



Available online at
SciVerse ScienceDirect
www.sciencedirect.com

Elsevier Masson France
EM|consulte
www.em-consulte.com/en



Original article

An architectural assessment method for new exterior additions to historic buildings

Hülya Yüceer^{a,*}, Başak İpekoğlu^b

^a Department of Architecture, Faculty of Architecture, Eastern Mediterranean University, Gazimagusa, via Mersin 10, Turkey

^b Department of Architectural Restoration, İzmir Institute of Technology, Faculty of Architecture, 35430 İzmir, Turkey

ARTICLE INFO

Article history:

Received 23 May 2011

Accepted 7 December 2011

Available online 21 January 2012

Keywords:

Architectural conservation

Architectural assessment

Contemporary additions

Historic buildings

Historic building assessment

ABSTRACT

The design approaches of new exterior additions to historic buildings have been among the ongoing debates in the field of architectural conservation. The aim of this study is to develop an assessment method, which can be used to determine the compatibility in architectural expression of the new addition in relation to the characteristics of a historic building. This method is based on the architectural analysis, which includes environmental relations, building-lot relations, mass relations and the facade composition of the historic building both before and after the new addition in relation to the value of a historical building. In this study, a selected group of historic buildings in İzmir, Turkey with new exterior additions was analysed with regard to their exterior architectural characteristics in order to evaluate the compatibility of the new addition, by employing the use of contemporary conservation principles. The importance of this study is to guide architects to form the basis of a decision for developing an integrated approach in designing new additions in the course of the actual design process. On the other hand, the proposed method can be evaluated as a contribution to the emerging field of heritage impact assessments as well as scientific assistance to local governments to criticize specific projects of cultural heritage assets submitted for appraisal. Analysis results showed that the value of the historic building should first clearly be identified and a new addition should bear the identity of its own period. However, instead of altering the scale or form of the historic building, a new addition should complement and contribute to the sense of proportion, disposition and historical pattern.

© 2012 Published by Elsevier Masson SAS.

1. Research aims

This article presents an assessment method to determine the compatibility of a new addition to a historic building. Based on architectural analyses which were applied to a selected group of historic buildings with exterior additions, this research aims to identify coherent issues to be taken into consideration during the design process of a new addition to a historic building by the use of a developed method, and it is intended to form a scientific assistance tool for architects in decision-making process and for local governments to criticize specific projects of cultural heritage assets submitted for appraisal. This research also aims to contribute to the emerging field of heritage impact assessments through the developed method, which outlines alternative design approaches that could be applied, based on a range of decision-making factors.

2. Introduction

One of the concerns of architectural conservation is the adaptation of historic buildings to the changing requirements of the present day. As the historic buildings were created with the techniques and according to the conditions of a past period, their adaptation processes require interventions at various levels [1]. Although it is appreciated that it is vital to keep interventions at a minimum in order not to reduce the value of the historic building, the degree of intervention may increase due to the expectations from its restoration. New exterior additions are considered as major interventions that are designed to either attach to the historic building or be situated within the boundaries of the historic building's lot. Regardless of its scale, a new addition to a historic building comprises the problem of establishing an appropriate relation between traditional and contemporary architectural language. Different approaches to the issue of evaluating new additions to historic buildings have been considered previously [2,3]. In these researches, additions to historic buildings were examined and discussed in terms of architectural criteria and the identity of the historic building. In the framework of this study, an assessment method has been developed to determine the compatibility

* Corresponding author. Tel.: +90 39 26 30 22 24; fax: +90 39 26 30 23 25.

E-mail addresses: hulya.yuceer@emu.edu.tr (H. Yüceer),
basakipekoglu@iyte.edu.tr (B. İpekoğlu).



Fig. 1. Uşakizade Mansion.



Fig. 2. Konak Public Hospital.



Fig. 3. Alsancak Train Station.

of a new addition to a historic building [4,5]. This method is based on architectural analyses dependent on the criteria that have already been considered in previous studies as well as international charters and national guidelines [6–11]. These analyses include environmental relations, building-lot relations, mass relations and the facade composition of the historic building both before and after the new addition. In the context of this study, a selected group of historic buildings with new exterior additions in İzmir, Turkey was analysed in order to evaluate the appropriateness of the new addition by employing the use of contemporary conservation principles. The buildings under consideration are the Uşakizade Mansion (Fig. 1), the Alsancak Public Hospital, Konak Public Hospital (Fig. 2), Alsancak Train Station (Fig. 3), the School for the Deaf and Blind and Pasaport Quay. The examples were selected according to the following criteria: with respect to the condition of the historic building before the intervention, the building should be intact, so that the intervention does not aim to replace or complete any missing parts of the historic building. The additions should go beyond the boundaries of the existing parameters of the original building, either adjacent to or connected to the mass of the historic

building and should be designed according to the rules and regulations of an architectural conservation project, which confirms the requirements of the commissions entitled to accept or reject the application of the restoration criteria.

It is possible to identify the issues to be taken into consideration both in the determination of the limits of an intervention and in making appropriate design decisions for any exterior additions using this method. Results have demonstrated that the assessment method developed in this study can be used as a guide for architects to evaluate the existing new additions to historic buildings and to form a basis, which supports the decision of the approach to follow with respect to the new additions during the design process. On the other hand, the proposed method can be evaluated as a contribution to the emerging field of heritage impact assessments [12] as well as scientific assistance to local governments to criticize specific projects of cultural heritage assets submitted for appraisal.

3. Determination of assessment criteria

The evaluation should primarily be based on the analysis of the historic building in question as a part of architectural heritage. Therefore, together with the architectural characteristics, the values that make the building eligible for preservation should clearly be defined. In the later phase, the contemporary addition itself requires evaluation as an architectural product designed with reference to a historic building. However, the new addition should bear the principle of reversibility, i.e., it should be designed in order not to damage details ornamentation and junctions between itself and the existing historic building when it is removed if necessary in the future. In defining the values and characteristics of both the historic building and the new addition, the evaluation must establish certain criteria to be adopted in the formation of the language between two edifices.

3.1. Criteria for architectural analysis

With regard to the conceptual framework of this study, the tangible aspects of the architectural edifice will be considered, which is also limited by its external appearance. The basic tangible aspects are identified as the environment and setting, the site, the mass, the facade order including the architectural detailing and ornamentation of the exterior surface.

3.1.1. Analysis of a building in relation to its environment and setting

An exterior addition is mostly associated with the rising demand for extra space or for functional change especially for the old public buildings in fast growing cities. Possessing strong architectural features of their location in history, such buildings have influenced the formation of the overall character of their surroundings [13]. The issue of the setting of a building and the protection of the setting arises in the wording of the Venice Charter as an imperative for protection [10]. Not only does the building suggest a particular historical association, but also the environment in which it is located. Any change in that setting could result in a distorted or different interpretation of the apparent significance of the building.

Thus, in designing an exterior addition, the architect's challenge is to create and develop an approach, which does not harm or detract from the historic character of both the existing structure and its surroundings while creating an identity, which is representative of the contemporary period. In the analysis of the building in relation to its immediate environment, the basic physical characteristics of the surrounding buildings such as their height and function are considered. The location of the historic building in the city, its appearance and visibility from the main

Download English Version:

<https://daneshyari.com/en/article/1038447>

Download Persian Version:

<https://daneshyari.com/article/1038447>

[Daneshyari.com](https://daneshyari.com)