

# 3 DEFENSIVE ARCHITECTURE OF THE MEDITERRANEAN XV to XVIII Centuries

Giorgio VERDIANI (Ed.)





DEFENSIVE ARCHITECTURE OF THE MEDITERRANEAN  
XV TO XVIII CENTURIES  
**Vol. III**



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Age Fortifications of the Mediterranean Coast  
FORTMED 2016

DEFENSIVE ARCHITECTURE OF THE MEDITERRANEAN  
XV TO XVIII CENTURIES  
**Vol. III**

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## Prefazione / Preface

**Giorgio Verdiani**

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This second edition of the FORTMED Conference simply confirms how many energies and research interests are raised by the Modern Age defence of the Mediterranean Coast. The large number of scholars and researchers, participating to the call from more than ten different countries gives a clear demonstration of this. The overall result is a significant occasion of discussion, an opportunity to put together the concepts and the ideas creating a new step in the state of knowledge, a progress, reflected in a significant contribution to the wide existing historiography. The time period subject of the FORTMED Conference is truly extraordinary: humanism, new discoveries, technological advances, renovation of roles for architects and engineers, a new strength in the word "planning", progress in maritime cartography and naval engineering and all this added to the exploration of the new territories, flourishing empires and, of course, the growth of some of the worst aspects in human behaviour, like piracy. All these elements are present in an undiluted way in the Mediterranean, which also played a vital role of connection between peoples while creating, at the same time, an extensive myriad of borders for kingdoms and religions.

The value of all these coastal settlements was double: on one side there was the practical and military value, towers, fortresses and defensive structures were all parts of a specific network, each architecture linked to the others in a site

specific solution. The territory, the landscape was something to exploit, to use in enhancing the defensive value of the system. The clear knowledge of each cliff, natural harbour or water supply was strategic to correctly allow the best defence. On the other side there was the need to show and demonstrate the protected area, to make clear that the coast was ruled by a well-organized system, updated in technologies and properly structured to avoid naughty incursions from the sea.

In the moment when the Mediterranean was considered an open field by pirates, the logic derived from the Antonelli family was more than ever ready to take place, the almost "linear" idea of a border between the free open space of the sea and the countries facing on it may nowadays look more suggestive than practical, but in ages based on a different relationship between space and time, based only on a direct passage between what is directly seen and what really exists, the concept of the need of a continuity in the border was more than ever explained by that idea. The ships were pushed by the wind, they had the possibility to disappear behind the horizon and to navigate out of sight, but each time a pirate ship was getting close to a coast, the evident presence of that territorial border, represented by towers and fortresses, was a clear sign of protection. A sign capable to see, to warn, to alarm its surrounding area. From this the need to create the mechanisms, the rules and the procedures to integrate the system of the coastal

defence to the harbours, to the towns, to the outposts and to the isolated settlements. A hierarchy of soldiers and common people working together with their signals, their horses, their weapons, to guarantee protection and development chances to all the humanity living along the coasts.

During recent experiences conducted between Spain and Italy by the research group based on the TOVIVA project and with personal research subjects brought on with the collaboration of graduating students and scholars, we had the opportunity to face and study a large set of Valencian towers along Spain's eastern coast, as well as a set of significant architectures along the Tuscan maritime border. In this occasion, we have realised that most of the approaches made on these constructions are at risk of being partial, since they are addressed from a determined area of knowledge and usually by a specific research institution or university. A too specific approach with a subject so much linked to our own history and territory is always limited. As a result of this reflection, from an original idea of Pablo Rodriguez-Navarro, we came up with the idea of bringing together researchers working on this topic in a conference whose main objective would be knowledge exchange for the better understanding, assessment, management and exploitation of the culture and heritage developed on the Mediterranean coast in the modern era, bearing in mind the dissemination needs the results. And this is how FORTMED was conceived.

The concept was to create a conference with the intention of building on interdisciplinary work, where architects, engineers, archaeologists, historians, geographers, cartographers, heritage managers, tourism experts and experts in heritage restoration, landscape designers, geologists, passionate scholars, experts in conservation and promotion, professional and academic figures, could convene. The idea has been to gather more inclusive, real and actualised data leading us to the level where research regarding this matter should be more readily available in the 21<sup>st</sup> century. After the first edition which took place in Valencia in

October 2015, this second occasion of the FORTMED, takes place in Florence, Italy.

This time, the theme of the conference, former concentrated on the Western part of the Mediterranean area, is now expanded to the whole family of fortifications of the *Mare Nostrum*, (from Spain, to France, Italy, Malta, Tunisia, Algeria, Morocco, Cyprus, Greece, Albania, Croazia, etc...) mainly dating from the 15<sup>th</sup> to the 18<sup>th</sup> centuries, but not excluding other countries or other fortifications or coastal settlement capable to raise specific interest from the point of view of the suggestions, the methodologies, the complex and inspiring history.

We hope that this endeavour will be the next step of the many fruitful collaborations started during the Valencian FORTMED 2015 and the occasion to start new challenges and new studies and researches; otherwise it would not truly satisfy our purposes. We are confident that this will continue its precious task in facilitating the building of ties between different institutions, professionals, teachers, researchers and students of distinct areas that will allow us to make further contributions from broader, more global and more integrated perspectives. We are convinced that new synergies and relevant networking opportunities will emerge from the debate, allowing us to propose new joint projects with a pluralistic and international scope.

We all agree that the topic deserves our attention and a more "contemporary" approach, allowing us deliver on the level of the culture that was present at that time. As best evidence of the second success of the congress, the event will commence with the participation of more than 150 researchers.

The change in the location of the conference, the opening of the subject to the whole Mediterranean Coast area, have brought new participations and is going to extend the range of studies from the western to the eastern creating the occasion for matching a wide extension of research experiences. The quality of all the results presented here is guaranteed by peer review on behalf of the Scientific

Committee. This contribution, leaving a rich legacy embodied in this publication, should not be limited to that. As we have noted above, we wish this to be just the beginning of a series of activities to be developed in different institutions. Similarly, the FORTMED 2015 Congress was born with the intention to be continued by another research group or institution and in this logic the FORTMED 2016 gather the challenge to support who would undertake the work of making FORTMED 2017 a reality.

As it is possible to notice since the cover of this books, the FORTMED 2015 and FORTMED 2016 international congress and its publications are organized according to a continuity, the logic of creating an extended panorama on the Mediterranean defensive architectures is supported by the same graphical layout and preserving a link to the previous books continuing the title and the numbering of this publications. In this way the new volumes create a significant step in the documentation of the state of the art on the Mediterranean fortified heritage in our years. A state that is not only historical, architectural, social or aimed to a unique target, it is faceted and rich, like its great and complex tradition.

The first FORTMED conference has been carried out within the activities of the research project entitled "Watch and Defense Towers of the Valencian Coast: Metadata and 3D Model Generation for Their Interpretation and Effective Enhancement", reference HAR2013-41859-P, funded by the National Program for Fostering Excellence in Scientific and Technical Research, National Sub-Program for Knowledge Generation, Ministry of Economy and Competitiveness (Government of Spain). The congress has also received funding from the Generalitat Valenciana Regional Authority, through the Grants for the promotion of Scientific Research, Technological Development and Innovation in the Valencian Community, reference AORG / 2015/025. Because of its innovative capacity, the project, soon named TOVIVA, was able to get the support provided by Leica Geosystems and Dronetools, who have participated in the two years long research

about Valencian coastal defensive architectures. They brought their technologies inside a clear example of the research - development - industry necessary symbiosis and evidencing that leading companies are not leader by chance.

It is now important to thank the Institute for the Heritage Restoration of the Polytechnic University of Valencia, the Centre for Technology Transfer, the Lifelong Learning Centre and the UPV Press for their full readiness, facilitating the work of all the researchers accounting for its workforce in the context of the FORTMED 2015. They gave the operative basis to a positive and still ongoing event. A special thank you to Pablo Rodriguez-Navarro, for his courage to face new challenges, for his belief that a Florentine FORTMED was possible and for trusting in me as its coordinator. And for this FORTMED 2016, I can only say thank you to all the people from my Department who fully supported and made possible this second event, to all my colleagues and collaborators who gave their efforts in making possible to have a second edition of the conference. I am grate to the system of laboratories that I coordinate since 2013, a great tool and a great challenge of this University, capable to solve complex problems and to made possible very difficult challenges. I am grate to my Department, the Dipartimento di Architettura from the Florence University, hosting in its structures the FORTMED 2016, with this, it has made a new step forward in the rich process of internationalization which is a fundamental passage in the evolution of our University.

Finally, I would like to express my gratitude to all the authors of this publication for the quality of their contributions, their attitude in regards to the adequacy of the reviews and their patience throughout the editing process and registration. I also extend my gratitude to the Scientific Committee and the Organizing Committee for their selfless dedication and professionalism.

Together we have made it possible one year ago and now we made it again.









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