

DANIELA PITTALUGA

FABIO FRATINI

(édité par/by)

**CONSERVATION ET MISE EN VALEUR
DU PATRIMOINE ARCHITECTURAL ET PAYSAGÉ
DES SITES CÔTIERS MÉDITERRANÉENS**

CONSERVATION AND PROMOTION OF ARCHITECTURAL AND
LANDSCAPE HERITAGE OF THE MEDITERRANEAN COASTAL SITES

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Ce livre est un ouvrage collectif, dont les contributions ont été élaborées à partir de la conférence RIPAM 7, organisée à Gênes du 20 au 22 septembre 2017 par le DAD - Département d'architecture et de design (Université de Gênes) en partenariat avec le CNR-ICVBC Institut national de recherche, Institut pour la conservation et la mise en valeur du patrimoine culturel de Florence).

This book is a collective work, with contributions developed starting from RIPAM 7 conference, organized in Genoa, 20 to 22 September 2017 by the DAD - Department of Architecture and Design (University of Genoa) in collaboration with the CNR-ICVBC (National Research Council, Institute for Cultural Heritage Conservation and Valorization, Florence).

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Daniela Pittaluga and Fabio Fratini worked together on the initial texts (including sections “What is RIPAM?” and “RIPAM 7 Conference”, acknowledgements and indexes) and on the descriptions of the themes et subthemes (section A and B and subparties). However, Daniela Pittaluga wrote the parts in French, and Fabio Fratini wrote the parts in English. They are authors of some articles and editors of the remaining part.

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Material evidences and memorial values in coastal ruins in urban landscapes. Sardinian and Scottish case studies

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Abstract. The present study is part of a wider research developed at the international scale that investigates ruins as material witnesses in stratified historical palimpsests in terms of meanings, values, and opportunity. In details, the in-depth thematic analysis here illustrated specifically focuses on urban ruins in coastal cities and on the complex relationships with their cultural landscape. Ruined structures are frequently misunderstood places. This situation has been experimented in both Sardinian and Scottish coastal towns and villages. In fact, although physically far, Sardinia and Scotland are, in these terms, very similar not only for their old geomorphology but also for their windy and irregular seaside characterised by a high presence of ruined structures which define singular coastal landscape. From this premise, the present study carries out a comparative study between these two territories, with the development of specific guidelines for the conservation of the particular category of ruined architectures represented by wartime ruins in Cagliari. A key factor of the investigating approach is the archaeological analysis, in terms of stratigraphic understanding of materials and constructive techniques that represent unique witnesses of interaction between nature and craftsman skills and abilities as well as symbol of identity and authenticity of the historical urban landscape. According to this point, the principal outcome of the research is the proposal of an integrated tool for ruined heritage's preservation as part of a multidisciplinary strategic plan for the enhancement of their historical memorial values and the monitoring of its urban sustainable transformation.

Keywords: ruined heritage, diagnostics, landscape values, coastal city, place-identity.

Introduction

This paper presents the results of a comparative study on urban and rural ruins in the international context based on the integrated interdisciplinary cooperation of two research projects. The first one, focused on the multidisciplinary study of architectural ruins, considers these architectures in the wide range of meanings, values, and opportunity that they can absolve in the stratified historical palimpsests. This study, carried out by the School of Architecture in Cagliari, in agreement with the Scottish Centre for Conservation Studies (University of Edinburgh), investigates ruins linking

them to their context and highlighting the significance of their protection and enhancement¹. The second one, carried out by the same Restoration team in the School of Architecture of Cagliari, focuses on the dating of Sardinian masonries techniques through their chronological and material analysis, with specific regard to ruined architecture dated in the range 13th-19th centuries². In the before mentioned research context, after the examination of the complex meanings and aspects embodied in ruins, a thematic line of inquiry has considered the particular category of ruins placed in coastal cities also investigating the complex relationship arising from the interaction between architectures and their environment producing a peculiar cultural landscape. The main result of the research has been the definition of a specific methodology descending from a cross-pollination between the Anglo-Saxon value-based approach and the Italian conservation tradition. This methodology has led towards the reconsideration and codification of a set of heritage values specifically studied for ruins, and towards the definition of a series of degrees of transformability that can drive possible conservation and reuse projects protecting their tangible and intangible values. Scotland, and in particular Edinburgh, have been studied as models in order to determine both best practices and criticalities, useful for a comparison with the Sardinian context and especially with the metropolitan coastal city of Cagliari. Scottish approach to ruined architectures seems to be significant for reconsidering wartime ruins that characterise Cagliari historical quarters. One of the most significant historical places investigated in the research is Aymerich Palace, here illustrated as a relevant paradigm of the general methodology.

¹ The research has been carried out by Elisa Pilia during the European Doctorate in Civil Engineering and Architecture, XIX cycle with the thesis entitled "*Urban ruins. Memorial value and contemporary role*" supervised by Donatella Rita Fiorino, Caterina Giannattasio, Silvana Maria Grillo (University of Cagliari) and Ruxandra-Iulia Stoica (University of Edinburgh). The author gratefully acknowledges Sardinia Regional Government for the financial support of her PhD scholarship (P.O.R. Sardegna F.S.E. Operational Programme of the Autonomous Region of Sardinia, European Social Fund 2007-2013 - Axis IV Human Resources, Objective I.3, Line of Activity I.3.1).

² This is referred to the Research project entitled *Tecniche murarie tradizionali: conoscenza per la conservazione e il miglioramento prestazionale*, financed by the Sardinian Regional Law 7 August 2007, n. 7: "*promozione della ricerca scientifica e dell'innovazione tecnologica in Sardegna*" - Year 2013. Scientific chief Caterina Giannattasio, 2015-2018.

1. Ruins as opportunity (EP)

Ruined structures are frequently misunderstood places because their absence-presence duality. They represent something of a blight on the landscape beyond the mere presence of fallen masonry and overgrown vegetation; they also represent an absence, a series of empty spaces. Inheritances from the past, they remind us important historical – even tragic – events but more especially, there are perfectly connected to their surrounding environment, becoming territorial sign of places. Ruins are so metaphors of absence and, at the same time, of reflection. Reflection as productive metaphor of modernity's self-awareness and reflexivity. This is because they might represent vacuity and loss as constituents of modern identity. These anthropological aspects also evoke the psychological implications of memory, identity, and place attachment. Through our observation of ruins, we might learn to adopt a more open approach to reading and narrating urban space as well as the signs and layers hidden in the histories and materiality of places [EDENSOR 2005, p.161]. To intervene on ruins, we should also consider how they are perceived and the way in which their memory is narrated. Thus, memory and time are two factors that contribute to defining the uniqueness and peculiarity of ruins. In fact, in urban landscapes, buildings, and more especially ruins, can be considered the objects that best embody the two sensorial elements of time and memory. For instance, if we consider ruins originated from the destruction, these designate the location of memory in which trauma has taken place. They are physical remains that have an aesthetic existence that must be faced. They are fragmented presences that can be filled by the imagination. Indeed, ruins are testimonials of history and temporality [TRIGG 2009, p. 89]. Ruins mark the fluidity of space and our times. They offer different ways of remembering the past. Therefore, the urban landscape can be seen as an archive of layers, traces and memories to protect instead of a mere place where only some preferences find space. Ruined structures have also a deep relationship with nature. If, on the one hand, their artificial origin has modified the landscape, on the other hand, nature shapes and transform their structures according to geographical location and climate conditions. Contamination between ruins and nature seems to be even stronger in seaside ruins, where wind and salt aggression carves the stones and shapes ruins in fascinating kinds of sculptures. Certainly, nature is a significant feature in coastal ruins for their aesthetical and sensorial perception. Although it is often widely conceived as a negative element

of weathering and decay, it could be instead investigated as a meaningful material component that links ruins with their territory and confers to them a singular new shape influenced by the local climate conditions and building materials. Overall, all these aspects should be seen not as an impediment, but they need to be reconsidered and investigated in terms of values to preserve and as fundamental key elements in for possible future sustainable intervention. In light of these considerations, ruins, if opportunely investigated, can become opportunities with great creative potential, key ingredients in the regeneration of wider cultural urban and rural landscapes.

2. An integrated methodology for ruined structures (DRF)

Considered the complexity of these fragmented structure, the multidisciplinary issues around their reuse and, at the same time, the great opportunities of knowledge that can be arisen from them, it has been necessary the codification of an integrated methodology that consider both tangible qualities and characteristics of ruins in coastal landscapes and the role of their intangible aspects. For these reasons, the method proposes a 'transdisciplinary approach', intended not only as the integration of knowledge of a specific research topic but also as the assimilation of reciprocal bodies of knowledge, overcoming the concepts of multidisciplinary and interdisciplinary work [MARZOCCA 2014, p.22]. Generally, the approach, based on tools and methods used in Italian technical and Anglo-Saxon value-based approaches, follows a rigorous procedure in which sectorial methods produce a wide range of data from different sources that can be triangulated, allowing a holistic, comprehensive and transdisciplinary analysis that explores all aspects.

The methodology is conceived on three levels.

The first step deals with the landscape issues and investigates the context. It considers all the aspects related to the urban and rural settlements such as material geology, climate features, weathering issues and the surrounding built heritage investigating ruins as result of interaction between human activities and natural processes.

The second step studies the architectural and structural aspects. It is related to the analysis of the architecture in its historic, architectural,

dimensional, material, technological and conservation aspects through an archaeological approach, based on geometrical surveys followed by typological, architectural and construction techniques analyses, as well as petro-mineralogical tests. This level of knowledge grants ruined structures a specific quality of being time-landmark [FIORINO, PILIA 2014] that can help not only for the understanding of its own geometry and characteristics, but also for the comprehension and dating of similar fabrics. Furthermore, it allows us to define the correct conservation and design project.

The third level regards the identification and assessments of heritage values through a value-based approach that join in the before mentioned level of knowledge. Integrating the context and building knowledge, the method proposes the identification of heritage values, assessed through a multidisciplinary landscape assessment where 'form, practice and relationships' are the key features of the heritage values. These features, considered in their continual changing as part of the landscape, represents tangible (forms) and intangible (practices and relationships) aspects of ruins³. Finally, this analysis of values leads to the identification of character-defining elements intended as key features that embody values and, for that reason, should be protected and preserved for the enhancement of the building's significance.

3. Ruins in Sardinian landscapes: the urban experience of Cagliari (EP)

The problem of how to preserve and reuse ruins is still widely debated in Sardinia where there is a high percentage of coastal heritage in a state of ruins. On this island, ruins differ in typology and origins: an extensive presence of rural artefacts, churches, villages, industrial sites, and defensive heritage lay neglected in the wild landscape. They originated with different events: the slow and progressive decay of disused structures and the violent destructive events produced by natural disaster or traumatic bombing during war. These ruins also vary in their materials, locations and building techniques creating a variegated heritage and evidencing a wide range of problems relating to their state of conservation and to the interventions undertaken for their protection in

³ These are conceived according to the Cultural Values Model defined by Stephenson, J. in his scientific paper entitled *The Cultural Values Model: An integrated approach to values in landscapes* and printed in 2008 in *Landscape and Urban Planning* 84, pages 127–139.

the past. Today's advanced state of ruination is due to different factors, such as the frequent poor coexistence of building materials, atmospheric agents as well as difficult access to these structures in their isolated locations. In this regional context, the coastal city of Cagliari has been individuated as case study. Cagliari, the regional capital of Sardinia, is a walled coastal city situated at the core of the Mediterranean Sea. Its strategic geographical position between seven hills and the sea has conferred to it an important role in the history for the easy possibility of trades. From the Phoenician occupation, several dominations have transformed its landscape conceiving the modern city as an extraordinary result of several mixed cultures and architectural styles with an outstanding dominance of bright colours, from ancient to modern buildings, due to different stones and plasters used during time [FIORINO 2015]. This overlapping of several historical layers, still visible nowadays, are currently characterised by a great presence of ruins mainly originated by the Second World that changed consistently its configuration and cityscape. These wartime ruins, mainly placed in its historical centre, contributed (and continue to contribute) to the gradual, on-going decay of its historic neighbourhoods, which today are experienced as and considered the mere wreckage of history. Between the wide range of ruins still existent in this urban historical landscape, Aymerich Palace, a singular residential wartime ruin, has been the object of an in-depth analysis aimed at the assessment of its values as bases for future sustainable intervention.

3.1 Ruins of Aymerich Palace: stratigraphies and assessment of values (EP, SMG)

Aymerich Palace, placed in the quarter of Castello between Via dei Genovesi n.34 and Via Lamarmora n. 48, is a residential wartime ruin that occupies an abandoned area of 666,98 m². The architectural typology, based on the union and reconfiguration of two medieval lots, can be referred to the neoclassic noble palace, typical of the middle of nineteenth century and signed with high probability by the important local architect Gaetano Cima. Furthermore, its structures were crossed by a public passageway and monumental stair called "Laconi portico", point of connection between the two streets. The palace privately owned, although witness of doubted significance, is not actually listed. In fact, in 2007, after a first scheduling request of monumental restriction from the Superintendence of the Architectural heritage (BAPPSAE) the

sentence 4399/2013REG.PROV.COLL. established by the National Council the 3rd September 2013 decided to remove this scheduled grade.



Fig. 01 : Localisation and façade on Via dei Genovesi of the Aymerich Palace

As regards its history and the several events around its structures are scarcely documented⁴. In 1931, a sale agreement reported that the Palace is a residential building with two fronts where three floors are located on Via La Marmora and six floors on Via dei Genovesi. Unfortunately, the twentieth century, the dramatic war bombings destroyed the 75% of the structures as reported into the survey done by the *Genio Civile*⁵. From this period, internal walls and arches are still existent although they cannot be accessible for the critical static of the structure without roof. Archaeometric investigations were carried out with the goal of better defining forms, materials, stratigraphies and building techniques of both the fronts of the palace. Looking at the material aspects, these were studied through a detailed diagnostic protocol of sampling, selection of the reasoned sample, their study by means of transmitted and reflected light microscope and the study of the aggregate and the binder, separately by means of X-ray diffractometer⁶. This survey was aimed at the definition of the mineralogical-petrographic nature of stones and mortars, identifying their binder and aggregate. Natural building materials are the same limestones used in the whole

⁴ Historic information has been collected consulting the Historic Archive of Cagliari Council and the documentary archives of the superintendence BAPSA of Cagliari and Oristano.

⁵ This map is published in MASALA F. (1995) - *Le vicende storico-urbanistiche del quartiere in Cagliari Quartieri storici*. Stampace, fig. 108, pages 23-82. Another map of the war damage has been published in the Piano Quadro del Centro Storico di Cagliari (1999) and in the new PPCS, elaborate Eg015 (2015).

⁶ Analyses have been carried out at the LabMast (Laboratory of Historical materials) and the DICAAR labs (Department of Civil, Environmental Engineering and Architecture).

historical quarters commonly known as '*pietra cantone*' and '*pietra forte*' historically quarried in the surroundings hills. *Pietra Cantone* is a soft limestone marly arenaceous, with a pale cream–yellow colour. Its low physical-mechanical properties limited its use to walls refined with plaster; in fact, the damage of masonry is mainly caused by the loss of render and the elements of *pietra cantone* appear distressed by honeycomb and powdering as in this case. *Pietra Forte*, instead, is a white in colour, very compact organogenic reef limestone that has excellent physical and mechanical properties more resistant to physical or chemical weathering but sometimes affected in coastal areas by the formation of superficial black crusts caused by reprecipitation of dissolved calcite as shown in the sampling PA_01 (fig.2a). As regards artificial materials such as mortars (PA_03 in fig.2b), these are characterised by a micritic structure with a lime binder and siliclastic and carbonatic aggregates with presence of quartz, K-feldspar and illite. Aggregates are compatible with the local sea sands. The binder/aggregate ratio is low with the consequent formation of a leaner mix, subjected to decomposition. Stratigraphies, referred to the nineteenth period of neoclassic reconfiguration of the fabric, are mainly composed by four masonry techniques. The masonry type M01 is present in the basement of both fronts. It is characterised by squared blocks of *pietra forte* (around 70x40 cm). M02 instead, characterises the portions of wall immediately above M01, built in ashlar perfectly squared of *pietra cantone* (around 65 x 25 cm). This typology was in the past provided by plasters now mainly lost. The type M03 is an irregular masonry partially realised in reused squared ashlar and rough pebbles of *pietra cantone* and is located as closure of the openings on the front of la Marmora street. Finally, M04, masonry with old bricks, can be found in upper parts of the ruined walls. Both M03 and M04 can be dated to the post war period where all the openings were closed, and the upper part was restored for making safe the structures.

Starting from the spatial, historic and archaeological analysis, it can be certainly recognised the significance of this residential palace for the wide range of heritage values embodied and its role of urban witness of forms, relationships and practices achieved and developed in the local nineteenth century local cultural landscape. In fact, it not only represents a stylistic icon with its neoclassic forms and decorative elements, but it has been also a nodal point of connection between two of the main streets of Castello. This functional aspect can be seen as a possible strategic

element to reconfigure the accessibility of the quarter. Moreover, its historic evidence, technologic, material and conservation aspects are local witness of anthropological and natural values typical of this coastal area. Finally, these forms are the result of intangible practices and relationships firmly rooted in the story of family, places, signed by the destructive events of the war and connected to important local personalities such as the local architect Gaetano Cima, who redesigned several palaces at the end of the XIX century, changing the 'face' of the city's public space [DEL PANTA 1983]. From all these sensorial and associative aspects concerned to relationships, the ruins of Aymerich Palace embody not only historic and memorial evidences but also community symbol of social life.

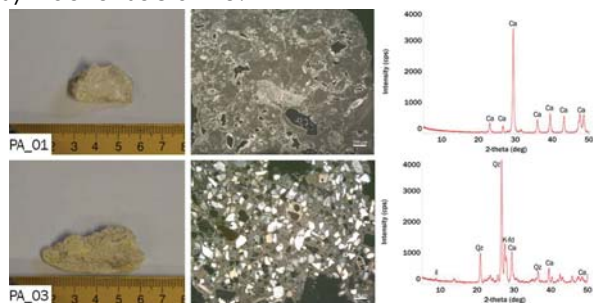


Fig. 02 : Images of the samples PA_01 and PA_03: thin sections and X-Ray diffraction

4. Ruins in Scottish landscapes: the urban experience of Edinburgh (EP)

There is no doubt that in Britain and more especially Scotland, ruins are much more highly considered and preserved than in the rest of the world. This is related to the high presence of structures in state of ruins. Churches, monasteries, and abbeys along with other building types such as palaces, residential buildings, and military installations are located throughout the Scottish territory. The origins of these ruins can be traced to the historical events that unfolded due to the power the State and the Church, both of which played important roles in the development of buildings in the state of ruins as well as in the process of reuse or conservation of this heritage. All these ruins started to be formally protected with the national Ancient Monuments and Archaeological Areas Act of 1979, and earlier with the formulation of the principles by which ruined buildings should be conserved around 1827 when the Historic Environment Scotland (HES) – a

non-departmental public body and registered Scottish Charity settled up to investigate, care for and promote Scotland's historic environment - had its first ancestor: the Scottish Office of Works. Since this year, ruined heritage has been included in the wave of protection that involved more generally the built historical environment. While in Scotland the approach was mainly to conservation and preservation, examples of conversion, reconstruction and restoration are not absent. In fact, according to the Building Regulations of HES, also historic buildings in a ruinous condition, even if Scheduled Ancient Monuments, may still be proposed for conversion or alteration. This is what came about in Edinburgh, a midsize city and regional capital of Scotland. Here a series of integrative interventions in conservation areas contributed to the rehabilitation of buildings in ruination and therefore at risk.

4.1 Urban rehabilitation of Advocate's Close (EP)

The city of Edinburgh with its Medieval Old Town and Georgian New Town, gained UNESCO World Heritage status in 1995. It is so a well-preserved and stratified city that shows universal value not only for its iconic cityscapes but also for the unique character of its historical quarters that, even if contrasting, still contain many significant historic buildings. Here, the old tradition of protection and the recognition of universal value has prevented this city from the formation of ruinous buildings. In fact, also according to World Heritage rules, redundant buildings, already before to become ruins, can be restored or converted, continuing to play a part in Edinburgh's cultural landscape. For that reason, a series of projects have been analysed as model for possible reuses in Cagliari. One interesting example of project of urban rehabilitation that can be used as model for the local case of Aymerich palace, is the of Advocate's Close in Edinburgh (fig. 3). Concluded in 2009 and designed by Morgan McDonnell Architecture, it offers an interesting blend of new and old in the core of the city. The project area consisted of nine listed buildings in danger, built between sixteenth and twentieth centuries, over 11 storeys in height, bridging two closes between High Street, Cockburn Street and Market Street. While many of the buildings were listed, the majority had been greatly altered since their construction. The project won the Best Building in Scotland 2014 Award due to the harmonious combination of traditional building design, such as the crow-step gable, with new building materials and techniques. The rehabilitation project, which created a new 208-room hotel, 50 apartments, bar, restaurant spaces, and office

accommodations, increased flows through the area creating a welcoming focal point that encourages visitors to explore and visit, revitalising this key public space [MORGAN 2014].



Fig. 03 : The integrative intervention in Advocate's close

Comparative notes, results and perspectives

As seen in the analysis, the Sardinian and Scottish coastal towns of Cagliari and Edinburgh are characterized by a relevant cultural heritage associated with an outstanding landscape. Although physically far, these two territories are, in these terms, very similar not only for their old geomorphology of limestones but also for their windy and irregular seaside characterised by a high presence of ruined structures which define singular coastal landscapes. Indeed, these contexts are unique and vulnerable mosaic of natural and historical assets where the actual settings are the result of ages of complex interactions between humans and nature influenced by morphological, anthropological, cultural and economic factors. At the same time, from this deeply different cultural background Sardinia and Scotland show two different experiences in terms of practical interventions, in protection policy as well as methods and techniques of investigation concerning ruins. Scottish experience, based on a different model in which heritage issues are administered and stewarded by private and charity organisations, has been a model which might provide inspiration. Overall, the presented example of integrative approach has shown how, in a city like Edinburgh, a World Heritage Site, the preservation and enhancement of historical heritage can be

positively supported by intervention fully respectful of the memory and history of the fabric and, at the same time, by contemporary additions that emphasise the city's traditional physical and social features. The study highlights the importance of a transdisciplinary and integrated approach for the knowledge, the protection and enhancement of ruins placed in coastal cities and their urban landscapes. The only solution comes from the deep knowledge of the historical and cultural relationship between human action and nature and the way in which it has changed during centuries, in order to understand the new significance of the urban landscape of the present city, including the old town, modern and future developments. From this knowledge, as seen for Aymerich Palace, ruins could be intended not only as place of ongoing decay but instead, as a symbol of local identity, significant and strategic cultural feature. Furthermore, taking as example the Advocates' close project, these ruins could be also possible element of economic growth and rehabilitation of the stratified coastal city of Cagliari.

Références

- DEL PANTA A. (1983) - *Un architetto e la sua città. L'opera di Gaetano Cima (1805-1978) nelle carte d'archivio comunale di Cagliari*, Della Torre, Cagliari.
- EDENSOR T. (2005) - *Industrial ruins, space, aesthetics and materiality*, Berg, Oxford.
- FIORINO D, GRILLO, S.M. (2015) - *Coastal cities and Cultural Heritage: problems of conservation and management. The case of the ancient walled city of Cagliari (Sardinia, Italy)* in Rodriguez, GR; Brebbia, CA (by), *Coastal Cities and their Sustainable Future*, WIT Press, pp.111-148.
- FIORINO D, PILIA E. (2014) - *Il rudere come time-landmark del paesaggio storico*, in *The international and interdisciplinary periodical. Agribusiness Paesaggio & Ambiente*, XVII (2), pp.108-114.
- FIORINO D. (2015) - *L'onda lunga della ricostruzione: restauri a Cagliari nel secondo dopoguerra* in *Palladio*, vol.55, pages 95-124.
- MARZOCCA F. (2014) - *Il nuovo approccio scientifico verso la Transdisciplinarietà*. In *ÁTOPON Rivista di Psicoantropologia Simbolica*, Special edition n. 10, Mithos Edizioni.
- MORGAN G. (2014) - *Doolan 2014 – the architect's perspective* in *RIAS Quarterly. The journal of the Royal Incorporation of Architects in Scotland*, issue 20, Edinburgh, pp. 26-28, ISSN 2044-1851.
- PILIA E. (2017) - *Urban ruins in historical centres. An integrated methodology for sustainable interventions in Cagliari, Sardinia* in *ArchHistoR architettura storia restauro - architecture history restoration*, anno IV (2017) no. 8, pages. 174-217, ISSN 2384-8898.
- TRIGG D. (2009) - *The place of trauma: Memory, hauntings, and the temporality of ruins* in *Memory studies*, vol.2, no. 1, pp. 87-101.

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Les RIPAM (Rencontres Internationales du Patrimoine Architectural Méditerranéen) sont à la fois des rencontres et un réseau de personnes et d'institutions qui travaillent pour la connaissance et à la conservation du patrimoine architectural et urbain méditerranéen: Meknès (Maroc) en 2005, Marrakech (Maroc) en 2007, Lisbonne (Portugal) en 2009, M'sila (Algérie) en 2012, Marseille (France) en 2013, Monastir (Tunisie) en 2015. La septième conférence RIPAM «Conservation et valorisation du patrimoine architectural et paysagé des sites côtiers méditerranéens / Conservation and promotion of architectural and landscape heritage of the Mediterranean coastal sites» a été organisée à Gênes le 20-22 septembre 2017 par le DAD (Département d'Architecture et Design, Université de Gênes) et le CNR-ICVBC (Institut de Conservation et de mise en valeur du Patrimoine Culturel du Conseil National des Recherches de Florence, maintenant CNR-Institut des Sciences du Patrimoine Culturel).

Ce livre contient les travaux de recherche menés depuis Ripam7 sur la conservation et la mise en valeur du patrimoine architectural et paysager des sites côtiers de la Méditerranée. Il part ensuite de la définition du paysage côtier et des transformations que le paysage lui-même a souffert au fil du temps, dans la région méditerranéenne pour arriver ensuite aux spécificités du patrimoine architectural de ces mêmes régions. Différentes théories et approches méthodologiques sont comparées. La deuxième partie de l'ouvrage décrit les stratégies de conservation et de valorisation et présente des interventions dans différentes parties des côtes méditerranéennes (des côtes italiennes aux côtes françaises et portugaises, puis aux côtes marocaines, tunisiennes, algériennes, israéliennes, turques, grecques et syriennes).

The RIPAM (French acronym for International Meetings on Mediterranean Architectural Heritage) are both meetings and a network of people and institutions working to the knowledge and the conservation of the architectural and urban Mediterranean heritage: Meknes (Morocco) in 2005, Marrakech (Morocco) in 2007, Lisbon (Portugal) in 2009, M'sila (Algeria) in 2012, Marseille (France) in 2013, Monastir (Tunisia) in 2015. The seventh RIPAM conference "Conservation and enhancement of the architectural and landscaped heritage of coastal sites Mediterranean / Conservation and Promotion of Architectural and Landscape Heritage of the Mediterranean coastal sites" was organized in Genoa, 20-22 September 2017, by the DAD (Department of Architecture and Design, University of Genoa) and the CNR-ICVBC (Institute of Conservation and Promotion of Cultural Heritage of the National Research Council of Florence) now CNR-ISPC (Institute of Heritage Sciences).

This book contains the research work done since Ripam7 on the conservation and promotion of the architectural and landscape heritage of Mediterranean coastal sites. It starts with the definition of coastal landscape and the transformations that the landscape itself has undergone, over time, in the Mediterranean area. Then it addresses the specificities of the architectural heritage of these same areas. Different theories and methodological approaches are compared. In the second part of the book, conservation and promotion strategies are described with interventions carried out in different parts of the Mediterranean coasts (from the Italian coasts to the French and Portuguese coasts and then to the Moroccan, Tunisian, Algerian, Israeli, Turkish and Greek coasts till the Syrian territory).