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ACRE, THE DOOR INTO MARE NOSTRUM SURVEY & MUSEALIZATION

International project for the documentation and the promotion of old city of Acre

INVOLVED INSTITUTIONS

Shenkar University. Engineering. Design. Arts, Department of Interior – Building and Environment Design
The Municipality of Acre
The Israel Antiquity authorities
The International conservation center of Città di Roma
Politecnico di Milano, Mantova Campus

INTRODUCTION

The international collaboration between different institutions in the city of Acre and Politecnico di Milano has arisen from the chance of documenting, with the latest digital technology, an old town with almost 10 centuries of stratification.

Acre (San Giovanni d'Acari) is a historic walled port-city with continuous settlement since the Phoenician period. The present city is characteristic of a fortified town dating from the Ottoman 18th and 19th centuries, with typical urban components such as the citadel, mosques, khans and baths. The remains of the Crusader town, dating from 1104 to 1291, lie almost intact, both above and below today's street level, providing an exceptional picture of the layout and structures of the capital of the medieval Crusader kingdom of Jerusalem.

The old city of Acre was inscribed in Unesco World Heritage List in 2001 for many reasons. Acre is an exceptional historic town where are preserved the substantial remains of its medieval Crusader buildings beneath the existing Moslem fortified town dating from the 18th and 19th centuries. The remains of the Crusader town, both above and below the present-day street level, provide an exceptional picture of the layout and structures of the capital of the medieval Crusader Kingdom of Jerusalem.

The old city center is an interesting theme on which to focus the attention of several institutions as it involves different aspects. The municipal authorities of the city aimed to the enhancement of the city itself, its knowledge between citizens and international community. Nevertheless, the old city of Acre is so complex and stratified that an in deep knowledge is advantageous before doing any kind of promotion. Historical studies and geometric documentation of the buildings are necessary to recognize and identify each single historical periods and its building. In this context, universities provide their knowledge both in the field of historical analysis and in 3D documentation. They survey the archaeological areas and give the basis for the subsequent operation of exploitation, dissemination and design, in order to enlance memories of old town and city of present days. The International Center for conservation, as well as providing support for historical studies, collaborates in the architectural preservation project, lay the groundwork for urban design in such a complex, and stratified historical contest. In this inter-disciplinary work, the Mantova Campus of Politecnico di Milano can provide its



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experience, acquired also through the UNESCO Chair. The aim of the UNESCO "Architectural Preservation and Planning in World Heritage Cities" Chair is precisely to intervene in complex situations with to identify and promote project interventions for the defense, design and promotion of the architectural heritage.

AIM

The purpose of this research project is to establish a close and profitable international network of relations on the topic of survey and musealization of archaeological heritage that means to re-discover ancient tracks and involve them in the present, as a part of contemporary city. The involvement of universities and research institutions demonstrates the absolute centrality of the issue at the international level: the documentation, knowledge and enhancement of Cultural Heritage for communities. The possibility to develop this research on the old city of Acre is an added value as it allows verifying the theoretical principles and apply them in a real, and complex, context.

The disciplines involved in research are varied (survey and architectural representation, historical analysis, museum exhibition, urban design, conservation and restoration) and is necessary to ensure a real integration to achieve significant results.

Architectural survey and representation have the task of documenting objects. These disciplines are not concerning the mere measure operations, but aim at building the apparatus of information necessary to validate the hypotheses of study. The survey activities, conducted with the latest methods and tools such as laser scanners, photogrammetry, UAVs and topography, allow you to integrate geometric and qualitative data to obtain three-dimensional reality-based models. The representation of architecture is inspired by these models to process the best-suited forms of communication for each target. Three-dimensional models are the starting points for both the technical drawings required for the project of preservation, reuse and restoration and the models that are used in the designing phase of the musealization, to the virtual representations for the dissemination online.

The process of knowledge to make the citizens and the community aware of the historical heritage is not possible without a thorough historical study. Through this, it is possible to reconstruct the origin of the cultural asset and its evolution over time to the present time and state so the historical and artistic value and raising the awareness of the need for conservation and for mix old footprints with contemporary urban life. In this complex process of enhancing, the role of knowledge and design is fundamental to allow the preservation of the architecture and to generate an urban system articulated in public spaces that link the monumental points with the rest of the existing urban framework.

THE OLD-CITY OF ACRE

Acre is an exceptional historic town where remains of the medieval Crusader buildings stay under-existing Muslim fortified town dating from the 18th and 19th centuries. The result is an exceptional view of a rich palimpsest that tells the story of an ancient city through stratified layers, since the medieval Crusader Kingdom of Jerusalem to present crossing all historical periods.



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Present-day Acre is an important example of an Ottoman walled town, with typical urban components such as the citadel, mosques, khans and baths, well preserved, and partly built on top of the underlying Crusader structures.

Ancient Acre was situated on Tel Akko, about 2.5 km east of the location of the old city. Around 1900 BC the town was fortified by a high earthen rampart with a brick gateway facing the direction of the sea. It was successively under Assyrian rule in the 9th century BC and a Phoenician town under Persian rule between the 6th and 4th centuries BC. Following the death of Alexander the Great the area around Acre was first ruled by the Hellenistic Ptolemaic dynasty of Egypt and then the Seleucids of Syria. The present city, founded on the peninsula in the 3rd to 2nd centuries BC, was named Antiochia Ptolemais after its founder, Ptolemy II of Egypt. Acre was a center for international trade because of its strategic position and its natural port. The city fell to the Romans in 63 BC and was granted the status of colonia. In 330, during the Byzantine period, this region passed into the control of the Roman Empire. During the early Arab period (638-1099) many cities were abandoned and destroyed: Acre decreased in importance as an international port. The city began its economic recovery during the 10th and 11th centuries and the port and city walls were rebuilt.

The Crusader period began for Acre in 1104, following the successful siege by Baldwin I, King of Jerusalem, and the Genoese commercial fleet. The king settled in the northern part of the city, where he built a fortified palace. Genoese, Venetian, and Pisan merchants built autonomous quarters nearby the port. The military orders installed themselves nearby. During the two centuries of Crusader rule Acre symbolized the interchange between the eastern and western cultures better than any other city. In 1187 the Muslims captured the whole of the Crusader lands and Acre was held for four years. It was not until 1191 that the Third Crusade led by Richard the Lion-heart led to the recapture of Acre and the adjoining coastal regions. A second Crusader kingdom was established with Acre as its capital, as the Crusaders were unable to retake Jerusalem. New neighborhoods such as Monmizar to the north were built and Acre was given a new double city wall. More palaces, churches, and public buildings were erected, at a time when styles in the west were changing from Romanesque to Gothic.

The Mameluke period began in 1291 with the conquest of Acre and continued until 1517. Acre came within the mamluka of Gaza. The city was destroyed and totally abandoned, with only a few buildings remaining around the port. During the Ottoman period (1517-1917) Acre was a deserted ghost town. Reconstruction did not begin until the mid-18th century, under Daher El Amar, who renewed the port, manned it with officials and merchants, built a palace for himself, and rebuilt the fortifications. Acre enjoyed renewed economic expansion in the 19th century. Mosques, bathhouses, and caravanserais were built. Wealthy merchants settled there, building grand mansions in the eastern neoclassical style of the end of the 19th century. After capturing Acre in 1918 and being given control of Palestine by mandate of the League of Nations, the British developed the city outside the boundaries of the walls, constructing dwellings and administrative buildings. The port fell into disuse as the nearby modern port of Haifa superseded it. After Israel's independence in May 1948 only a few Muslim residents remained in the old city, but after the fighting had died down many Palestinian Arab refugees from other places began to arrive and settle in the old city, whereas many Jews settled in the new sections.

What remains today is a remarkable mixture, both above and below ground, of cultural elements from every period of Acre's eventful history between the 11th and 20th centuries.

(Source: UNESCO/CLT/WHC)

ACTIVITIES OF THE PROJECT



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The project is a three years work and is divided into several activities to achieve the described purposes.

The annual survey campaigns are organized with the aim to integrate measurement activities with thematic workshop where research can mix with teaching, attended by students, scholars and researchers. The international workshops in Acre aim to acquaint the participants and the residents of Acre with cultural architectural sites of the old city. During the workshops, chosen sites will be documented and presented in architectural drawings, as well as three-dimensional models. Throughout the workshops, participants will acquire technical knowledge on today's methodologies of documentation and historical knowledge on the old city of Acre and on the specific sites they will be dealing with. Workshops are also an important opportunity for all designers, students, teacher and professionals, to get in touch with places, materials, sensations, dimensions and inhabitants of the city, both present and ancient.

The digital documentation of the chosen sites will be execute through the use of 3D laser scanning, photogrammetry and UAV. The participants will be shown the methodology and strategies related to the acquisition and management of three-dimensional data from the site. Further, during the workshop, the possibilities of using acquired data for the construction of two-dimensional drawings and three-dimensional models will be explained and became an opportunity both for researcher and inhabitants to look at the city in a different and objective way. Last, the workshops will close with an exhibition that represents the documentation and the history of the sites that were research during the workshop. The exhibition will be open to the residents and community of Acre.

Other workshops are organized in Mantua and focus on the conservation and enhancement project. The approach characterizing this project works on different layers at the same time, in order to targets the preservation and enhancement of the antiquities, but also to develop a comprehensive urban project aimed to develop a deep relation between present needs (of inhabitants, tourism, economy ...) and opportunities carried on by ancient remains. For this reason the research project contemplate a multi-scalar and a multi-disciplinar approach in which the relationship between archaeological estates, urban fabric, monuments and natural landscape become the synthesis between tradition and innovation, as in the phase of recognition and measure.

The aim of these workshops is to favor the approach to Cultural sites, through historical analysis and the design of spaces, exhibition paths and the communication of the cultural asset itself. The participants, students, phd students, scholars and researches, will discuss the best practices for architectural preservation, by focusing on data acquired in Acre.

The project involves a high exposure. The inaugural launch took place in October 2015 in the Israeli Pavilion of Expo-Milano confirming the relationship of the Polo di Mantova of Politecnico di Milano with Israeli universities (as of the 2014 summer seminar with Technion University). The project results will be disseminated through workshops, a website and through publications, still on an annual basis, with theoretical contributions and research findings including historical studies, relevant experience, ideas for archeological- urban design.

An important contribution will come from the students thesis (master, phd, etc) as a practical exercise for data acquisition and urban design for cultural assets.



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TIME SCHEDULE

1st year

Survey campaign and workshop on 3D documentation [in Acre] - 6 days: 14-19 February 2016

Workshop on designing for Cultural Heritage [in Italy] - 6 days: 11-17 September 2016

Report publication

2nd year

Survey campaign and workshop on 3D documentation [in Acre] - 6 days

Workshop on designing for Cultural Heritage [in Italy] - 6 days

Report publication

3rd year

Survey campaign and workshop on 3D documentation [in Acre] - 6 days

Final workshop on designing for Cultural Heritage [in Italy] - 6 days

Report publication

Teachers:

Researcher and professor from Politecnico di Milano

Andrea Adami - survey and geomatic

David Palterer - architectural design

Mara Flandina - architectural design

Researcher and professor from Shenkar University:

Rebeka Vital - digital documentation

Yael Moria - landscape design