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Arkos

January-June 2013



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ARKOS

SCIENCE RESTORATION VALORIZATION

**RESTORATION AND REUSE OF THE
BIBLIOTECA CLASSESE OF RAVENNA.
PERMANENCE AND INNOVATION**

**PALAZZO STROZZI SACRATI IN FLORENCE.
THE RESTORATIONS OF TWO MILLENNIA
OF HISTORY AND A DOCUMENT ON
NINETEENTH CENTURY ANTIQUES.**

**THE SANCTUARY OF
HERCULES VICTOR IN TIVOLI.
AN EVOLVING, COMPLEX RESTORATION.**

**MINIMIZATION AND VERSATILITY OF
STRUCTURAL SOLUTIONS THROUGH
CONSERVATION AND NEW USES IN THE
SANCTUARY OF HERCULES VICTOR IN TIVOLI**

ARKOS

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The new series of Arkos, the scientific journal specialized in architectural restoration and published for over twenty years, continues to provide a constant update on the conservation of Cultural Heritage to the subscribers and readers.

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Palazzo Strozzi Sacratì.
The monumental staircase connecting the two floors painted in 1815 by Luigi Catani with the Stories of Aeneas

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Arkos is reinventing itself

A new period of life lies ahead for Arkos, the causes being partly due to the deep economic crisis which has also weighed on the publishing industry, and partly to the modern changes that are developing in the communications industry, and in particular in that of “niche” scientific journals that need to expand their sphere of readers using the new means of distribution such as the net.

As a result, starting from this issue the journal will not be exclusively published on paper, but will be marketed primarily in electronic format, with different types of subscriptions to be later imparted.

This new format allows the publisher to reduce costs as well as reach a greater number of potential buyers and/or subscribers, ensuring the journal and its contents higher visibility.

The journal will be available in two versions: one in Italian and one in English. The articles of the new series of Arkos will all be fully translated into English, thus being accessible to an international audience.

Computer scientists who are taking care of the realization of the journal in electronic format have the goal to give the of choice between the different types of the same journal that will be carried out in formats for iPad and paper.

An app will be created that brings the journal on the iPad, with the ability for the user to download individual issues or subscriptions to the journal.

Access to free content and paid content will be arranged in order to fully enjoy the different contents of the journal.

A version for the Android operating system will be implemented at a later time.

Those who want to receive Arkos in its traditional format may purchase the individual issues on the website, or subscribe using the instructions that will be communicated on the same site.

A model of on-demand printing will be set up. The journal will therefore print only the requested number of copies taking into account the subscribers and any additional needs for the availability of traditional issues.

The journal will keep its scientific autonomy intact regarding the selection and publication of the articles, sanctioned by the rules that have been followed since its founding.

Adolfo Pasetti
Claudio Montagni

Earthquake and Historical Architecture. Emergency prevention

Adalgisa Donatelli

Preview by Carla Bartolomucci



Research and Technology

Restoration and reuse of the Biblioteca Classense of Ravenna. Permanence and innovation



FIGURES 1A. 1B.
COMPARISON BETWEEN THE CURRENT STATE OF THE ABBEY (A) (BCR. LF) AND THE FORMER ONE IN 1762, AS SHOWN IN THE PRINT *MONASTERIUM CLASSIS RAVENNAE* (B). (B. FIANDRINI, *ANNALI RAVENNATI*, 1762, T. VII, P. IX, A.S.C. RA.).

Claudio Galli

Architectural restoration is, above all, historical and technical understanding of the remnant, identification of its intricate history, its wall stratigraphy, as well as the value and meaning it has gained over time.

The *Biblioteca Classense* represents a great presence in the heart of the present-day city. It was developed over an entire block consisting of an ancient Camaldonese abbey moved from Classe to Ravenna in 1515. It was expanded and modified over the course of five centuries to reach, including its gardens and appurtenances, an extension of one hectare, hosting three cloisters in its inside area (Fig. 1), as well as numerous social and cultural activities.

In fact, the bloody *Sack of Ravenna*, carried out by the French in 1512, forced the Calmadonese monks of Classe to seek shelter inside its walls and start the building of a new convent in an area which, at that time, was occupied by the S. Bartholomew Church and the Hospital of Mercy, given to them by Ostasio da Polenta in 1433. Thus, a slow process of building great works started, which was ended only again by the hand of the French in 1798 with the suppression of religious orders¹. The building of the first convent complex, of which only the marble main gate located in via Baccarini remains, with the date 1523 engraved on its architrave along with traces of a semi-cloister named 'Occluso'; was followed by the building of a second cloister (1556-1575), the current Minor cloister, obtained by using part of the area formerly occupied by the hospi-

ABSTRACT

As historically and architecturally important the Classense library is, its management and updating constitutes such a complex cultural and technical task when it comes down to having to adapt its space to modern use as well as current norms. Upon having recently carried out emergency works related to safety issue and regulation compliance, a significant first group of interventions related to the second fraction have been concluded, allowing for the reopening of the wing once occupied by the Academy of Fine Arts on the ground floor. Such a restoration project sets an example used as a tool and research method aimed at bringing architectural solutions that blend and fuse pre-existence (in terms of character and original materials) and modern needs and lifestyle; the only way to guarantee efficient maintenance and continuation over time.

Culture and latest news

Palazzo Strozzi Sacratì in Florence.
The restorations of two millennia of history and a document on nineteenth century antiques.



FIGURES 1. 2.
AERIAL VIEW OF PALAZZO STROZZI SACRATI AND SOME GLIMPSES OF THE MAIN FACADE,
FROM THE SIDE TOWARDS THE CATHEDRAL AND FROM THE COURTYARD
IN THE SHADOW OF THE DOME OF BRUNELLESCHI

Maurizio Martinelli

Palazzo Strozzi Sacratì, having the main facade oriented towards Piazza del Duomo in Florence to face the apse of the Cathedral between the Opera Museum and via Oriuolo, was bought in 1989 by Regione Toscana, becoming the subject of extensive renovation and adaptations, ending with the inauguration in 2008, which allowed for the reconstruction of the history and evolutionary phases of the building. After the initial phase of work carried out on the roofs, basements and plaster facades, and a second lot for building and plant works, according to the project and under the direction of engineer Mario Focacci, since 2002, the firm SPIRA of Florence, with the coordinating engineer Massimo Marranos and under the supervision of architect Giuseppe Cruciani Fabozzi, has updated the initial draft adapting it to the new legislation and new requirements of the client. This has enabled the introduction of technical solutions aimed at better reconciling, minimizing the invasiveness of the interventions, the need to protect what is good and what

Restorations

The sanctuary of Hercules Victor in Tivoli.
An evolving, complex restoration.

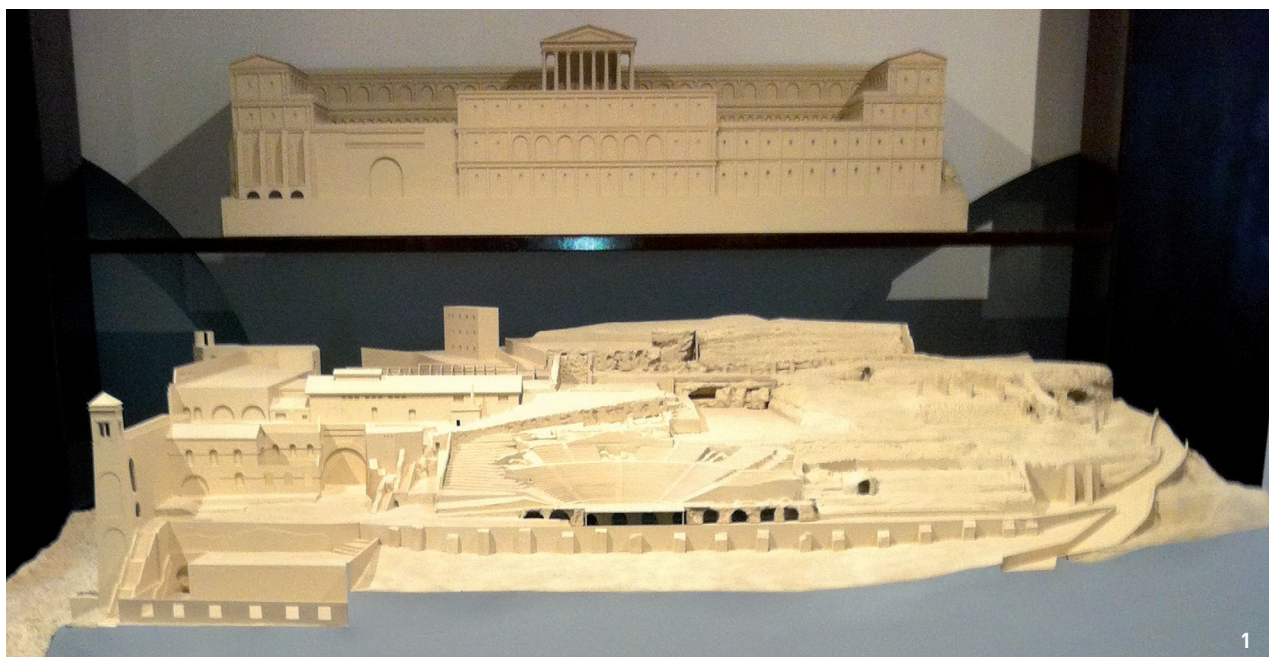


FIGURE 1.
HYPOTHETICAL RECONSTRUCTION OF THE SANCTUARY, OVERALL VIEW (G. VERZILLI).

Marta Acierno, Riccardo D'Aquino

The sanctuary of Hercules Victor, dating from the beginning of the first century BC¹, is one of the main republican sanctuaries in Lazio. Placed in the southern area of Tivoli, it consists of a wide terrace built over a strong substructure, and it is delimited by a double line of arcades over three of its sides. Ruins of the temple can be found in the centre of the terrace, while a theatre lies on its west side. The building, articulated over three main levels, hosts in its lowest level an indoor section of via Tiburtina (named *via Tecta*).

Via Tecta, entirely covered by a barrel vault with skylight windows, goes through the whole structure obliquely from east to west, presenting a series of halls of variable dimensions, probably built for commercial purposes (Figure 1). Today, half the southern part of the structure is buried. In addition, the central and northern areas of the site were recently subjected to excavation and restoration works.

The sanctuary has undergone important and va-

rious changes as regards use, especially after the XVII century, made the complex less recognizable over time.

Over the centuries, the sanctuary has become of main interest among a number of scholars and artists, who, at the beginning of the XV century, restored some of its drawings and reliefs; among the most remarkable are found Giuliano da Sangallo, Palladio, Canina and Charles Alphonse Thierry². Particularly, Thierry's relief, made in the early years of 1860, clearly illustrates the planimetry of the different levels, sections and façade³.

The complex presents a double nature, both devotional and commercial, coexisting over its multiple floors: whereas on its lower floors we can find an actual marketplace, built over the edge of via Tiburtina, its upper floor is dedicated exclusively to the sanctuary. A system that symbolically resembles the hierarchy between economic structure and a superordinate ideologic and religious system⁴. The factory, in particular, situated in an important arterial road connecting Lazio and Abruzzo, coinciding with a highly-frequented transhumance course,

Restorations

Minimization and versatility of structural solutions through conservation and new uses in the Sanctuary of Hercules Victor in Tivoli.

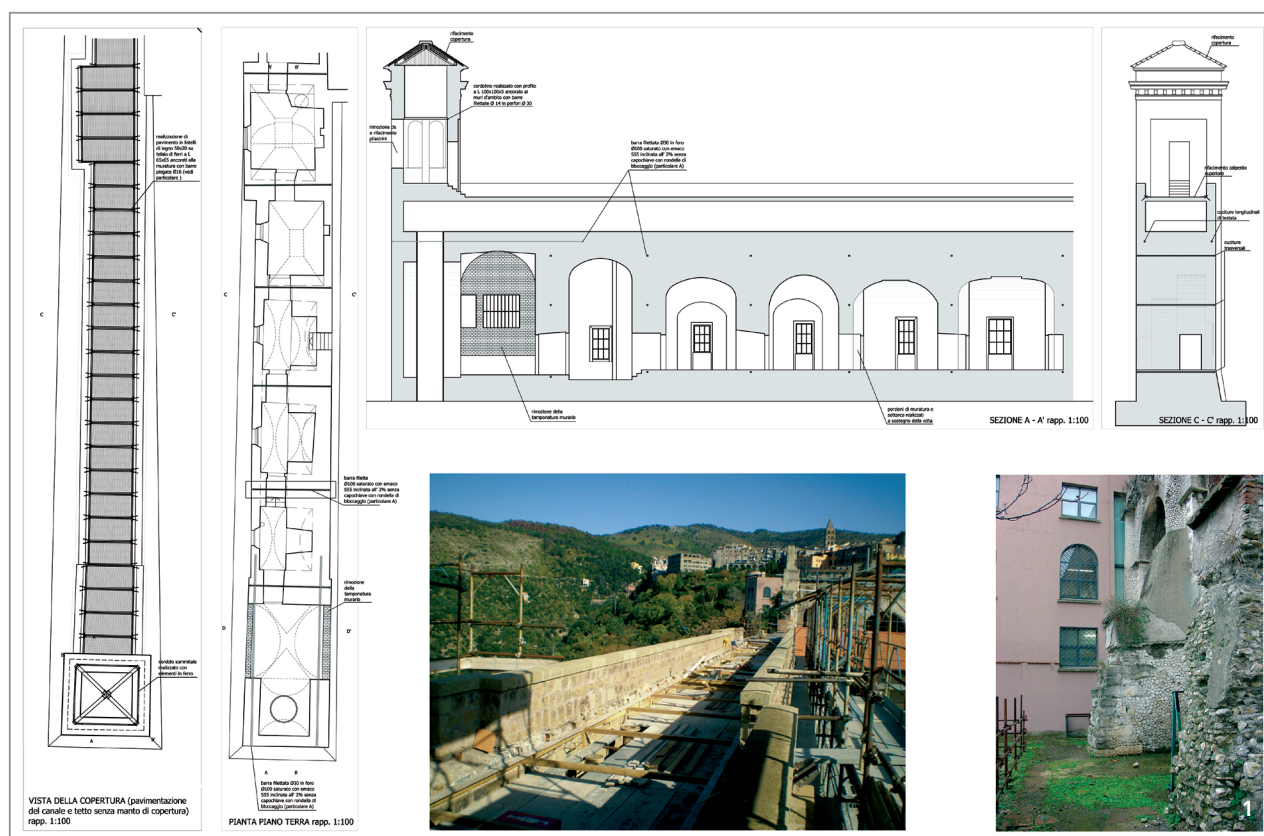


FIGURE 1.

INTERVENTIONS OF MINIMAL CONSOLIDATION TO THE WING OF THE COMPLEX OVERLOOKING THE ANIENE VALLEY. THE SLIM BODY OF THE BUILDING, BUILT WITH MODERN ADDITIONS ON THE ANCIENT SUBSTRUCTURES, SUPPORTS THE CANEVARI CHANNEL TO CARRY WATER TO CONDUCT VERTICAL FORCE, AN AXIS WITH THE TOWER (SEE PLANT LEVEL AND LOWER SECTIONS). THE INSERTION OF CROSS-RODS, WHICH ARE BINDING ON THE OPPOSITE SIDES AND CONTAIN THE PRESSURES OF NATURE, ALLOWS ONE TO AVOID THE EFFECTS OF DIFFERENTIAL BEHAVIOR BETWEEN THE FACADES WHICH ARE CHARACTERIZED BY STIFFNESS AND RESISTANCE AND ARE VERY DIFFERENT; PICTURED AT RIGHT ARE OBSERVED EXTERNAL SPURS. IN THE PLANT LONGITUDINAL STRUTS IN THE TERMINAL AREA ARE ALSO VISIBLE, CHARACTERIZED BY THE PRESENCE OF THE TOWER, IN WHICH THE LOGGIA REOPENS. FOR THE CANEVARI CHANNEL, IN THE UPPER PART OF THE SECTIONS, IT HAS BEEN PROPOSED, IN REPLACEMENT OF THE EXISTING STRUCTURE NOW INADEQUATE AND WORN, TO USE A COVERED WALKWAY BUT LIGHT AND TRANSPARENT THAT ALLOWS ONE TO SEE THE CAVE OF THE CHANNEL (SEE PLANT OF THE UPPER LEVEL, CENTRAL SECTIONS AND PHOTOGRAPHY).

Fabrizio De Cesaris

The structural intervention in the Sanctuary of Hercules Victor in Tivoli¹ has the aim of improving stability, in respect to the various dynamic stresses, through the use of distinct and varying methods: the inclusion of precautionary measures on some of the antique pieces, and on the slope, the consolidation of building relatively recently, the implementation of

some small buildings intended to accommodate the services and functions required, sometimes taking up the lines of preliminary draft, and in other cases modifying it substantially. Given the archaeological context in which it is inserted, the design of the interventions was guided with the objective of having the maximum respect for the formal consistency of pre-existing materials, minimizing the interventions themselves and searching for its maximum durability.