
Abstract

Following development and qualitative and quantitative changes in communities, that have made substantial changes in historic environments, the authenticity concept has attracted attention in order to strike a balance between conservation and development approaches. The concept of authenticity as the transmitter of values and significance of cultural heritage, is regarded as a key criterion in the process of conservation and thus, the need for clarification of its factors has been emphasized in the international documents. This paper aims to refine the prioritization of authenticity factors in the plans and measures of the revitalization project of Atique Square in Isfahan, Iran. To achieve this, firstly the conventions and the international documents related to authenticity are reviewed using qualitative research methods and content analysis strategy; consequently the effective factors in measuring authenticity have been selected in three main categories: 'historical-evidential values', 'artistic values and creativity', and 'socio-cultural values'. After that, prioritizing these factors in the Atique Square revitalization, is analyzed by quantitative research method and correlation strategy. The findings indicate that the 'historical-evidential values', 'socio-cultural values' of the context and 'artistic values and creativity', in descending order, have the highest to the lowest contribution in explaining the concept of authenticity in the measures taken for the project of the Atique Square revitalization.

Keywords: Heritage, Authenticity, Revitalization, Evaluation, The Atique square, Isfahan.

1. Introduction

Review and analysis of documents, conventions and theories concerning the role of authenticity in the conservation of cultural heritage show that in recent decades, the tangible and intangible aspects of authenticity have been considered together to evaluate, conserve and manage cultural heritage. Hence, this paper aims to study the factors explaining the concept of authenticity in the conservation of historic urban heritage and to prioritize these factors by reviewing and evaluating revitalization measures in the Atique Square of Isfahan in Iran. In order to achieve this goal and investigating the authenticity factors, the method of Confirmatory Factor Analysis is used.

The concept of authenticity has a fundamental role in balancing the plans and measures of historic urban heritage revitalization. Thus, the more consistent the new developments are with the concept of authenticity, the more integrated and balanced they will be with conservation. English Heritage defined authenticity as “those characteristics that most truthfully reflect and embody the cultural heritage values of a place” [1].

1.1. Literature review

Content analysis of the international documents represents a universal consensus on the importance of authenticity in the conservation process of heritage sites. The Venice Charter (1964) is the first international document that discussed the concept of authenticity in the field of cultural heritage [2]. The topic of authenticity appeared only in the preamble of the Venice Charter as historicity and how to slow down the heritage property erosion process; especially in buildings with more durable materials (such as stone and brick) which have been discussed in many international charters and recommendations. Since then, lots of discussions have been raised about authenticity. The World Heritage Committee (1978) introduced four criteria for the assessment of authenticity in heritage structures: ‘design’, ‘materials’, ‘workmanship’, and ‘setting’ [3].

The measure of authenticity was first used as the initial criterion for the assessment of properties in the World Heritage List. The importance of the use of authentic criterion for guiding decisions after the registration process
was first stressed in management guidelines of UNESCO and Feilden for the World Heritage Sites (1993), titled as ‘Authenticity and Treatment’. Furthermore, ‘the Bergen meeting in 1994 laid the groundwork for the Nara conference later that year’ [4]. Gradually, Nara Charter (1994) focused on notions like ‘cultural diversity’ and ‘indigenous culture’, in a world in which diverse cultures are experiencing globalization, and verified the significance of ‘socio-cultural values’ as a main criterion for explaining authenticity and the process of conservation. ‘Japan was the first country in the world to introduce intangible heritage concepts into the heritage protection system’ [5]. The Nara Conference on Authenticity developed ‘ways and means of broadening our horizons to bring greater respect for cultural and heritage diversity to conservation practice’ [6]. The Nara Charter, for the first time, considered the importance of intangible and associated aspects of heritage. Natalia Dushkina, representative of Russia ICOMOS, argued in her paper in Nara meeting (1994) that; things that have tangible and material aspects (form, setting, techniques, techniques) and things that have intangible and immaterial aspects (function, use, tradition, spirit) ‘used to be the bearers of authenticity in a monument…’ that ‘they transmitted authenticity to us and thus are relative to it…’ and that ‘authenticity is a value category of culture’ [7]. Following that, the Burra Charter by emphasizing on the significance of ‘place’ and ‘setting’ [8], again shifted the focus on ‘socio-cultural values’ of the setting. Other events associated with authenticity and intangible aspect which can be mentioned are the 2003 Convention for the Safeguarding of the Intangible Heritage [9], and also the 2005 operational guidelines of the World Heritage Convention [10].

The 2003 Convention for the Safeguarding of the Intangible Heritage is particularly relevant for cultural landscapes based on the content presented in the 1972 World Heritage Convention. According to the 2003 Convention, the intangible cultural heritage or living heritage is a basis for our cultural diversity and its maintenance is a guarantee for continuing creativity [11].

Later, the 2005 World Heritage Convention in paragraph 82 introduced criteria for ‘test of authenticity’ in the operational guidelines to assess the measure of authenticity, these criteria are: form and design, materials and substance, use and function, traditions, techniques and management systems, location and setting, language and other forms of intangible heritage, spirit and feeling, and other internal and external factors [10]. Based on the definition provided in the Operational Guidelines of the World Heritage in 2005, the concept of authenticity can be defined as the capability of the property to transmit the cultural significance of a place. As mentioned earlier, the concept of authenticity stated four parameters: design, materials, workmanship and setting. The proposed parameters basically pointed the tangible and physical aspect of heritage. Consequently, ‘the Nara Document on Authenticity, which was later integrated into the Operational Guidelines (Annex IV of the Operational Guidelines of 2005), provided a practical basis for examining the authenticity of properties proposed for World Heritage Listing’[12]. Some of the documents published in recent years, including Quebec ICOMOS (2008), have expanded the scope of heritage to ‘Cultural Routs’ by developing the concept of authenticity in conservation process as well as emphasizing on preservation of the spirit and sense of place [13]. Having highlighted the ‘Spirit of Place’ in evaluating authenticity with regards to intangible heritage and significance of heritage, and having considered the definitions given for ‘Spirit of Place’; it can be concluded that, in recent years, the concept of authenticity has moved beyond the physical aspect of heritage and have been proposed as social and intellectual structures. Jenny Kidd [14] has also pointed out that ‘the concept of authenticity is of course socially constructed’.

Review of literature and perspectives relevant to authenticity proves that ‘social-cultural authenticity’ beside ‘material change’ and considering the creativity aspect while maintaining its continuity over several generations have been effective in designation of authenticity [15]. Hence, based on the definitions presented by Jokilehto [16], the effective components for authenticity assessment can be categorized into three main groups: 1) ‘Historical-Evidential Authentication’; 2) ‘Artistic and Creative Value’; 3) ‘identifying Social-Cultural Authentication of the context’. According to the definition provided by Jokilehto [16], the tangible and intangible aspects of heritage have been taken into consideration for the assessment of authenticity (Fig. 1).

![Diagram](https://via.placeholder.com/150)

**Fig. 1** Factors explaining the concept of authenticity in the domain of cultural heritage. (Based on the definition provided by Jokilehto, 2007)
The “historical-evidential value” is one of the three main factors in authenticity assessment. This factor refers to illustrated aspect of history in remaining properties and documents of the ancestors. This value is derived from the capabilities and potential of historic place for obtaining evidence of human activities at that location in the past. Physical remaining human activities of the past, is the main resource of information for review and the evolution process of historic places, people and the cultures created by them. Age and era of the historic property are important indicators. For this purpose, the property authenticity should be reviewed according to material transformation, evolution of historical periods and documentation of construction and competition periods, from the past to the present time. “Artistic value or creativity aspect” is another factor considered in authenticity evaluation; that can be reviewed owning to artistic value and quality as well as the creativity of design or its implementation. English Heritage suggested this indicator as aesthetic values that enable people to be absorbed in sensory and mental motivations of place. Aesthetic value could be the result of the conscious design of a place that includes artistic activities. This value is special for each time and each cultural context; therefore, understanding and appreciating them culturally are not limited to a particular generation.

The third factor determining authenticity criterion is “cultural-social values”. For this purpose, live traditions and social values of the context and society should be identified and assessed. Social value is derived from the sense and significance of place for the people who are associated with that place, or for those who imagine it in their collective memories or experiences. Compared with the other heritage values, social values have less dependence on the physical remains of historic context. These values may be linked to the place by function; in any case, cultural and social values can be the driving force for recreating places which are destroyed [1, 16, and 17]. In the following sections, to prioritize the key factors of authenticity as defined by Jokilehto, the revitalization of the Atique Square in Isfahan, Iran is reviewed and evaluated.

2. Methodology

2.1. Research questions

Generally, this paper focused on answering the following two questions:
1. What factors explain the concept of authenticity in historic urban heritage? To answer this question, theories and literature associated with the concept of authenticity are reviewed and analyzed. The following question arises afterwards:
2. Which of the factors of authenticity is mostly being focused on conservation and regeneration measures of the Atique Square?

In this step, besides studying the factors explaining the concept of authenticity, the actions that have been done in the Atique square of Isfahan are reviewed and evaluated and it becomes clear that which authenticity factors are more considered in these measures.

2.2. Research methods

Reviewing research questions indicate that the dominant approach of this paper is a combination of qualitative and quantitative methods. Therefore, in the qualitative part of this paper; for studying factors explaining the concept of authenticity in historic urban heritage, the logic reasoning technique with content analysis and logic tool for explaining and interpreting theories and related documents have been used. Moreover, official structured interview, observation, photography, reading and viewing documents and descriptions have been applied in this research.

In the quantitative part, in order to prioritize the authenticity factors and determine the correlation coefficient of them; the correlation strategy with multiple investigations method including official structured interview, questionnaires, observation, photography, daily notes, documents and descriptions reviewing have been used.

2.3. Selecting the case study of the Atique Square, Isfahan

In the second part of this paper, in order to clarify the concept of authenticity, the case study is being reviewed and analyzed. Review and analysis of empirical findings from case study research, approve the internal validity and to some extent the external validity. The case study is one of the distinguished projects in the historical center and near Masjed-e Jāmē of Isfahan, which is registered on the World Heritage List. The most important selection criteria for it can be mentioned as the followings:

- Being a distinguished sample of implementation of strategies, policies and plans of revitalization in Iran;
- Capable of being reviewed and analyzed based on authenticity factors; and
- Availability of information and access to the resources.

2.4. Sources of research information

For case study review and analysis, these tools have been used: 1) documentary observation and reading, 2) interviews, and 3) questionnaires. Using questionnaires besides other tools makes a substantial contribution to the clarification of the concept of authenticity and enhances its scientific credibility. The proposed questionnaire has been reviewed by 11 managers, planners and designers associated with the project of the Atique Square revitalization through face to face interviews. In the next step, the questionnaires were randomly given out to 25 individuals of various guilds who mostly have shops around the square and their opinions were received. After some minor changes based on the feedback from the respondents; a questionnaire of 21 multiple choice questions with five options in the range of very low, low, medium, high, very high on the basis of authenticity variables was organized. In order to organize the
questionnaire, the qualitative components of authenticity must have been converted to quantitative and measurable ones. Hence, based on the three factors of authenticity, five-choice questions were prepared. To measure ‘historical-evidential values’ six variables and to do so for the ‘socio-cultural values of the context’ four variables are determined. For measuring the ‘artistic values and creativity’ two variables were considered. Questionnaires were distributed randomly among 131 users, who were mostly shop owners around the square, from November 18th of 2011 for four days between 8:40 AM to 6 PM. According to the number of the independent variables of this research, the number of questionnaires are adequate and thus the results are acceptable and valid (internal validity of the study). However, for the external validity of the findings of the research and the capability of their generalization to a broader level, more case studies need to be examined.

2.5. Data analysis strategy

To analyze and evaluate information obtained from the questionnaires in this paper, Confirmatory Factor Analysis (CFA) method is used. For this purpose, the data obtained were analyzed and interpreted by SPSS software version 17 using ‘Spearman’s correlation r_{ho}’.

If the research variables have non-parametric correlations, it is not possible to use parametric tests like Pearson’s for determining the correlations. In this case, the non-parametric correlation measurement should be used [18]. Spearman’s correlation is a non-parametric measurement. Spearman’s correlation coefficient is used when data have discontinuous consecutive rank (1, 2, 3, …) or the main amounts are converted to ranks. If data are measured by distant or relative scale, it is possible to convert them to rank and then calculate the Spearman’s ordinal correlation coefficient [19]. In other words, Spearman’s ordinal correlation coefficient; based on ranks, measures the correlation between two variables at ordinal level. In Spearman’s ordinal correlation, the variables are expressed in ordinal (ranking) measures instead of distant or relative ones [20]. Spearman’s coefficient is the most popular measurement coefficient in ordinal variables correlation [21]. Nominal and ordinal scales are qualitative measurement scales [19]. Since the nature of this research data is qualitative and have ordinal scale; the non-parametric method and Spearman’s correlation test is applied for determining the correlations among variables. In addition, the five-point Likert Scale is used in this research.

Data analysis with Spearman’s correlation indicates that the role of each factor in explaining the concept of authenticity. Although the generalizability of the findings is limited to the selected case study, in order to expand its generalization to a larger scale, more examples of historic urban complexes in Iran should be examined.

3. Review and Analysis of the Case Study: the Historic Complex of Atique Square, Isfahan, Iran

In The Historic Cities Of The World, There Are Many Examples With Regard To Conservation And Restoration Of Single Buildings That Have Historical Values. However, It Is Not Easy To Find A Distinguished Example, Like Revitalization Of A Vanished National Document With The Scale Of Atique Square In Isfahan. Activating This Project Is Like An Open Heart Surgery That In Addition To The Special Required Care; The Suggested Plans And Measures Should Be Paid Enough Attention To With Respect To The Effects It May Have On The Whole Complex Of The Atique Square [22]. Obviously, In The Process Of Revitalization, Besides The Historical Retrospect, The Existing Problems Should Be Considered in Different Dimensions.

In this Section, The Results Of The Evaluation Based On Authenticity Factors Are Presented. First, The Historical Background And Current Status Of The Square Is Reviewed By Studying Documents And Reviewing Projects And Plans (Section 3-1 And 3-2). Then, Implemented Measures Are Evaluated Based On Authenticity. And The Data Extracted From The Questionnaires Are Analyzed In Section 3-3. Based On The Findings, It Becomes Clear That Which Factors And Variables Have Been More Effective In The Revitalization Of Atique Square.

3.1. Case study: Atique Square

Isfahan Is One Of The Oldest Cities In Iran. The City's Central Location In Iran Led It To Be The Capital Of Two Iranian Great Dynasties Seljuk And Safavid. Although Isfahan Used To Be A More Glorious Capital During The Safavid Era In Comparison To The Seljuk Period; Atique Square Was Constructed By Seljuk Empire. The Historical Complex Of Atique Square Reflects The Cultural-Historical Identity Of Isfahan [23].

Hence, The Present Solemn Mission Is To Recreate. In Addition, The Historically Significant Elements Near It Like The Atique Mosque Encourage And Provide Enough Motivation In Its Revitalization Process. Nowadays, The Square Is Located At The Vertex Of Isfahan Historic Axis, Which Is Also The Most Congested Traffic Point Of The City. This Square Has Lost Its Seljuk Magnificence And Considerable Parts Of It Have Been Eroded. This Block, Following Some Actions In Contemporary Period, Such As Constructing Hataf Street About Seventy Years Ago And Abdolrazagh Street About Fifty Years Ago; Experienced Change As Well As Physical And Spatial Rupture And Subsequently functional one (Fig. 2).

The inside part of the square used to be full of commercial units and simple stories and many of the surrounding historic markets were destroyed. So the importance of considering physical and social structures and economic empowerment of this complex in its revitalization project became obvious. Finally, Renewal and Rehabilitation Organization of Isfahan Municipality [25] with the aim of removing the exclusion of the area and flourishing the historic axis of Isfahan again; planned some measures in three phases [26]. In section 3-2 the most significant measures based on the authenticity concept are introduced.

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3.2. Analysis of data obtained from observation and documents review

In this part, the three phases of Atique Square revitalization project are reviewed and analyzed.

3.2.1. The first phase: implementation of the underpass

In order to start the implementation of the underpass, the approval of Iran Cultural Heritage, Handcrafts and Tourism Organization was required (due to historical values of the area). The main conditions for that were: (a) putting speculations in the area of the square, and (b) permanent presence of cultural heritage experts at all stages of implementation. The excavation investigations were carried in two phases for eighteen months (Fig. 3a, 3b).

The findings of these speculations included the floor brick of the old carpet of the square and lots of pottery and even metal objects. Some pillars were also obtained, all documented, but were known as invaluable for being maintained. Therefore, in 2008, constructing the underpass was authorized by Iran Cultural Heritage, Handcrafts and Tourism Organization. The construction lasted for fourteen months and made serious damages to the authenticity of the complex, especially to the ‘historical & evidential authentication’ (Table 1).

3.2.2. The second phase: the main square, the forecourt of Atique Mosque and the Historic Bazaars

The second phase of the project was to construct a multifunctional space (cultural, religious and services) and parking spaces under the square (Fig. 4).

Restoration and reconstruction of a large part of the historic bazaars, located around the square, have been implemented with the aim of shaping the body and restoring the historic form of Atique Square (Fig. 5). Implementing these measures have been effective for maintaining and revitalizing the ‘historical-evidential values’ and the ‘visual-aesthetic values’ and collectively
the authenticity of the complex. In order to name one example of the restored bazaars, the intersection of Isfahan Bazaar with Abdolrazagh Street can be mentioned, which is effective in preserving and regenerating the ‘historical-structural integrity’ and ‘visual-aesthetic integrity’ of the square (Table 1).

Figure 5 The revitalized Isfahan Bazaar at the former intersection with Abdolrazagh Street (2012)

3.2.3. The third phase: the urban design of the surrounded area, functional change of historic buildings and organizing the retails

Twenty-two cultural commercial projects and services in the surrounding area of the square, organizing retails and restoration and functional changes in some of the historical buildings can be named as the measures of the third phase. Although high commercial density and traffic congestion will be the consequences of this twenty-two projects and a serious danger for the historical complex authentication; if properly organized, the businesses not only can maintain the ‘functional-social integrity’, but also can assist in achieving the ‘functional development’ and even the ‘economic vitality’. In addition, restoration and functional changes of the historic buildings can have a great role in the revitalization project being successful. Implementation of these measures, while maintaining the authenticity and integrity of the complex, can lead to the overall development and eventually the economic vitality.

In the third phase, the Isfahan Municipality and Iran Cultural Heritage, Handcrafts and Tourism Organization provided the context for private sector and the public sector involvement. Implementation marks the cooperation of the Isfahan Municipality and Iran Cultural Heritage, Handcrafts and Tourism Organization, as the two main authorities of the Atique Square revitalization. Collaboration of stakeholders and actors and their understanding of the cultural significance of the place have an important role in maintaining the concept of authenticity. Many of the planners and designers believe that if the third phase is implemented completely, the aims of the project would hopefully become achievable. Otherwise implementation of phase one and two cannot lead to preservation of authenticity in this complex (Table 1).

<table>
<thead>
<tr>
<th>Phase</th>
<th>The Taken Measures</th>
<th>Authenticity Consideration</th>
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<tbody>
<tr>
<td>One</td>
<td>Underpass Implementation</td>
<td>×</td>
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<tr>
<td></td>
<td>The Forecourt of Atique Mosque and implementing the main design of the square</td>
<td>✓</td>
</tr>
<tr>
<td>Two</td>
<td>Constructing parking and multifunctional space under the square</td>
<td>×</td>
</tr>
<tr>
<td></td>
<td>Renovation and reconstruction of the surrounding historic bazaars</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Connecting Isfahan bazaar at the intersection with Abdolrazagh Street</td>
<td>✓</td>
</tr>
<tr>
<td>Three</td>
<td>Organizing the Retails</td>
<td>×</td>
</tr>
<tr>
<td></td>
<td>Construction of twenty-two Commercial projects</td>
<td>×</td>
</tr>
<tr>
<td></td>
<td>Restoration and functional change of valuable historic buildings</td>
<td>✓</td>
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</table>

In the following, the set of measures implemented to revitalize the Atique Square based on authenticity are evaluated.

3.3. Findings of Analysis of Interviews and Questionnaires

The first step of this paper was to study and review the theoretical concept of authenticity and selecting its constituent factors. The result of the findings of the theoretical part provides a proper answer to the first question of this research, what factors explain the concept of authenticity in historic urban heritage. Thus, the ‘historical-evidential values’, ‘socio-cultural values’ of the context, and ‘artistic values and creativity’ were introduced as the main factors explain the authenticity concept for evaluation of the measures taken for Atique Square revitalization.

In the second session, findings of analysis of the interviews and user questionnaires based on the strategy explained in the methodology are presented. The findings show that to what extent the concept of authenticity and its indicators are considered in revitalizing Atique Square. Based on this, it is indicated that the ‘historic-evidential values’, ‘socio-cultural values’ of the context, and ‘artistic values and creativity’; in descending order, have the highest to the lowest contribution in explaining the concept of authenticity (Table 2). The overall findings of the Spearman correlation test indicate a relatively high positive correlation of the factors with the concept of authenticity.
To refer to the other findings of observations and interviews with managers, designers and planners, the followings can be mentioned: lack of integrated management, lack of adequate knowledge and appropriate understanding of policy makers and actors towards the authenticity factors, and lack of interaction between conservation and development actors in the process of decision making, planning, design and implementation. Hence, authenticity recognition and understanding by the political forces, designers, planners and actors in the field of conservation and development have a key role for properly being taken of revitalization measures.

4. Conclusion

In this paper, having reviewed the theoretical aspect of authenticity concept by revisiting the international documents, conventions and theories in section one; the category presented by Jokilehto for authenticity factors was selected due to being comprehensive enough in explaining the concept authenticity. After that, the selected factors were being evaluated in the case study of Atique Square using correlation strategy and Confirmatory Factor Analysis method. The findings of analysis and evaluation of Atique Square revitalization measures; not only support the authenticity factors, but also prioritize them and determine the correlation coefficient for each of them. Evaluation results show that all the factors explaining the concept of authenticity, ‘historic-evidential values’, ‘socio-cultural values’ of the context and ‘artistic values and creativity’, have had effective roles in the revitalization measures of Atique Square as well as their meaningful relationships with the concept of authenticity in the taken measures. Although the overall measures have had some drawbacks; in terms of considering the concept of authenticity, the project has been, by and large, successful. The ‘historic-evidential values’ is considered as the most significant authenticity factor in the measures. This indicates that, to some extent, the measures have been successful in terms of returning the historical form of the square and revitalizing its past spatial organization. Having tested the explanatory factors of authenticity criterion by quantitative method, this paper shows how to take the required steps toward conserving the property authenticity in the process of conservation and development measures during different stages of recognition, planning, design and implementation.

Note

1. The group of “respondents” include the inhabitants, tradesmen, tourists and customers of the area.

References

[6] ICOMOS Nara Document on Authenticity, the Nara Conference on Authenticity in Relation to the World


