

ISTANZE STRUTTURALI NELLA DEFINIZIONE DI USI COMPATIBILI: UN CASO STUDIO NEL COMPLESSO MONUMENTALE DELLA PILOTTA

EVA COÏSSON, FEDERICA OTTONI, FEDERICO PAGLIARI

Dipartimento di Ingegneria e Architettura – Università degli Studi di Parma

eva.coisson@unipr.it

Abstract

STRUCTURAL ISSUES IN THE DEFINITION OF COMPATIBLE USES: A CASE STUDY IN THE PILOTTA MONUMENTAL COMPLEX

The conservation of historical architectural heritage cannot be limited only to a series of isolated interventions on materials and structures, but must include also the maintenance or insertion of compatible uses, which can ensure a continuous upkeep. The exploitation of heritage, nevertheless, is a wedge issue, as it involves new loads, more wear, different environmental conditions, which can induce changes in their behavior that are hard to foresee on the long term.

This contribution aims to analyze in particular the structural issues involved in the use changes or in the adaptation of a pre-existing use to new functional or normative requirements. When dealing with the management of built heritage, the choice of the structurally compatible uses cannot disregard a specific analysis aimed at the identification of the structure bearing capacity. These analyses can also supply useful indications on how to combine functional and structural needs, in the respect of the conservation principles.

The case study here analyzed, the Pilotta Monumental Complex in Parma, represented a good occasion for the application of this approach. In particular, the foreseen reorganization of the visit paths and the need of reconsidering the uses allocated in some spaces, has constituted the starting point for a structural study of the wide barrel vault which covers the main entrance to the Farnese Theatre and to the National Museum and which is supposed to host new functions, thus carrying new (and larger) loads. The results of the structural analyses carried out on this vault have represented objective and measurable criteria in order to fix some limits to the possible new uses, thus showing the importance of (structural) knowledge in defining a reasonable and compatible reuse.

Keywords: *adaptive reuse, structural aspects, vaulted structures, Pilotta Museum, compatible use*