Developing an Integrated Conservation and Revitalization Model to Provide Criteria and Indicators to Assess the Integration of Measures in Historic Urban Areas

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ABSTRACT: Developing an integrated model, establishing a balance between conservation and revitalization objectives in the historic environment, has always been a controversial issue in many countries; however, they sometimes have a type of symbiotic relationship with each other. In this regard, the main aim of this paper is to answer this question: Is it possible to provide an appropriate model for “integrated conservation and revitalization initiatives” in historic urban areas which contains criteria for integrated conservation and revitalization in historic context? To answer the main question, the paper in the first step examines the “integrated conservation model” and “integrated revitalization model”. The concepts of “significance” and “economic vitality” are as the fundamental criteria in these models. In the second step, the concept of “integrated conservation and revitalization” combines “significant” and “economic vitality” concepts together to explain different backgrounds. The “integrated conservation and revitalization model” introduces the criteria and indicators for integration “conservation and revitalization initiatives” and provides an analytical framework for assessing the level of integration of strategies and plans in historic urban areas. Consequently, policy makers, planners, designers and managers can introduce appropriate solutions based on the indicators and criteria of “integrated conservation and revitalization” to achieve a balance and integration in their approaches in conservation and revitalization plans. The validity of the proposed model could be examined in many different examples in similar or different contexts and scales

Keywords: Conservation, Revitalization, Integrated Model, Criteria.

INTRODUCTION

Aim of Research

The main aim of the research is to develop an integrated model for balancing conservation and revitalization objectives and provides an analytical framework to assess the integration of “conservation and revitalization measures” in historic urban fabrics. The integrated model also emphasize the protection of the significance of historic place and its economic vitality. Hence, the present paper focuses on identification of criteria for the “integrated conservation and revitalization model” in historic urban areas.

Research Questions

As already pointed out, this paper aims to develop a broad vision and better understanding of the integrated model. Accordingly, this paper attempts to provide an appropriate response to the following research questions;

• How can a model presents an appropriate framework for integrated conservation and revitalization strategies and plans in historic urban areas?

• What criteria and indicators are needed to assess the integration of measures in historic urban Areas?
Research Method

Identification of the appropriate research method to find a rational answer to the main question is an important factor in every research. The research questions of this paper show that dominant approach of the research, the paradigm of the research and the research method are qualitative. In order to answer the main question of the research, the data are collected through library research. The theories of conservation and revitalization are examined in logical argumentation strategy and they are analyzed through content analysis techniques.

This paper concentrates on the “integrated conservation and revitalization model”. It is an attempt to delineate various factors that affect the process and product of conservation and revitalization in historic urban areas. To advance an understanding of the integrated model, the first section of this paper describes the importance of “significance” as a key criterion in “integrated conservation model” and the second section identifies the “integrated revitalization model” which introduces “economic vitality” as a key criterion. Understanding these criteria is inevitable to develop an integrated model for the analysis and evaluation of urban revitalization initiatives.

TOWARDS AN INTEGRATED CONSERVATION AND REVITALIZATION MODEL; “SIGNIFICANCE” AND “ECONOMIC VITALITY” AS THE KEY CRITERIA

In the second part, the paper goes on to argue about the “integrated model” which introduces the criteria for developing an analytical framework to assess the level of integration of “conservation and revitalization initiatives” in historic urban fabrics. To advance an understanding and awareness of the “integrated model”, section 2-1 will explain the concept of “significance” as a key criterion. The “significance of historic place” obviously shows the “relative value”, “authenticity” and “integrity” as different dimensions of “integrated conservation model”. The section 2-2 will describe the concept of “economic vitality” as the key criterion. The concept of “economic vitality” introduces the “physical revitalization”, “functional revitalization” and “social-cultural revitalization” as various aspects of the “integrated revitalization model”. Understanding these factors and processes are vital to develop an “integrated model”.

Integrated Conservation Model; Significance as a Key Criterion

“Cultural significance is the term that the conservation community has used to encapsulate the multiple values ascribed to objects, buildings, or landscapes”(Getty Conservation Institute, 2000, p. 8).

The conservation studies typically have focused on the physical and technical aspects. However, the broader definition of conservation refers more widely to conservation as a complex and comprehensive tool for policy making and planning. In this context, some national ICOMOS such as: Australia ICOMOS, New Zealand ICOMOS, Japan ICOMS; and some national heritage organizations for example, the English Heritage; and many other nongovernmental organizations (NGOs) have established policies for integrated conservation management and planning. They tried to incorporate all tangible and intangible values more effectively in the conservation decision making process. As pointed out, the term of “significance” could be used instead of natural and cultural values of heritage places. The concept of “significance” has a vital role in the process of heritage planning and management. Accordingly, the “integrated conservation model” should consider the forces of development as well as the significance of historic places. Such that a heritage place preserve its significance, while recognizing opportunities to transfer their significance for future (English Heritage, 2008).

As has been mentioned in some sources, such as English Heritage, (2008) and Jokilehto (2007), the “significance of place” has introduced as the key criterion which includes concepts of “authenticity”, “integrity” and “relative value” as the main sub criteria. The first diagram shows the “authenticity”, “integrity” and “relative value” as the main sub-criteria of “significance” (Fig. 1). Each of these factors has been introduced as follows.

![Fig. 1. Main Criterion and Sub-Criteria of “Integrated Conservation Model”](image-url)
**Authenticity**

“Authenticity is ascribed to a heritage resource that is materially original or genuine and as it has aged and changed in time. The contribution of all periods to the place must be respected” (Feilden & Jokilehto, 1993, p. 16).

The idea of authenticity is a basic component of “integrated conservation model”. It has a fundamental role to form the “significance of historic place”. As Worthing and Bond (2008, p. 94) suggest that determining the authenticity of historic place “is closely linked to assessment of value – and can cause problems when, for instance, the idea of age value influences decisions about the relative value of more recent development to the place”.

Furthermore, based on the Nara Document discussions, authenticity is a “measure of the degree to which the values of a heritage property may be understood to be truthfully, genuinely and credibly, expressed by the attributes carrying the values” (Stovel, 2004, P. 3).

The verification of authenticity could be passed in relation to: design and form, material and substance, usage and function, tradition and technique, situation and setting, spirit and expression, original state and historical development. (UNESCO, 2005, Paragraph 82) This paper, as has been pointed out by Jokilehto (2007) classifies the idea of “authenticity” into three main sub criterion: “Historical - Evidential Authentication”, “Social – Cultural Authentication” and “Artistic or Creative Value” (Fig. 2).

These indicators should be considered to verify the authenticity of the elements that define the integrity of a place. Each of them refers to a set of values.

For example, the “Historical and Evidential Authentication” suggests the type of material, historic structure and different phases of construction from past to present. “It is most relevant in the historical and archeological verification of a heritage resource” (Jokilehto, 2007, p. 39). Moreover, the “Artistic value” as the other aspect of authenticity "can be verified in the quality of design and execution, but requires critical comparison with similar production of the same culture" (ICCROM, 2007, p. 55).

![Fig. 2. Effective Factors of “Authenticity” Criterion](image)

Another aspect of authenticity refers to identity is the “social-cultural authenticity” that should be taken into account to verify the immaterial aspect of the property. This has been formed by the living traditions and social characteristics (Jokilehto, 2007). The social-cultural values have a considerable task in forming the authenticity of a heritage property, particularly in multicultural communities. In addition, there is a strong relationship between social values and historical and aesthetic values (English Heritage, 2008). The approaches proposed for evaluating the authenticity of a place are numerous. The test of authenticity should consider all aspects; however, it can vary according to the circumstances of each case.

**The Condition of Integrity**

“The condition of integrity in relation to heritage places should be understood in the relevant historic context. Integrity can be referred to visual, structural and functional aspects of a place. It is particularly relevant in relation to cultural landscapes and historic areas, but even a ruin can have its historic integrity in its present state and its setting. The visual integrity of a building or an area indicates what is visually relevant to its historically evolved condition in relation its context “(ICCROM, 2007, pp. 55-56).

“Integrity” is an important component of the “significance of a heritage place”. It is also a considerable reference to defining the limits of urban development in historic urban areas. This paper, as has been mentioned by ICCROM (2007) and Jokilehto (2007), categorized the concept of “Integrity” into three main sub criteria: “social-functional integrity”, “historical-structural integrity” as well as “visual-aesthetic integrity” (Fig. 3).
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These indicators form “integrity” or “Wholeness” of the heritage place. The recognition of the “visual integrity” of a historic building or urban historic fabric should take into account not only its architectural characters but also the result of processes of change in time (ICCROM, 2007). The “visual integrity” is an essential factor in defining the aesthetic features of the historic urban area. The “Social-Functional integrity”, as the other aspect of integrity, is also a considerable factor in forming the integrity of historic urban areas. “It is referred to the identification of the functions and processes on which its development over time has been based, such as those associated with interaction in society, spiritual responses and movements of peoples” (Jokilehto, 2007, p.39). It is a critical issue when discussing the criteria and strategies of revitalization, where traditional uses may be challenged by the using of modern technology. Besides, the “historical-structural integrity” as the other aspect of integrity should be based upon the analysis of the structural relationship between the elements that form the historic urban fabric. The “historic-structural integrity” identifies the historic elements which survive in today’s condition. “These elements provide testimony to the creative response and continuity in building the structures and give sense to the spatial-environmental whole of the area” (Jokilehto, 2007, P. 32). Considering the issues that were raised, all aspects of integration should be investigated in each case. However, each of them can have different importance in various contexts.

Relative Value

“Conservation of cultural heritage in all its forms and historical periods is rooted in the values attributed to the heritage. Our ability to understand these values depends, in part, one degree to which information sources about these values may be understood as credible or truthful. Knowledge and understanding of these sources of information, in relation to subsequent characteristics of the cultural heritage and their meaning, is a requisite basis for assessing all aspects of authenticity” (ICOMOS, 1994, Part 9).

From Riegl, who had a fundamental contribution into the issues of values, to the policies of the Burra Charter (1999) and English Heritage documentation (2008); the tangible and intangible values have been classified in different categories. “The high level values range from evidential, which is dependent on the inherited fabric of the place, through historical and aesthetic, to communal values which derive from people’s identification with the place” (English Heritage, 2008, p. 27). Each of these values correspondingly varied ideals and epistemologies. The various classifications of values, lead to different approaches and methodologies to preserve the heritage (ICCROM, 2007). Since, values are passed from generation to the next generation in the Community; they need to be referred to the cultural context where they have formed over generation. This means that we can speak of “relative of values”. “It should be interpreted as the relative importance or relative worth associated with a particular site as compared with other sites elsewhere having comparable characteristics. This would generally mean reference to the relevant cultural region” (Jokilehto, 2007, p. 39). Hence, the valuing of the heritage is varied in terms of cultural region, time framework and society. Therefore the true meaning of value, particularly in relation to the cultural heritage should be defined according to cultural context of heritage property and time framework in which the property is previously formed. However, the “category of the property” and “meaning of the place” along with the “culture and historic features of heritage”, has a considerable role in formation the “relative value” concept. The term of “category of property” refers to the “thematic framework” and refers to heritage properties based on functional characteristics. In addition, the concept of “meaning of place” points to the story of the place and refers how the historic place was established and signified during the time (Jokilehto, 2007, ICOMOS, 2005).

This section, as has been suggested by Jokilehto (2007), categorizes the concept of “relative of value” into three main sub criterion; “category of the property”, “cultural region and time framework” and “Meaning of the place” (Fig. 4). These indicators should be assessed to verify the “relative of value” in relation to heritage property.

With regard to the cases listed in section 2-1, the “integrated conservation model” is presented in detail, as below (Fig. 5). It provides criteria and indicators to

Fig. 3. Effective Factors of “Integrity” Criterion
assess the integration of “conservation and revitalization measures” in historic urban areas.

As can be seen, the Fig. -5 provides an analytical framework to assess the conservation initiatives. The concept of “Significance” as the main criterion and its sub-criteria of “authenticity”, “integrity” and “relative value” and their indicators have an important role to evaluate the integration of measures in historic urban areas. These factors can be used by policy makers, planners and managers to achieve a balance and integration in their approaches and plans.

**Integrated Revitalization Model; Economic Vitality as a Key Criterion**

“Historic urban quarters should be considered as part of an economic dynamism; they are rarely autonomously functioning zones and they usually have a symbiotic relationship with the rest of the city. Their conservation has to be considered, not as a straightforward and restrictive concern with conservation, but as a concern with revitalization and enhancement” (Tiesdell et al., 1996; cited in Doratli et al., 2004, p. 751)

The second section of this paper identifies the “integrated revitalization model” and recognizes “economic vitality” as a key criterion in this model. The “economic vitality” introduces physical, functional and social-cultural revitalization as various aspects of “integrated revitalization model”. Understanding these factors and processes are needed to develop an “integrated model” for analyzing the urban revitalization initiatives.

Although, different types of revitalization are necessary, but the main purpose of “integrated revitalization” is “economic vitality”. It can provide many opportunities for economic use of heritage assets and attracts people for living, working and visiting the historic places. As referred in some sources, such as Doratli (2005), English Heritage (2013) and Tiesdell et al (1996), the re-use and adaptation of heritage assets is vital in “economic revitalization”. It can be used to enhance the economy of the whole city, attract private investment and emphasis on local features. The benefits of re-use and adaptation of heritage assets can provide money to cover conservation and refurbishment costs. Thus the component of “economic revitalization” is introduced as a key criterion for the “integrated revitalization model”. It leads to “economic vitality” when it interacts with “economic feasibility”.

As mentioned above, the “integrated revitalization model” is composed of three criteria (Fig. 6). To provide a balance between conservation and revitalization approaches, it needs to consider the significance of the heritage assets in hearth of different type of “physical revitalization”, “functional revitalization” and “social-
cultural revitalization”.

The Fig. 6 represents the various aspects of revitalization. It introduces the “economic vitality” as the key criterion that should be considered in the “integrated revitalization model”.

It should be kept in mind that the various types of revitalization should be considered as complementary to each other in order to achieve a successful revitalization of historic urban areas.

Each of these factors has been defined as follows.

**Fig. 6. Main Criterion and Sub-Criteria of “Integrated Revitalization Model”**

**Physical Revitalization**

“Physically, the successfully revitalized historic urban quarter is kept in good repair and is well maintained. They are repaired and rehabilitated. Streets are improved and the area attains a general appearance of well-being. This positive image makes a place attractive to investors, visitors and the residents” (Tiesdell et al., 1996, pp. 207-8).

“Physical revitalization” is composed of various types of renewal to improve the quality of historic urban areas, which are (1) refurbishment, (2) conversion, (3) demolition and redevelopment (Fitch, 1990 cited in Tiesdell et al., 1996). However, the “physical interventions” are often the first stages in revitalizing historic urban areas where often need deeper “functional revitalization”, “economic revitalization” and “social revitalization” for being alive in the long term (Tiesdell et al., 1996; Doratli, 2005; Vehbi & Hoşkara, 2009).

There are several indicators which can be used to assess “physical revitalization” in historic urban areas. They can be summarized under three main indicators (Fadaei Nezhad, 2012, p. 78); (Fig. 7)

(1) Intrinsic physical potential;
(2) Environmental potential (LUDA, 2006; Doratli, 2005);
(3) Technological option.

**Fig. 7. Effective Factors of “Physical Revitalization”**

**Functional Revitalization**

“To break the vicious circle of decline, changes may be needed in occupation and use. That is, “functional restructuring” or “functional diversification” may support the physical revitalization of buildings and the areas they create” (English Heritage, 2005, p. 6).

“Functional revitalization” is an important and essential component to realize “integrated revitalization”. In the process of “functional revitalization” is very important to identify the appropriate new uses to reduce changes in the existing historic urban fabrics (Tiesdell et al., 1996; Doratli, 2005). Changes should be controlled and moderated based on the significance of heritage. It is a vital criterion that should be considered in re-use of historic buildings and any type of “functional revitalization”. Several factors are involved in the formation of “Functional revitalization”. The various factors of “functional revitalization” can be grouped under five main indicators: (Fig. 8)

(1) Resources; (Pendelbery, 2009; English Heritage, 2013; Tiesdell et al, 1996; Doratli et al., 2004).
(2) Legal resources3; (Tiesdell et al., 1996; Doratli et al., 2004).
(3) Locational factors4; (English Heritage, 2013; Tiesdell et al., 1996; Doratli et al., 2004).
(4) Intrinsic physical potentials5; (English Heritage, 2013; Tiesdell et al., 1996; Doratli, 2005).
(5) Physical conditions6; (Pendelbery, 2009; English Heritage, 2013; Tiesdell et al., 1996; Doratli, 2005).
"Social-Cultural Revitalization"

“A revitalized quarter has an attractive ambience and is a good place to be and to go: its streets are peopled and crime rates are reduced. The presence of people turns spaces into place, making them living, working and organic parts of the city” (Tiesdell et al., 1996, p. 209).

In order to achieve “social-cultural revitalization”, the local habitants of historic urban areas should be involved in the “conservation and revitalization process”. They should feel that are helpful in developing the regeneration plans of their neighborhood, not only to physical improvement are taken into consideration (Vehbi & Hoskara, 2009). The residents of historic neighborhoods should have the same opportunity to access the urban facilities, it implies the importance of “social justice” in “social revitalization” (English Heritage, 1998). The items listed in this section have indicated the importance of “security”, “population structure”, “partnerships and social justice” as the main indicators of “social-cultural revitalization”. In addition, convenient access of local habitants to the “cultural & educational facilities”, “sport amenities” and “medical centers” are the other indicators for “social-cultural revitalization”.

As LUDA (2006) pointed out, the overall goal of “social-cultural revitalization” is helping to improve the quality of life in urban areas. Accordingly, the main indicators of “social-cultural revitalization” can be summarized as follows: (Fig. 9)
Fig. 10. Integrated Revitalization Model

With regard Fig. 10, the concept of “economic vitality” as the main criterion and its sub-criteria of “cultural-social revitalization”, “functional revitalization” and “physical revitalization” and their indicators have significant role to assess the integration of actions in historic urban fabrics. These factors are useful for policy makers and managers to achieve a balance between conservation and revitalization objectives in their policies and plans.

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RESULTS: TOWARDS INTO INTEGRATED CONSERVATION AND REVITALIZATION MODEL

“Whenever a historic area considered as a part of the economic dynamism, it should be able to compete with the rest of the city. This would not be possible without it being revitalized. Of course it should be always kept in mind that any kind of revitalization efforts should be controlled in the interests of conservation” (Doratli, 2005, p.751).

This paper has developed the “integrated conservation and revitalization model” that can be regarded as a useful tool to assess the level of integrity of conservation and revitalization measures in historic urban areas. The integrated model is composed of two main parts. From one hand; the “integrated conservation model” introduces the conservation alternatives that should consider the “significance of place”. On the other hand; the “integrated revitalization model” suggests the revitalization alternatives that should consider the “economic vitality” of place. The “integrated revitalization model” should be implemented; the “physical revitalization” as a short-term strategy and the “functional, social-cultural and economic revitalization” as long-term strategies to improve the attractiveness and integrity of historic urban areas. The conservation and revitalization alternatives should be based on contextual values and “significance of heritage place” which have an important role in determining the type of conservation and revitalization alternatives. In order to establish the “integrated model”, the conservation and revitalization options should interact with each other. The “integrated model” based on the conservation and revitalization options provides...
professional recommendations that should be taken into account for political decision making process in historic urban areas. In order to achieve an “integrated model”, from one hand, the political decision makers should lobby with “conservation-oriented stakeholders” who assess and observe the significance of heritage and review the legal title and constraints in this process; on the other hand, they have to lobby with “revitalization-oriented stakeholders” who assess and consider the economic vitality of place (Fig. 11).

In addition, the “integrated model” cannot be tackled through uncoordinated action of individual actors. It demands concerted action by all agencies and beneficiaries.

Accordingly, the integrated model provides various alternatives to be applied in similar or different contexts and scales. By establishing a new strategic model, urban authorities can adopt an integrated approach to provide a balance between conservation and revitalization objectives; however, as Strange and Whitney (2003, P. 221) state, “the link between conservation and regeneration, both strategically and at a policy level, is problematic”. There are still tensions in the implementation of such approaches.

Fig. 11. “Integrated Conservation and Revitalization Model” to Assess The Integration of “Conservation and Revitalization Measures” in Historic Urban Areas.
CONCLUSION

This paper tries to develop an “integrated model” to converge conservation and revitalization objectives. It defines the “integrated conservation and revitalization criteria and indicators” that can provide an analytical model to assess the level of integration of “conservation and revitalization measures” in historic urban areas. The findings of this paper provided the appropriate responses to the research questions. To answer the main questions, understanding and reviewing theories and policies of conservation and revitalization are conducted which leads to the analytical model of “integrated conservation and revitalization”, and the concepts of “significance” and “economic vitality” as fundamental criteria. Although these concepts are determined separately, the concept of “integrated conservation and revitalization” combines those concepts together to clarify in different backgrounds.

Likewise, the most important finding of this paper is a framework which introduces the criterion of “significance” and its sub-criteria of “authenticity”, “integrity” and “relative value” on one hand, and the criterion of “economic vitality” and its sub-criteria of “cultural-social revitalization”, “functional revitalization” and “physical revitalization” on the other hand. By making it accurate and verifying the proposed “integrated model”; it can be used to evaluate the integration of measures in historic urban areas.

Consequently, policy makers, planners, designers and managers can define appropriate solutions based on indicators and criteria of “integrated conservation and revitalization” to achieve a balance and integration in their approaches and plans. The proposed “integrated model” can be used as a basic pattern for future research in this field.
REFERENCES


ENDNOTES

1- International Council on Monuments and Sites.

2- For more details see: thematic framework in ICOMOS Gap Report; cited in (Jokilehto, 2007, p. 41).

3- Functional changes of historic buildings and fabrics should be based on conservation and development rules.

4- Proper location of the heritage assets within the city.
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can be effective in attracting people towards them.

5- Intrinsic physical potentials of historic buildings are an important factor to determine the type of function.

6- Physical condition of historic buildings and its surrounding area have an effective role in determining the type of “functional revitalization”.

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