sector	-Lack of adjustment of governmental entities to realize development
Aesthetic	-Different designs and design facilities	-Structural disruption of climatic variations, subsidence, and the public
Communicative	-Adjacency with other urban applications -different audiences in different age groups	-Elimination of ambient context of the square due to new applications
Dynamic		-Possible difficulty of square management at the time of crisis and natural incidents like earthquake
Historical		-Weakened position of square in neighborhood

Source: Authors of Present Study

Analysis of Strengths, Weaknesses, Opportunities and Threats

Considering the analyses done, 10 internal strengths versus 8 internal weaknesses along with 8 external opportunities versus 9 external threats were determined. In sum, 18 strengths and opportunities and 17 weaknesses and threats were identified as the advantages and limitations of 8lifelikeness layers of Imam Ali Square. The Likert scale was used to measure the strengths, weaknesses, opportunities and threats. The following table represents the sum and mean of weights assigned to each underlying items of strength, weakness, opportunity and threat.

Table 3: Analysis of Strengths, Weaknesses, Opportunities and Threats

Analysis of Strengths	Total Weight	Mean Weight
S1-tourism- and transit-oriented centers	41	4.55
S2-Different technical tricks of construction	42	4.66
S3-Different individuals in predicted economic sector	37	4.11
S.4-Classification based on pathway, shop, square and door	32	3.55
S5-Using elements of color, water and light for decoration	39	4.33
S6-Verbal connection among the public	31	3.44
S7-Designing rows and product-based job division	29	3.22
S8-High density and harmony in geometrical shape	40	4.44
S9-Governmental and judicial places	34	3.77
S10-Social center	24	2.66

Analysis of Weaknesses	Total Weight	Mean Weight
W1-Change in identity of square through non-identity materials	43	4.77
W2-Lack of targeted society's welcome of acquisition of available shops	44	4.88
W3-Fragile physical structure	32	3.55
W4-Environmental risks	37	4.11
W5-Lack of familiarity of most of the public with diverse applications	38	4.22
W6-Decentralized economic currents	28	3.11
W7-Change in connective role due to pervasiveness of media	30	3.33
W8-Lack of activity spirit in square	40	4.44

Analysis of Opportunities	Total Weight	Mean Weight
O1-Development of tourism-oriented activities and planned visits	43	4.77
O2-Different materials and religious ideas to decorate and shape forms	36	4
O3-Adjacency with other urban applications	32	3.55
O4-Agents willing to use potentials of square in governmental sector	33	3.66
O5-Different audiences in different age levels	29	3.22
O6-Increased willing of urban mass to visit	32	3.55
O7-Different designs and design facilities	30	3.33
O8-Willingness of private sector to diversify	24	2.66

Analysis of Threats	Total Weight	Mean Weight
T1-Difficulty of square management during crisis and natural incidents such as earthquakes	40	4.44
T2- Increased possibility of structural subsidence due to high weight and sinking of underlying lands	42	4.66
T3- Increased frequency of social offences as number of clients rises	34	3.77
T4-Elimination of ambient square context due to application	39	4.33
T5- Lack of adjustment of governmental entities to realize development	30	3.33
T6- Structural disruption of climatic variations, subsidence, and the public	29	3.22
T7-Decreased position of square in neighborhood	36	4
T8-Interference of ambient context in development of square with economic approach	34	3.77
T9-Population density and non-essential traffic in adjacency of square	30	3.33

Source: Authors of Present Study

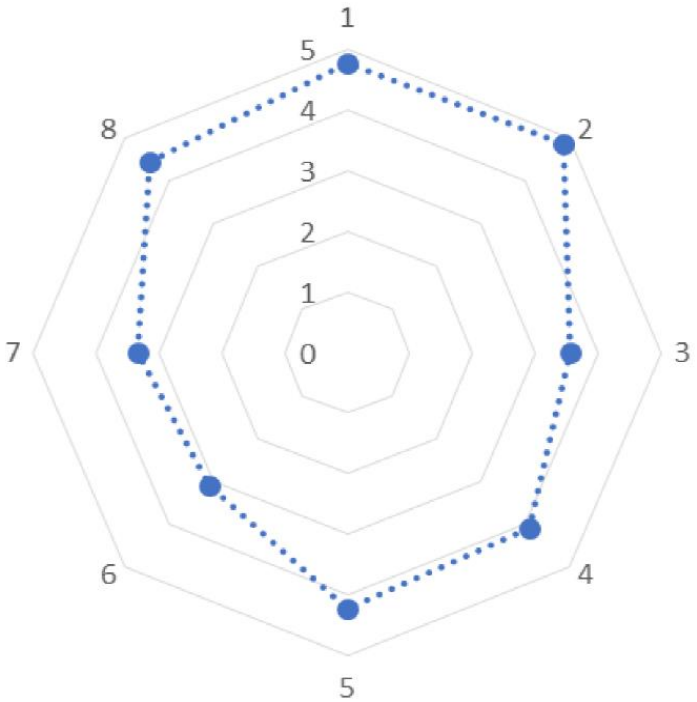

Figure 1: Spider diagram of strengths of 8 lifelikeness layers

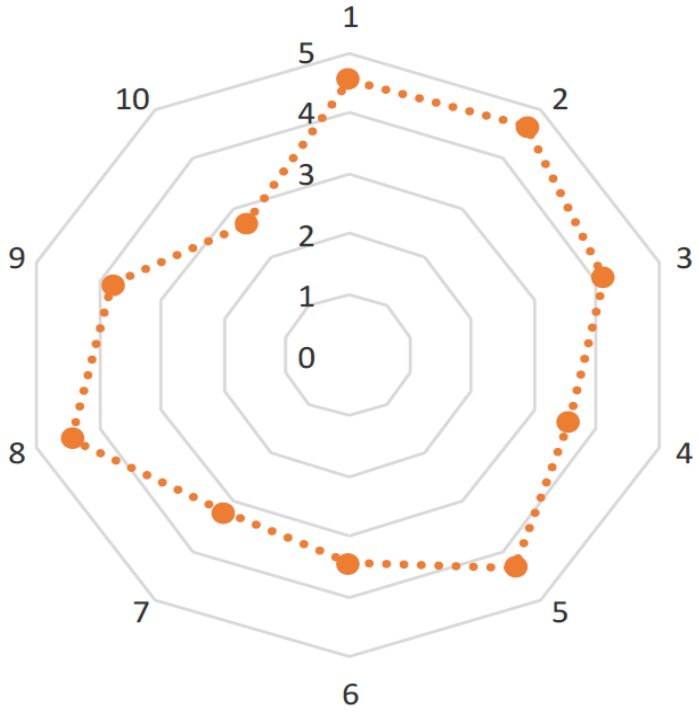

Figure 2: Spider diagram of weaknesses of 8 lifelikeness layers

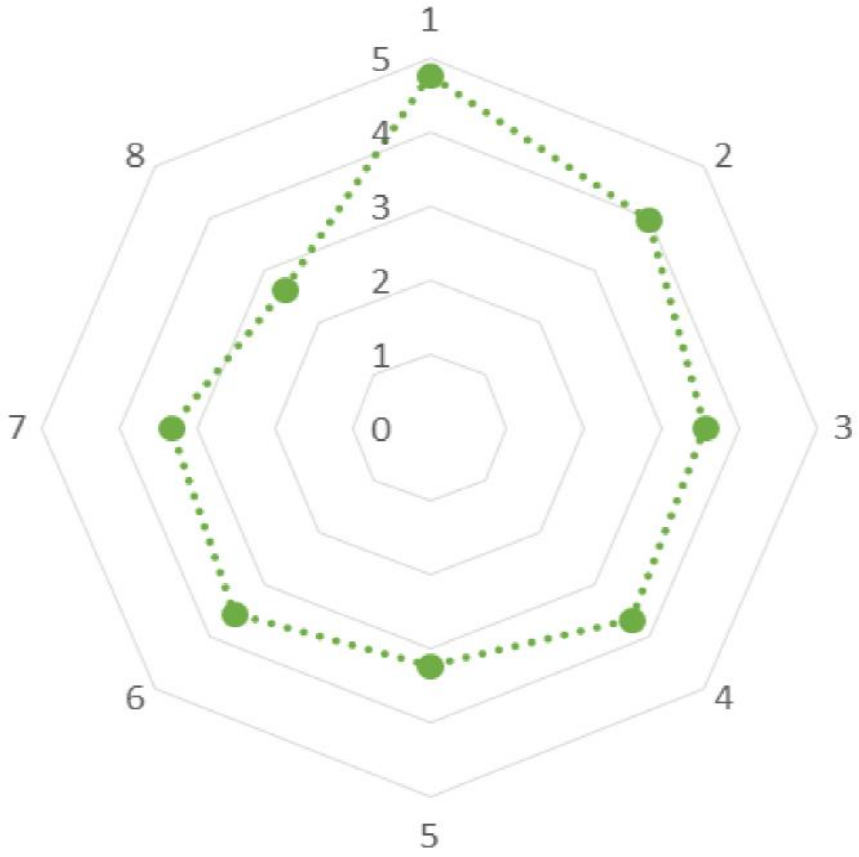

Figure 3: Spider diagram of opportunities of 8 lifelikeness layers

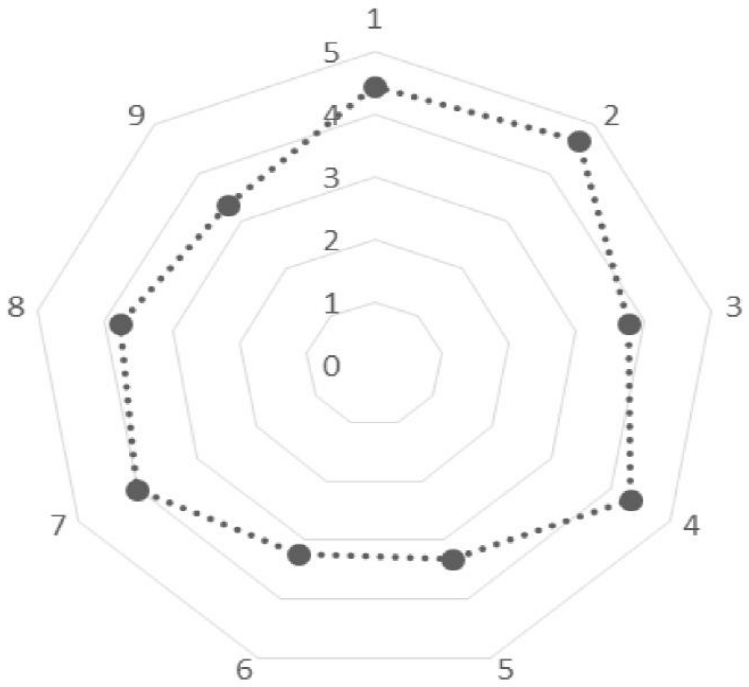

Figure 4: Spider diagram of threats of 8 lifelikeness layers

Summary and Conclusion

The generalization of architectural principles such as people-centeredness and static knowledge will offer the conditions for representation of sustainable architecture in design and construction of the building. As a result, lifelikeness as a significant and influential principle deserves promotion of an emphasis on each one of its distinctive layers. In the present study, a review of condition of 8 lifelikeness layers of Imam Ali Square in Isfahan was done from this viewpoint. The results show that with exception of one item, 9 out of a set of 10 items had higher-than-mean score in Likert scale. In this regard, all underlying items of 8 weaknesses had higher-than-mean score in Likert scale. In regard to opportunities, 1 out of 8 items had less-than-mean score in Likert scale. It should be noted that all observed threats in 7out of 8 lifelikeness levels of Imam Ali Square had higher than average in Likert scale which represented their high influence. The respective total scores of 38.7, 32.4, 28.7 and 34.8 for strengths, weaknesses, opportunities and threats signified Imam Ali Square of Isfahan had undesirable condition from perspective of lifelikeness and it still has the potential to develop in management, attraction of participation and promotion of spirit of civic activism. The results of SWOT analysis show that the sum of limitations (i.e. weaknesses and threats) with score of 67.2 is higher than sum of advantages (i.e. strengths and opportunities) with score of 64.4. This necessitates higher attention and accuracy in analysis of significant lifelikeness layers especially public participation, social development, development approaches, and promotion of diverse activities by reigning system.

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