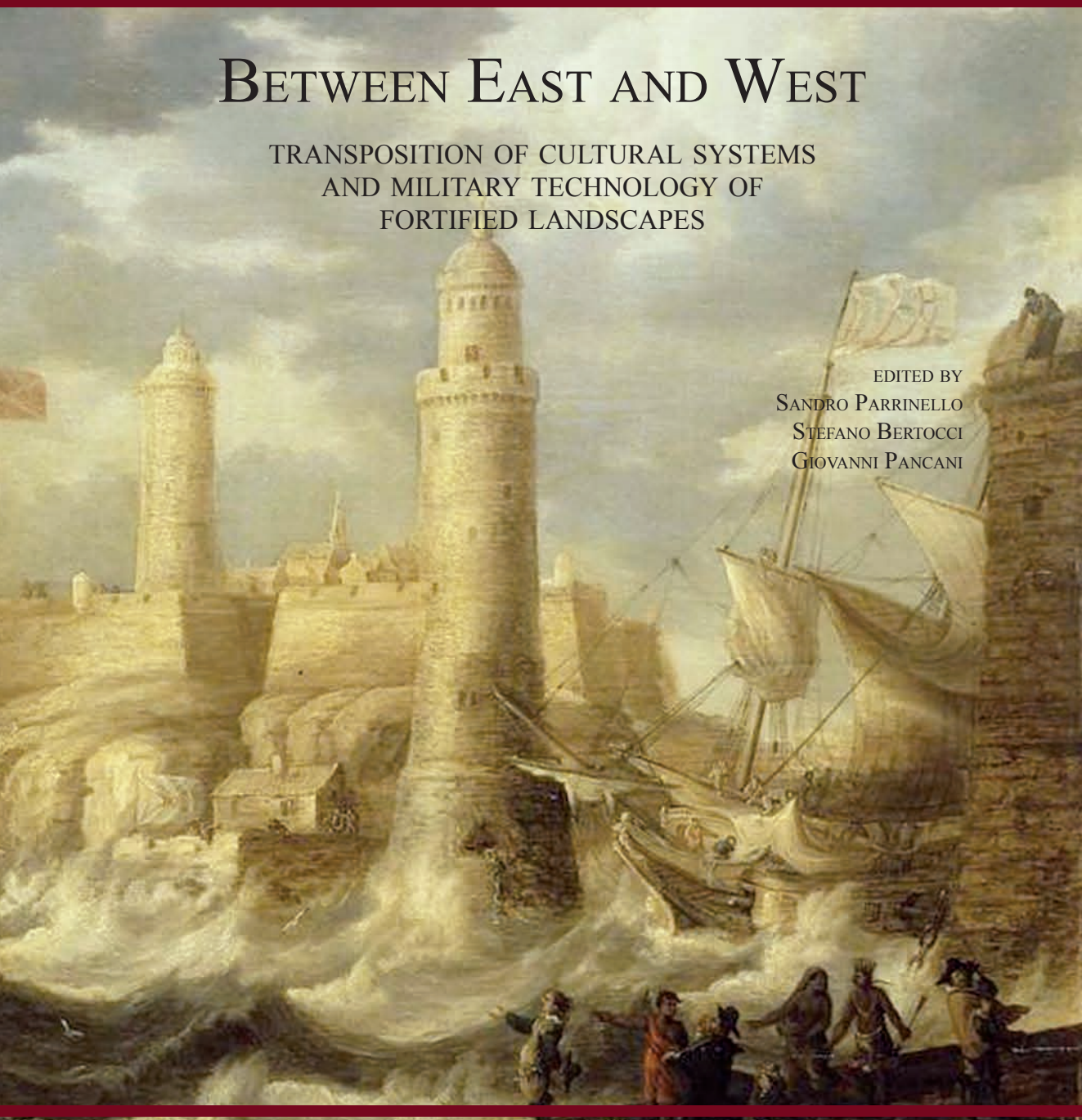


BETWEEN EAST AND WEST

TRANSPPOSITION OF CULTURAL SYSTEMS
AND MILITARY TECHNOLOGY OF
FORTIFIED LANDSCAPES

EDITED BY
SANDRO PARRINELLO
STEFANO BERTOCCHI
GIOVANNI PANCANI



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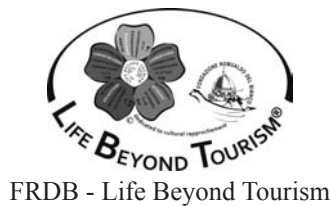
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INTRODUCTION

The programme will give a particular attention to the priorities expressed by the recent document of ICOFORT, and in particular to the themes of cultural tourism, training in regard to the development and review of world Heritage Site nominations, fortification glossary of terminology, the evaluation on Fortifications and military landscapes, the relations between the conservation of fortifications and processes of climate change, and also the dissemination of web information. The research projects will be organized in three thematic areas related to the ancient fortifications of medieval period and his late medieval developments, to the great Renaissance and late Renaissance fortifications, and to the modern and contemporary fortified systems.

The international conference *“Between East and West: transposition of cultural systems and military technology of fortified landscapes”* is organized in order to compare the results and the updates about the several researches made by experts of various nationalities, about the theme of cultural routes and fortified landscapes.

The scientific knowledge, the analysis, the documentation and the architectural survey and of the heritage in all its meanings, are essential instruments for the understanding and the improvement of any information and sign that history and culture has produced in each places or in a specific geographic area. These signs are in any case the result of the transposition of cultural models, of building technologies and offensive and/or defensive strategies, that have been tested, consolidated and exported for a long time, and that have determined the image of whole territories.

“The structure of a site is not a fixed condition, usually eternal rule places sometimes change quickly. This does not mean that the genius loci must necessarily change or be lost”. (C. Norberg-Schulz)

The implementation of the knowledge, the specific studies and the documentation programs, also constitute the main basis for the exercise of critical and interpretative activities, in order to training and to develop a particular settlement, city or area. Besides, they are also useful for the expectation of the necessary specific planning for the conservation and the improvement, that are aimed at promoting the conscious development of human activities in that places.

This international conference aims at comparing the experiences made in this scientific area, that have allowed the development of operational methods for researches useful for the correct understanding of both the architectures and the historical and archaeological complexes. Furthermore, it also aims at taking into consideration the cultural and environmental contexts of the contemporary history, giving essential advices for a critical reading and a proper evaluation about the conservation actions for this important heritage.

S. Bertocci, S. Parrinello, G. Pancani

FEATURES OF THE ARCHITECTURE OF CASTLES AND FORTIFIED CHURCHES OF CRUSADER EPOCH

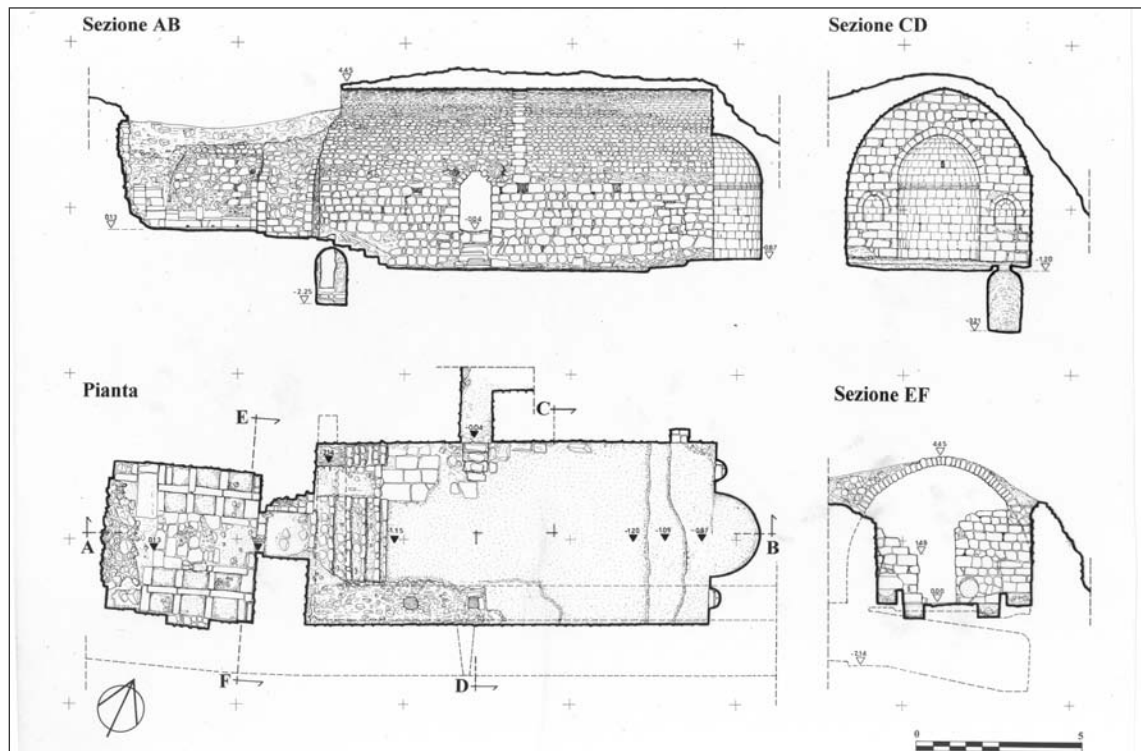
Stefano Bertocci

University of Florence, Italy

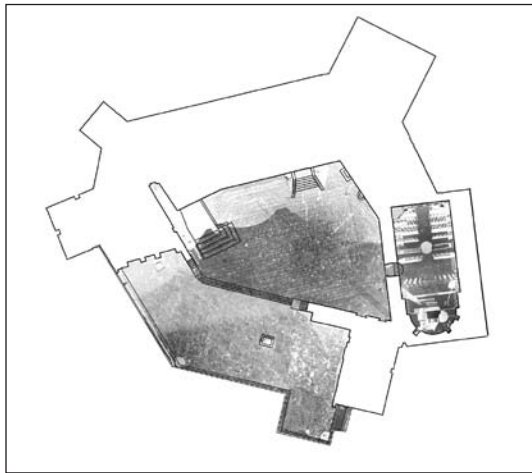
Keywords: *Castles, Crusader epoch, Petra (Trans-Jordan), historical documentation*

The first part of the project, coordinated by Marco Bini and Stefano Bertocci, dealt with the data gathering and management of survey of Crusades Castle in Petra (Archaeological Sites in Trans-Jordan region), that has been developed since 1992, at the same time with other specific excavation projects conducted by some archaeologists directed by Guido Vannini.

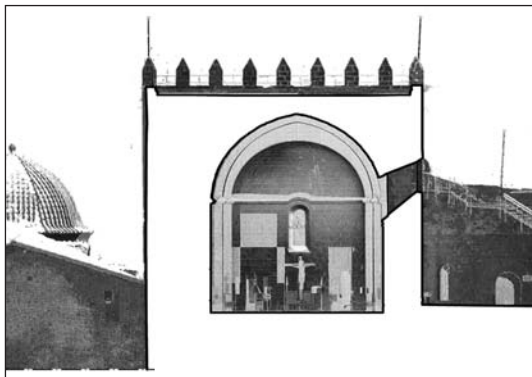
The purpose was to create a work methodology to organize the collected data in such a wide survey campaign and to furnish a valid support for the planning of further operations such as researches or interventions in restoration and conservation. This study produced for every site a large amount of graphical, photographic and textual material, besides several cartographical maps and historical documentation. The working team was composed by a large number of scholars, so it was necessary to find an useful instrument for data gathering, firstly experimented in the site of Shobak Castle¹. The area of Petra, due to its historic and geographic characteristics, in the course of time had alternate episodes of centrality and marginalization, from its vital role during the classic period, being



Survey of the chapel of the Castle of Shoubak, in the Petra area in Jordan.



Graphic representation of the laser scanning survey of Medieval castle in Peñíscola made by Templar Knights.



Cross-section of the church of the castle of Peñíscola.

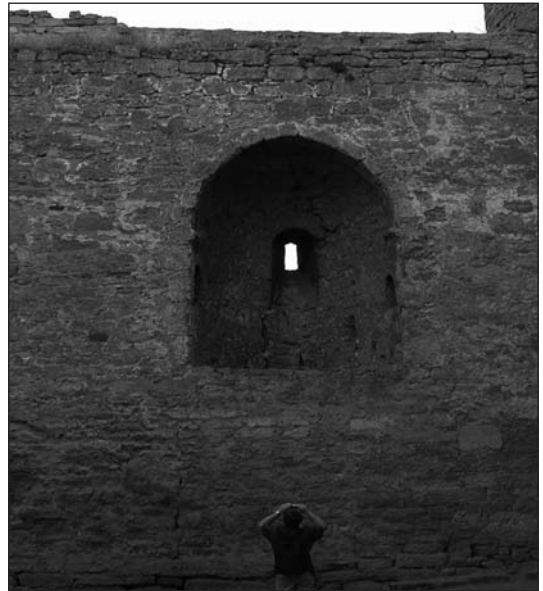
capital of the Nabataean kingdom, to the marginality of the “limes”, in Roman-Byzantine epoch; however it has always had an absolute importance as a cultural interface. With the awareness, therefore, of the complexity of the area, the research into the Crusader settlements in Transjordan, regarding both the survey and the representation of the archaeological architecture, in addition to its specific contribution to archaeology, has operatively experimented various analysis and interpretation methods in a context of such a wide interest. For the same reasons in the Middle Ages, with the first Crusade, the Western world attempted to bring these distant lands back to Christianity. Petra regained centrality during the Crusader Signory of Transjordan, a frontier that lasted for a century, before returning to a marginal role within the Islamic world. It was deemed necessary, for a better understanding of the studied objects, to take into consideration the settlements preceding the Crusader structures, the cultural stratification that produced admirable structures through the millennia, where human settlements dating back to the Paleolithic era, succeed each other in a logic of reuse and of territorial organization that have no equal. The main result obtained by the research group, is the documentation of the original characteristics of the first phase of Crusader occupation in the Holy land. For this reason it was necessary to study three castles in the area of Petra with different characteristics and importance, built in the 12th century during a sufficiently short time interval during a first organization phase of the Jordan territory by the Crusaders. The castles of Shoubak, Wu’Ayrá and Habis, can be considered as evidences of the expansionistic aims of the princes of Transjordan, who strengthened the ancient “*limes arabicus*” to prevent the danger of enemy

concentration nearby the desert and to control the commercial traffic between the two main seats of power, the Emirate of Damascus in the northeast and the Caliphate of Egypt in the southwest area.

The study was divided into various steps, from the instrumental and direct survey of the sites, to the functional analyses, analyzing also the construction techniques. The correct synergies and the promising results made advisable to schedule the whole work in a decade, organizing each year a survey campaign, preferably accompanied by an excavation campaign. From a scientific point of view, the researches led to the refinement of operative investigation methods, aimed at a more complete comprehension of the castles of Wu’Ayrá, Habis and Shoubak. The approached problems, to which logistic and technical solutions were found, derived from the significant morphological complexity of the archaeological area and were complicated by the lack of cartographic documentation, leading to the selection of particular survey protocols. The detailed survey of front views, sections and of architectural and excavation details were carried out firstly in pilot areas due to the

extend of the territory, through photogrammetric surveys integrated with topographical and direct measurements. The work, divided into interpretation of the literature and analysis, was enhanced by performing dimensional, functional and structural comparisons between the three sites. The literature provided the necessary support for the first analyses aimed at the comprehension of the Crusader installations in Transjordan. The church within the castle layout during crusader times is undoubtedly an indispensable element of the “intra moenia” organization. It is a veritable physical bulwark of political persuasion that has its utmost justification in the religious motivation: it is likely that the nucleus constituted by the church is always one of the first structures constructed within the walls. Often, as proven by archaeological evidence, the church being part of the same walls, is the first complex to take form. The analyses carried out on the examined crusader churches have underscored the adoption of a well defined common typology. This typology was probably imported from Europe and refers in particular to the fortified churches that developed along the Mediterranean coast of southern France during the 11th century, such as the Abbey of Maguelone, the Aude Cathedral and the Church of Saint Pons de Thomieres, Saintes Maries de la Mer. One of the major examples of this typology in the Crusader castles of the Holy land is the well-conserved Church of the Krak des Chevaliers in Syria. The typology of the castle’s chapel, as it appears in the fortified settlements of the Holy Land, is also used in the European castles of the 12th, 13th and 14th century, as an example in the Monocastro castle in Ukraina, in the 13th century in the castle of Peñíscola (Spain), in the 16th century in the cathedral of Valletta of the new fortress of Malta.

The diversity of the three sites was object of a comparative study to attempt to codify common principles and homologous implementations. The interdisciplinary nature of the research has led to the acquisition of diverse elements that have contributed to the delineation of a precise picture of the layout, the constructions and of the multiple restructurings of the sites.



The apse of the church, built in the thickness of the wall of the Monocastro Castle, nearby the ancient village of Tyras in Ukraina.

NOTES

¹ Cfr.: BINI M., BERTOCCI S. 2004, *Castelli di pietre, Aspetti formali e materiali dei castelli crociati nell’area di Petra in Transgiordania*. Firenze, Polistampa; BERTOCCI S. 2009, *Il rilievo e la documentazione dei castelli crociati di Wu’Ayra, Habis e Shawbak in Transgiordania*. in BINI M., BERTOCCI S. (a cura di), *Castelli medievali a Petra e nel vicino oriente, tra rilievo e archeologia*. Di BINI M., BERTOCCI S., Firenze, Società editrice Fiorentina p. 43-61.