



PROCEEDINGS

**ARCHITECTURE,
ARCHAEOLOGY AND
CONTEMPORARY
CITY PLANNING**

«Issues of Scale»

LONDON

22-25th September 2016

London, UK
22-25th September 2016

ARCHITECTURE, ARCHAEOLOGY AND CONTEMPORARY CITY PLANNING

“Issues of scale”

PROCEEDINGS

editors:
James Dixon
Giorgio Verdiani
Per Cornell

Published on
May 2017

London, UK
22-25th September 2016

Scholar workshop:
ARCHITECTURE, ARCHAEOLOGY AND CONTEMPORARY CITY PLANNING

The workshop took place in London, U+I Offices, 7a Howick Place, Victoria.

Workshop organizing committee:
James Dixon, Giorgio Verdiani, Per Cornell

The workshop has been realized in collaboration between Museum of London Archaeology (MOLA), the Architecture Department of the Florence University, Italy, the Department of Historical Studies, University of Gothenburg, Sweden.



UNIVERSITÀ
DEGLI STUDI
FIRENZE

DIDA
DIPARTIMENTO DI
ARCHITETTURA

Proceedings Editors: James Dixon, Giorgio Verdiani, Per Cornell
jdixon@mola.org.uk / giorgio.verdiani@unifi.it / per.cornell@archaeology.gu.se

Scientists participating at the workshop:

Per Cornell, James Dixon, Liisa Seppänen, Giorgio Verdiani, Matteo Scamporrino, Pia Englund, Anna Frank, Louise Armstrong, Nick Woodford, Valentina Fantini, Laura Polizzi, Neil Korostoff, Oliver Brown, Gwilym Williams, Sophie Jackson, Valerio Massaro, Sabrina Morreale, Ludovica Marinaro, Timothy Murtha, Thomson Korostoff, Giulio Mezzetti, Sarah Jones, Natalie Cohen, Francesco Maria Listi, Katrina Foxton.

PROCEEDINGS INDEX

INDEX

WORKSHOP PRESENTATION

James Dixon, Per Cornell, Giorgio Verdiani 7

VIRTUAL RESEARCH AS A TOOL FOR BOTTOM-UP URBAN DESIGN: THE CASE STUDY OF BIRMINGHAM

Valentina Fantini, Laura Polizzi 13

PHILADELPHIA STREET HIERARCHIES

Thomson Korostoff 25

WHERE THE LONG SHADOWS FALL: URBAN ARCHAEOLOGY IN THE EARLY 20TH CENTURY – STANDARDIZING METHODOLOGIES, LEGISLATION, FINANCE AND PUBLICATION

Oliver Brown, Gwilym Williams 39

A MITHRAEUM FOR A MODERN CITY: REBUILDING THE TEMPLE OF MITHRAS IN LONDON

Sophie Jackson 51

A COMMON GROUND: DESIGNING THROUGH ARCHAEOLOGICAL TOOLS

Valerio Massaro, Sabrina Morreale 59

LANDSCAPE TRANSFORMATION BETWEEN PORT AND CITY. AN INTEGRATED DESIGN APPROACH

Ludovica Marinaro, Matteo Scamporrino 71

FORMATION OF A MEDIEVAL URBAN PLANNING PROCESS USING THE ARCHAEOLOGICAL KNOWLEDGE BASE TO INTERPRET THE URBAN SPACE THROUGH LANDSCAPE ARCHITECTURE AND ART

Anna Wyn-Jones Frank 81

RETHINKING URBAN DENSITY: ARCHAEOLOGY, LOW DENSITY URBANISM AND SUSTAINABILITY

Timothy Murtha 92

ARCHAEOLOGY FOR SUSTAINABILITY

James Dixon 101

3D FLORENCE REPRESENTATION STARTING FROM HISTORICAL MAPS: YESTERDAY'S EYES, TODAY'S TOOLS

Giulio Mezzetti, Matteo Scamporrino 107

**DIGITAL RECORDING AND ARCHAEOLOGY AT KNOLE “MORE TOWN THAN HOUSE”
(VIRGINIA WOOLF, ORLANDO 1928)**

Sarah Jones, Natalie Cohen 121

**THE FORTIFICATION SYSTEM ON THE ELBA ISLAND: ARCHAEOLOGICAL AND TERRITORIAL
EVIDENCE OF THE MEDITERRANEAN TUSCANY**

Mirco Pucci, Giulia Baldi 129

**MILAN AT THE BORDER OF ITS ANCIENT BORDER: FROM THE XVI CENTURY WALL TO THE
BERUTO’S PLAN, TO OUR DAYS**

Francesco Maria Listi 139

CIRCUMNAVIGATING THE CITY: A VIEW FROM MEDIEVAL WALLS

Katrina Foxton 152

**PHYSICAL PLANNING, THE REGION, DEMOCRACY AND THE QUESTIONS OF TIME.
PRELIMINARY REFLECTIONS**

Per Cornell 167

**CONSTRUCTION, CITY PLANNING AND URBAN ARCHAEOLOGY
REFLECTIONS ON THE ROLE OF MONEY IN THE CITY DEVELOPMENT AND ARCHAEOLOGICAL
RESEARCH OF TURKU**

Liisa Seppänen 171

**FROM DECAY AND TOTAL DESTRUCTION TO THE WORST PRACTICE IN CULTURAL
HERITAGE: A REFLECTION ABOUT THE WILL OF LOSING ALL THE TRACES**

Giorgio Verdiani 185

PICTURES FROM THE WORKSHOP

Giorgio Verdiani 212

From decay and total destruction to the worst practice in Cultural Heritage: a reflection about the will of losing all the traces

Giorgio Verdiani

DiDA (Dipartimento di Architettura) – School of Architecture – University of Florence

Abstract: In time the community of the Cultural Heritage scholars, have experienced a large amount of archaeological ruins, we have visited them, we have surveyed them, we have wondered about the original aspect of those places. Most of the time we have imagined the causes of that decay: wars, disasters, abandon, in a lot of situations the reasons for the ruins are not that clear and legends and common believes take the place of any proved reasoning. But there are some situations, all across time, where the applied destruction was so strong and methodical to leave absolutely no trace of what was in place, this creates a great challenge for the archaeologist and for the architects, a challenge in finding any possible reason for what has been completely forgotten leaving nothing but some drawings, a popular story, a mix of crushed ruins. The political will of removing a small walled town, the effort of the thieves, the try to cancel the memory of a place, the blind and improper approach to cultural heritage operated by certain administrations, create a bad and unlucky environment which is the exact opposite of memory and preservation. It is not something specific from our age nor from the previous, it is an articulated process developed in different ages, cultures and approaches, but with a same result: the annulation of a place or an architecture. This contribution will be aimed to develop a reflection about this illness in built heritage, using various direct samples, from the Hekatomnos' tomb in Milas, to the Hadrian's Villa in Tivoli, to the Montecastrese settlement on the Tuscany coast, to the Pionta citadel in Arezzo, to the Vagli town in central Tuscany, up to the Corallo baths in Livorno and the Tonietti mausoleum on the Elba island. A series of "bad" stories where the digital approach to documentation and virtual reconstruction meet the interest in some sort of preservation or even "resurrection" of these unlucky constructions. This may help to discuss one of the worst process in built heritage and start some understanding about new ways to better address efforts and face this complex phenomenon.

Keywords: Decay, Destruction, Built Heritage, Digital Reconstruction, Digital Heritage

Introduction

Sometimes we can think that Built Heritage has a precious value out of any discussion, an old and historically significant building appears to us as a source of interest and as an engine of culture, a depot of important values worth to be shared. When the building or urban area we study is running in bad conditions, we think about how to operate on it, to the possibilities offered by restoration and intervention. We act according to our cultural position, respecting the values

we learned from cultural heritage studies and matured staring to and learning about the patrimony we have seen all around our world. But the well constructed concept of preservation and sharing, the strong roots these ideas and this approach have extended in our professional and intellectual behaviour can be sometimes even too strong, bringing us to think about these values as something commonly recognized as a common will of people. With the understanding of the built heritage value as a direction for all the people living in rich historical and

stratified context. These ideas are based on concepts with various declinations in the same geographical area, even when the value of Built Heritage is recognized, the way to approach the intervention can vary from total or even maniacal preservation to various degrees of freedom according to specific needs and local traditions. The ancient Built Heritage can be considered as something to be preserved in all its features, creating a self-referenced image of itself, or it can be “edited” in its context or its same parts, to preserve a sort of “sense of place” or “sense of the architectural item”, while transforming all the elements around it, sometimes removing the structure and the pattern which have generated the specific architecture of the place and extracting the object of interest creating the illusion to have it embedded in the present time.

As told, the way of intervention may vary from country to country and from situation to situation: as strong is the will in changing the aspect of a town or a neighbour, as massive is the economical effort and interest in doing it, as declined can be the uprightness in the logic of the operations. But even in these generally recognized conditions, even when all the people from the primary schools get the ideas about preservation as a common part of our culture, it is important to keep in mind that this conviction is a new orientation of our times, never in the past it has been operated or acted on such a scale like it is brought on in our time. The act of preserving and restoring according to clear and well-readable practices is applied to any old building, from the real monument to small house and remains with a minimal trace of historical value. It's a matter of scale, but this conviction is often so deep-rooted to bring the risk to see certain architectures or old parts of a town to be frozen in the condition of being the museum of themselves. But if this condition can be a rich subject of debate in a large geographical area, it is important to keep in mind how these ideas are based on con-

cepts from our own historical period. The last century has seen the will of preservation rising from a cultural condition limited to certain elites to be a common educational approach. After the World War 2 the long period of peace in Europe, large part of Asia and America has created the conditions to develop and enhance all the concepts of preservation and reuse of the historical patrimony and to start considering the built heritage in front of two main great challenges: the disasters (earthquakes, floods and climate and environmental changes) and the evolution of the town into more technological conditions (piping, urban infrastructures, overpopulation, implementation of information technology, energetic efficiency). Most of the museums reorganization and almost all the “in place” musealization operations took place in the past sixty years, with a progressive increment in the rehabilitation of the built heritage, taking care, little by little, not only about monumental masterpieces, but also about industrial historical buildings, housing architecture, minor vernacular architecture and so on. In a lot of cases the results are very satisfactory, with the new urban asset offering a valuable scenario, pleasant for living and to be used in a multiplicity of ways. In others situation the result is a simply musealization or an “in style” recreation of a place, creating something expressly aimed to the evoking of a certain previous historical moment (sometimes even more than one). Thus, even if this is what has been done and what it is expected to be done also for the future when an intervention is planned on built heritage subjects, there are two aspects there are almost ignored when talking about regeneration and restoration: what was done in the past (and why) and how is common to get a correct result in interventions aimed to the preservation. The first aspect, is apparently quite simple, but it is a key point in the understanding of the story of a place, it helps a lot in defining the correct questions when looking at an archaeologi-

cal remain or a at a very transformed architecture. In the past people never considered the ruins or the abandoned buildings as a precious subject to be preserved. Most of the time they look at them as a quarry of pieces or a reserve of parts for new constructions. They never felt guilty or thought that what they were doing was wrong, they simply saw this operation as a natural event following the evolution from a historical period to another, the stones from the past were a present reserve of building materials, what was not coherent or compliant with the cultural and/or religious status of their time was to be removed or was of poor interest. The priority to the optimization of the resource, the need of reuse was always the first in the list of tasks in all those years, the removal of parts was mainly done as there was no strange feeling in starting the building of new houses over the ruins of an amphitheatre, nor in “cooking” Roman (pagan) marble statues to produce lime. If the piece was capable of extreme beauty and in very good conditions the reuse of it in a new building was also a matter of “continuity” to exhibit something from a glorious past, but the mix of new elements with the remains often required some adaptation to the old pieces, so cutting and re-modeling them was a quite common operation. From intense reuse to total destruction the almost daily intervention on abandoned part of the ancient towns have been a common behaviour in all our past history. The rules connecting the way to operate the destruction to the new use were most of the time quite simple. First of all the richer the building, the more robust the destruction. If the building was presenting marbles, statues, plumbings, reusable small elements, the people have removed in time all the usable portion of it, with no thinking about the damage to the remains, most of the time the holes and demolitions caused by removing a part were in a quite short time the cause of even more extended fall and damage. If the parts of the building,

like its stones and its sculpted elements, were very large, better to work on it in place and move them only for small distances, only very rich people were capable to pay to move a large pillar or a capitol or blocks of stones for long distances. If the parts of the building were too small and complicated to be moved, like mosaics, decorations of the vault or the vaults in themselves, better to leave them in place, a mosaic can easily fall in small pieces, that no one will recompose again and a vault can have very dangerous collapses while been unmounted, thus the damages to all the other structures in many occasions were enough to weaken the remains and accelerate the general decay. The presence of parts coming from previous architecture is in general indicated with the word “spolia” but this can be used to indicate clearly recognizable elements, while it is quite clear that the reuse was often quite beyond the simple placing of a part in a wall: it was common to scalpel, carve or fragment the parts to fit them in a new layout, making them impossible to be recognized in the long run, and for certain materials the destiny was to be reduced to dust according to the specific needs, a good picture about the situation in the Mediaeval age can be taken from Dale Kinney: “The reuse of Roman stone for building was normal until the late eleventh and twelfth centuries, especially in Britain. At that point it tapered off due to depleted supply, the technological and economic recovery that made it possible to resume new quarrying, and the novel design demands of Romanesque (or Norman) and Gothic architects. Marble was always a special case. It was a luxury stone and its reuse was ornamental, not expedient. Even in Italy it had to be obtained secondhand, as the Mediterranean quarries that produced it were abandoned in late antiquity”. But the past was not only made of destructions or of use of ancient building as quarries, in many situation, the reuse and adaptation of previous constructions brought in our times not the

original building but its very original transformation into following structures, creating unique masterpieces of stratification and architectural inventive. Just to mention few samples of this phenomena it is possible just to list the “Piazza dell’Anfiteatro” in Lucca, or the “Piazza dei Peruzzi” area in Firenze: two cases of urban reuse of Roman amphitheatres where the original buildings completely disappeared to leave space to houses which simply kept the original shape of the lot; or to “Castel Sant’Angelo” in Rome, evolved from the monumental mausoleum of the emperor Hadrian. The number of cases of total or partial reuse of previous buildings is high, with a lot of meaningful samples, mainly in the Mediterranean area. But if reuse can bring to the destruction, the forgiveness or even the complete annihilation of a place, it is still done for practical or symbolic reason, somehow it is a sort of continuity with the past. On the contrary, there are numerous situation when the will to destruct a place worked pushing it to fully disappear from the physical and cultural level. In the next lines a series of cases will be presented to guide through a gradient of situations from the reuse bringing to destruction to the full will of removing a place from the history.

The Hekatomnos’ tomb in Milas, Turkey

There are many cases demonstrating how the subject of the “Mausoleum”, of the monumental tomb, is one of the most “suffering” architecture. Rarely this type of building has a lucky history, most of the time, with the death of his guest, the following changes in political and social situations bring to the destruction or alteration of a “too much” visible structure recalling a (sometimes long gone) past. At the same time, the nature of “significant” architecture, dense of a will of remembering, causes this building to be strongly experimental, to be at risk of earthquakes, of structural collapses and of unexpected decay phenomena. In



Fig. 1 - Three picture from the scene of the “haunt” from the Milas Sarcophagus (G.Verdiani 2013).



Fig. 2 - A parallel between the tomb in Milas and the most famous Mausoleum of Halicarnassus (G.Verdiani, A.Frascari, 2014).

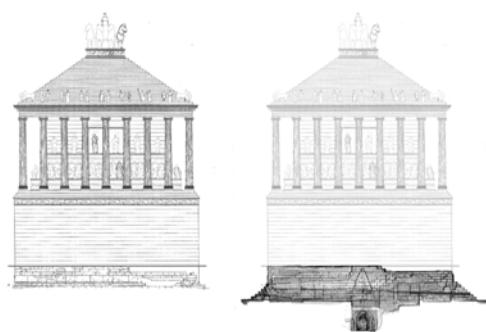


Fig. 3 - Reconstruction parallel between the monumental tomb in Milas (on the left) and the Mausoleum of Halicarnassus (G.Verdiani, A. Frascari 2014).

all the cases the balance between richness of the elements, decay of the social status of the guests, or decay of the structures, cause this kind of building to became an interesting quarry of materials or the place for building something else.

In 2010, in the city centre of the city of Milas, Turkey (the ancient site of Mylasa), an hypogean sepulchre was found inside a superstructure identified earlier as a temple. The discovery came after an illegal excavation in the area was noticed. The tomb has been attributed to Hekatomnos, satrap of Caria and father of the better

knows Mausolus (satrap of Caria between 377 and 353 b.C.). At that time the city of Milas was the capital of the Carian kingdom until the reign of Mausolus that moved it to Halicarnassus between 370 and 365 b.C. It is well known that we use the word "Mausoleum" to indicate a monumental tomb and that this derives from Mausolus, so finding the tomb of his father creates a very interesting studying condition, both for architectural and art aspects. The building has been used in time as a quarry for other constructions and probably it suffered from some partial or extended fall across time, this cause it to be reduced to a part of the original, thus the tomb chamber has preserved the large sarcophagus, hiding it until 2010. The disastrous actions of the thieves luckily has not damaged too much the sculptures and the set of figures sculpted on the sides of the sarcophagus allows to open a new view to this ancient past. The structure consists in a chamber tomb occulted within the structure of the funerary monument. This chamber is almost completely filled by the monumental sarcophagus made from a single block of white marble that is carved in high relief on all four sides. The burial chamber is placed around seven metres below the actual soil and it's preceded by a dromos, both rooms are covered by barrel vaults. The entrance to the subterranean area was buried under the ground level and sealed with a monolithic stone block.

The thieves penetrated into the basement of the proto-mausoleum perforating from the floor of the house the calcareous blocks and marble stones. They used a core drill to pierce the floor, creating a series of cylindrical holes and then removing the block detached from the structure. also led to a considerable amount of water ingress inside the hypogean chamber to cool the cutting surface. This water has impregnated the walls damaging the paint on the surfaces. The burial chamber consists in a rectangular room of about 4x5 metres and is 3 metres high at the keystone

of the barrel vault. All the walls and the vault itself are made entirely of marble. At the approximately centre of the chamber there is the white marble sarcophagus of about 3x4 metres, tall 1.70 metres under the gabled lid. It occupies most of the interior space making it difficult to move in the chamber.

In order to steal the funerary decoration and all the grave goods, the thieves forced open the lid of the sarcophagus in a bad way, removing and damaging the doors of the burial chamber, producing numerous scrapes, cracks, and drilling here and there, probably looking for some more rooms to ransack and apparently losing some parts from the sarcophagus including the right leg of the rider sculpted on the back. After archaeological discovery, the local government proceeded to expropriate housing built on the mausoleum and throughout the area bounded by the terracing of the temenos wall. Later many of these buildings were demolished in order to proceed with the archaeological excavations in the area and have revealed the entire perimeter of the mausoleum of Hekatomnos. A continuation of the excavations has shown the re-emergence of the crepidoma that consists in seven steps which run around the entire perimeter of the building.

This architecture shows two particular aspects: it has been forgotten for a long time, considered as a Temple of Zeus or some other damaged building and secondly, the remains of the massive base arrived in our time hiding the precious tomb inside its stones. A significant part of history missing while being under the eyes of everybody in that area. In a certain way this confirms the idea about how much is still waiting to be discovered in our times, but at the same time underlines the problems about preservation and historical stratification: the destructive approach to everything built in time over the proto-mausoleum, without any kind of documentation, doesn't look like the best approach in Built Heritage.

The Hadrian's Villa in Tivoli

A system of construction of this size move the problems and the issue from the proper conditions of a building right to the urban scale, with specific problem of people and goods movement all around this huge settlement. The choice made by the Villa architects was to try creating an articulated network of connections completely independent and almost invisible from all the area of the Villa characterized by richness and luxury, this was done for two main



Fig. 4 - The network of the underground passages in the Hadrian's Villa, Tivoli (G. Verdiani, G. Corsaro 2010).

purposes: avoid to have a direct view on the servants activities and create special spaces for walking and relax during the summer season to the emperor and his court. In the Villa there are many types of connections partially or completely realized



Fig. 6 - View of the cryptoporticus around the building called "Peschiera" in the Hadrian's Villa, Tivoli (G. Verdiani, G. Corsaro 2010).

underground, some have been completely built, with the realization of a dig and then of vaults and other masonry works to integrate it to other constructions or back to the landscape, others were made simply digging tunnels into the tuff. The name used to indicate these structures is Cryptoporticus. The state of the knowledge about the cryptoporticus network documents a system articulated along almost five kilometres. The need of galleries was strictly linked to the mobility inside the Villa's area. A need similar to the current needs. In the complex of the Hadrian's Villa, cryptoporticus have very different characteristics, especially under the functional aspects. Often the function of a cryptoporticus changed over the years, adapting to specific needs. Generally (and often wrongly) some underground tunnels are defined cryptoporticus; cryptoporticus, in its standard definition, means a series of



Fig. 5 - Pictures from various samples of Cryptoporticus in the Hadrian's Villa (G. Verdiani, G. Corsaro 2010).



Fig. 7 - Section of a Cryptoporticus between the Large Baths and the Small Baths (G. Verdiani, G. Corsaro 2010).

corridors partially buried, barrel vaulted and lighted by small windows open on one side of the vault. Often the corridors are linked together according to a rectangular shape and are frequently placed under a peristyle. The cryptoporticus was generally used as a substructure, or to stabilize a steep terrain, or like a podium for other architectures.

The network of underground paths of Hadrian's Villa can be classified according to some macro-categories:

Classic cryptoporticus, for the imperial court, usually decorated.

Link ambulacrum: are galleries connecting the different buildings, they were usually used by the crew of the villa.

Underground carriageable roads: There is an extensive network of roads for the transport of supply and building materials.

Hypogean elements of service: Like maintenance galleries, aqueducts, depots, and so on.

Inside the Hadrian's Villa almost each building is composed and serviced by one or more covered path, just near or even combined in the structures. Such a complex system, asked a complex project, with very specific solutions, thus, with the decay of the area, the reason for all these structures was forgotten. Now it is well known that easily stories and legend about fantastic "underground" construction took place among people. "The tunnel going from here to there", "The conduct from the castle to the monastery", "the secret passage", are mere samples of a reality barely perceived in holes opening in the ground and badly read from ruins and parts of old architectures. But the people from the Medieval age, were

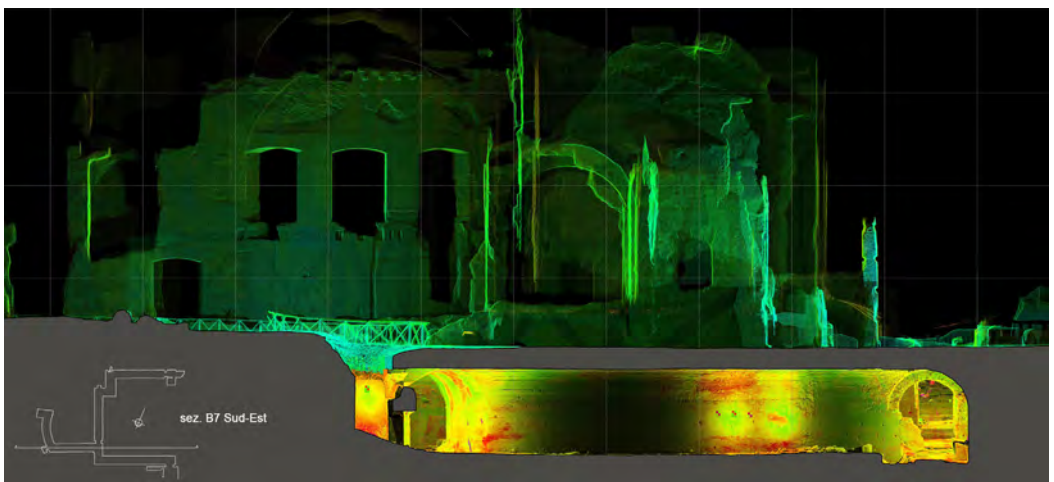


Fig. 8 - Section of a Cryptoporticus between the Large Baths and the Small Baths (G. Verdiani, G. Corsaro 2010).

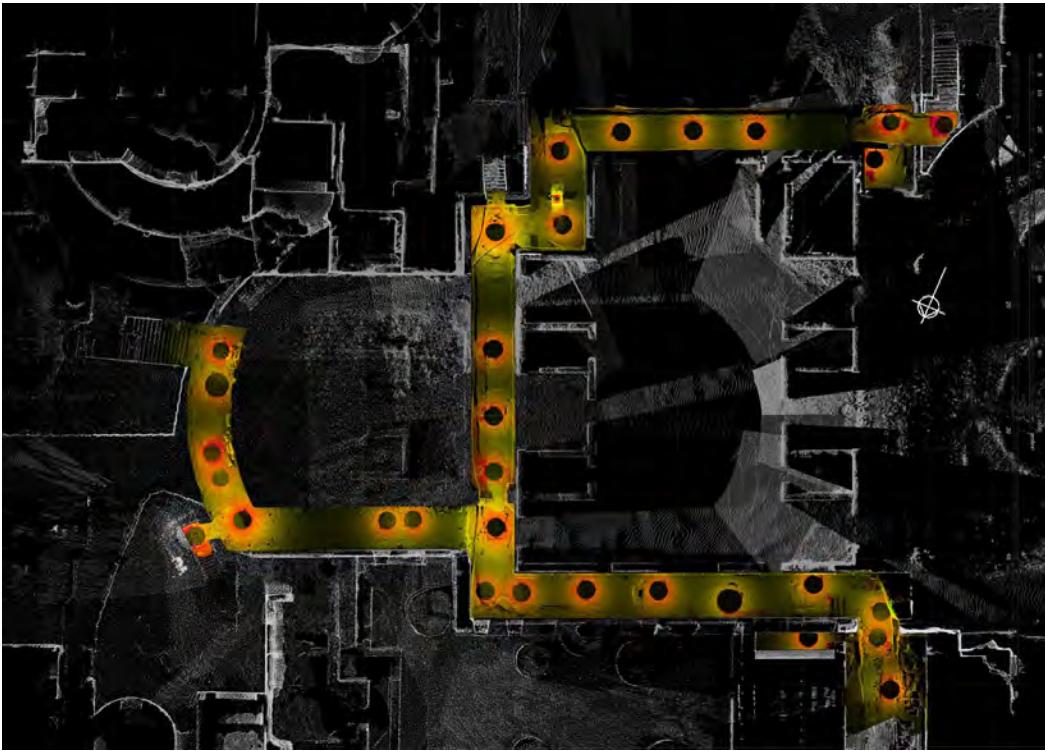


Fig. 9 - Plan view of a Cryptoporticus between the Large Baths and the Small Baths (G. Verdiani, G. Corsaro 2010).



Fig. 10 - Illustration presenting an image from the legend of "Santa Sinforosa" (J. A. Mulca).

probably able to enter and visit large parts of the Cryptoporticus system, the trace were so clear that no legend about a fantastic system of tunnels was created, the tunnels were there in front of them, ready for a tour. So, during the long centuries of abandon the Villa and Hadrian were not completely forgotten, during the middle age a legend about a local Saint, "Santa Sinforosa", took place with a strong link to explain the "underground" characteristics of the Villa in connection to Saint Sinforosa's martyrdom. According to the main legend Hadrian sent Sinforosa, a Christian Roman woman, to death, the reason for this was the refuse of the woman to renounce to her religion. As a following punishment for his bad act, after the death of the Saint, Hadrian was persecuted by her spirit and by a strong remorse. So he decided to go living underground to hide himself from the sunlight and to expiate. It is possible to imagine this legend as a direct explanation of the strange and huge underground network

the people from the middle age found in the Hadrian's Villa, probably the idea of living far from light was suggestive enough to need some strong and complex legend like this one. Visiting this huge "invisible" town, it comes immediately clear where the legend found its origin. For the Hadrian's Villa the forgiveness of the original use, was not due to choice or to some specific will, the abandon, little by little, caused the "re-reading" of certain structures, something to put order between the past and the need of putting some rationality in an intervention too innovative to be easily understood even after some centuries.

The Montecastrese settlement on the Tuscany coast

On a hill dominating Camaiore, Lucca, Tuscany, there are the ruins of a Medieval settlement, named "Montecastrese", a system of fortifications organized along the top of the hill. In the first half of the XIII century, the castle was conquered and destroyed by the army of Lucca. This caused that almost all the buildings were destroyed and the area abandoned. Only from the XXth century the area was studied from an archaeological point of view. In 2015 a survey campaign brought digital technologies in this place. The municipality of Camaiore commissioned a complete survey to the "Dipartimento di Architettura", University of Florence in collaboration with AION s.n.c., Rome. This was done using aerial photogrammetry for the general documentation of the top part of the hill and 3D laser scanner survey for all the remains of the fortress. This new digital survey allowed to have the perfect base to refine existing hypotheses about the original aspect of this interesting and almost lost medieval settlement. The Montecastrese castrum is mentioned for the first time in a parchment dating back to 1219. At that year the settlement was belonging to the Corvaia

and Vallecchia noble families. At the moment of its maximum development, the fortress was organized around two main towers, with walls and various houses, at that time a quite extended village was located along the southern hillside. With the destruction occurred in the 1224, the towers were torn down, the inhabitants were forced to move to Camaiore and the site was then gradually abandoned until, at the turn of the XVth and XVIth century, this area was dedicated to an extended olive plantation that partially allowed the conservation of some of the archaeological remains. The archaeological campaigns brought back to light the traces of the fortress and of the village, exploring the monumental ruins of the northern tower, still in place and tumbled in two main large parts between the trees.

The first traditional archaeological surveys have been accomplished by the Archaeological Group of Camaiore with the



Fig. 11 - One of the fragments of the Northern Tower in Montecastrese during the aerial survey (G. Verdiani).



Fig. 12 - Some shots from the aerial photogrammetry survey (A. Blanco and D. Nepi, 2015).

discovery of some very ancient pieces of pottery and some remains from IX-X century, supporting the idea of a settlement used for long time. According to the information gathered by archaeologists and scholars, it is possible to define 3 main phases in the development of the settlement: the first goes from the VIII to the X century: the area around the North tower is occupied by structures made of perishable materials, part of the settlement to the South was protected by a wooden palisade, and probably to the West by a moat. In the X-XI centuries there is the second fortified phase: the wooden fence is demolished to leave space to a first stone building. The XII century represents the third phase of the fortified settlement: in this

phase there was the demolition of the older stone structures on the North-East and the construction of a tower with square shaped layout surrounded by a defensive paddock and completed by a guard on the eastern side. With these constructions there was also the building of the South-West tower and of the double wall containing the keep in the upper part of the village and in the lower areas of the hill. At this point Montecastrese constituted an important fortified centre with a strong strategic value. The settlement was articulated between the structures of the fortress and the village, with a complete view of the sea and of the roads all along the plain. The mountains at the back of the settlement were enough to give an adequate

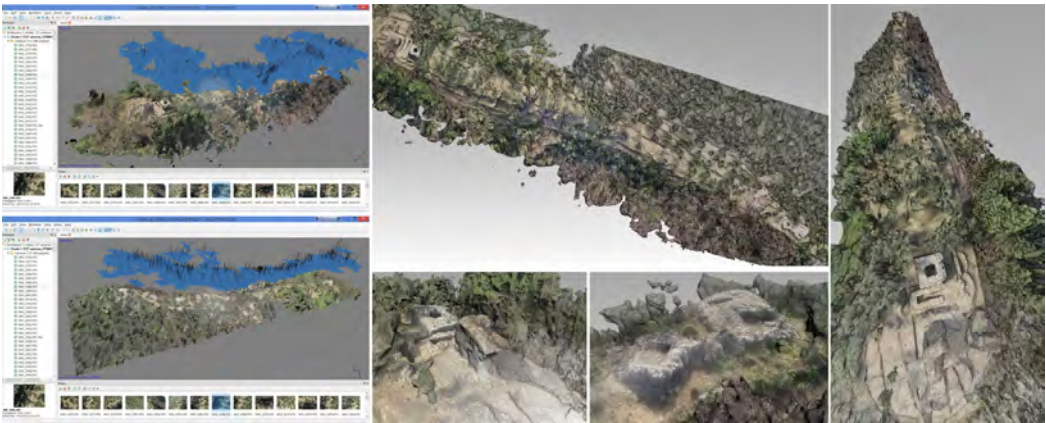


Fig. 13 - First modelling results from aerial photogrammetry survey (G. Verdiani, 2015).

protection and the path along the Apennine was very close to the borders of the fortifications. A similar strategic position and the image of the towers dominating the landscape were a symbol of power too strong to be tolerated in the evolution of the rule of Lucca on this area. The destruction of the architectures was so total and direct that in a certain way the interest in this area was immediately removed, the only use for the terrains and the ruins in time was only for some agriculture activities. It is interesting to mention that the large northern tower was mined and demolished, but that probably the operation got out of control, causing not the crushing of the walls but the tumbling of the top part of the tower. A large block of masonry made a turn of 180 degree on its cracked base as stopped upside up on the ground in front of the remains. In time this part get broken in two, but after almost eight centuries it still looks like some sort of materialization of the Tarot's Card "The Tower", or at least of the effects it represents. The strange event probably caused the broken tower to become a great symbol of defeat, even stronger than the absence of all the settlement, totally destroyed to the ground. All the other aspects in the operation of removal worked as programmed by

the army and in time the place was fully forgiven. Ruins on a hill, difficult to be reached, with narrow paths, a nice place for a walk on Sunday and nothing more. So any intervention of valorization here has to start from a very first understanding and reading and in our time this can be achieved using digital tools and efficient procedures both for documentation and dissemination. In the specific case of the Montecastrese settlement this was done starting from the gathering of all the previous materials and then coordinating them around the new digital survey. The research work was then oriented to produce a set of materials to disseminate information and create learning and understanding around the story and the events of this particular site. The final products were a set of physical models, created from digital models and aimed to present the state of the settlement and its reconstruction, various graphic panels and a short video presenting all the operations done in 2015. The physical models, the panels and the video are in permanent exhibition in Camaiore at the «Civico Museo Archeologico» Palazzo Tori-Massoni, Piazza Francigena. The models were realized in white Plexiglas with a digital laser cutting machine at the Architecture Modeling Laboratory (LMA), part of the

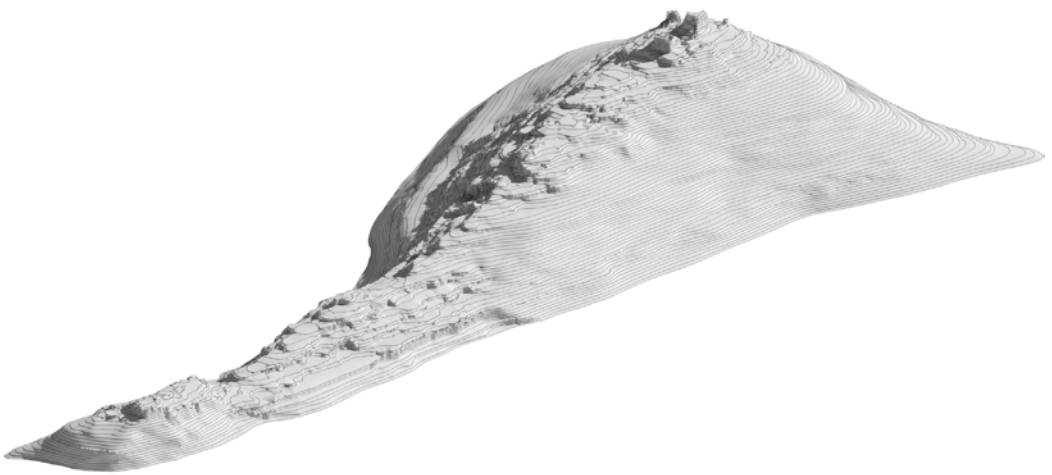


Fig. 14 - 3D digital model of the Montecastrese hill with the system of ruins (P. Kruklidis, S. Lami, M. Carrara 2016).



Fig. 15 - Physical models of the Montecastrese hill, state and reconstruction, in the Model for Architecture Laboratory in Florence (LMA) and the specific exhibition area in the “Museo Civico” in Camaiore (G. Verdiani 2016).

DiDALabs System of the Dipartimento di Architettura, Florence University. The idea was to produce an accessible to the public maquette, a tactile model, when needed, robust and massive enough and capable to communicate the relationship between the territory and the structures (both in the form of archaeological site and of hypothetical reconstruction). The system of panels and maquettes, enriched by some findings and some reproductions took their place in the rooms of the museum, planned and designed by arch. Andrea Innocenzo Volpe and arch. Yoichi Sakasegawa. In this way, starting from a complete and accurate digital survey a whole process of cultural dissemination was started, creating, at the same time, the right bases for new studies and researches to enhance the knowledge and the understanding of this ancient citadel.

The Pionta citadel in Arezzo

Arezzo, a town in Tuscany, is located in the centre of Italy, as many of the town from this very lively area, it has a rich and intense story. But in the story of Arezzo there was an ancient and complex event which destroyed a piece of the timeline in the history of this town. There was a time when the hillock named “Pionta” was closed by walls protecting a small independent citadel , governed by bishops, with its own

churches and political alignment with the Pope and the Vatican State. The hill rises in an area outside of the Arezzo walls; it had its own fortifications and was a completely independent settlement. The tolerance for this small enclave in the Tuscany territory ended in the sixteenth century: Cosimo de’ Medici ordered the destruction of this walled town in 1561, bringing to the ground all the buildings and trying to obliterate its existence, not only from the terrain but from the historical memory. This was the will and the effect of this intervention, but there are few evidences supporting a completely clear reading of the state of the Pionta Hillock before the destruction, the duration of the demolitions, the evolution of the site in the time immediately after the destructions. The traditional reading of these events indicates



Fig. 16 - Digital Survey of the ruins on the Pionta Hillock (G. Verdiani 2014).



Fig. 17 - The “Cacciata dei Diavoli da Arezzo” from Giotto, Fresco from the St. Francesco Church in Assisi. The remains of the Church of St. Stefano and Maria on the Pionta Hillock, Arezzo (G. Verdiani 2014).

the presence of two large churches in this area, both used as cathedrals. The earlier one was dedicated to the Saints Maria and Stefano; it was a quite common construction in the system of the Romanesque churches, while the following St. Donato was characterised by a very complex asset, with a central and symmetrical plan organised around a large central space. Even if the presence of this area remained at a latent state in the memory of the population, the buildings on the hill were demolished and their materials were most probably reused somewhere else, while only minor parts of the previous churches and chapels were reused and adapted in combination with new constructions (like the small church of St. Stefano, built in 1610, giving access to a small crypt from the original settlement).

Various interventions through the centuries have rearranged the terrain of the hillside itself and only starting from the 1960 a real archaeological excavation campaign was started to discover the remains of the ancient town.

The ruins of the Romanesque church of St. Maria and St. Stefano were brought to light and various minor remains were excavated in the following archaeological campaigns. But a large part of this settlement is still mysterious and unclear. There are no significant traces of the large church of St. Donato, the real cathedral of the walled town, or the original walls protecting the citadel. The organisation and the aspect of the area is barely testified by some paintings, representations and drawings, which include a plan view of St. Donato made by G. Vasari the young, but all these buildings are disappeared; there are no clear remains or traces, neither there are findings of their foundations. In 2014 new investigations were started, based on a new survey of the whole area with the use of Drone Photography, 3D Laser Scanner and Total Station, after this first phase of documentation, a new Archaeological campaign started and it is still ongoing at the moment of the writing. The new data were used to produce drawings and schemes useful for testing ideas and



Fig. 18 - The crest representing the façade of the lost Cathedral of St. Donato on the Pionta Hillock, digital model produced by photogrammetry (G. Verdiani 2015).



Fig. 19 - Various representations of the lost St. Donato Cathedral on the Pionta Hillock, the architectural characteristics are clearly present, thus the relationship with the walls and the other buildings is simply symbolic.

dissemination. While the poor ruins on the hill of the Pionta are not the only witness of the ancient condition of this place, a series of specific digital survey was operated on various iconographic examples that can be found around Arezzo, this heterogeneous series of elements testifies, in its own way, the original aspect of the citadel. All these elements were surveyed using digital photogrammetry procedures. The first was a sign engraved on the main door architrave of “St. Maria of the Old Dome” Church in the Arezzo town centre, probably realised immediately after the destruction of the citadel. The second was a baked clay plate from an altar now located in the Diocesan Sacred Art Museum in Arezzo. For both these items the photogrammetry was based on the use of Agisoft Photoscan with the use of a measurement taken in place to put the final model in scale. The use of 3D models to study such elements is very interesting, because it allows the detailed reading of the shape of the elements and it makes it possible to look at them from different and specific perspectives. There are also other and even more detailed graphical description of the place before its destruction, but they are paintings or

drawings, so a simple flatbed scanner was enough to create a digital copy starting from a good quality reproduction of these documents. One of these is currently conserved in the Uffizzi “Gabinetto dei Disegni”, and it is a drawing by Giorgio Vasari the Younger showing the plan of the original St. Donato Church. This is a very important document, describing a rare and innovative medieval church with a spatial organisation running all around a central space, something existing in other types of architectures, but only found in churches built many centuries later. The combination of this drawing and the other traces left in paintings and sculptures is the only possible basis to start a virtual reconstruction of the St. Donato church, while the presence of a certain set of ruins from the Church of St. Maria and Stefano allows to start investigating this ancient church with more ease. The virtual reconstruction of the site started from the main evidence of the site: the Church of St. Maria and Stefano. The remains of the crypt, the walls, and the previous archaeological investigations and studies offered the base for an architectural reflection of this building. The plan of the church was compared with other similar

ones like St. Salvatore in Agna, Pistoia and St. Eugenia in Bagnoro, Arezzo. These two churches are in well-preserved conditions and useful to better understand the general aspect of the elevations and sections of the ruined church. The study of the geometrical layout, based on the units of that time, the Florentine “braccia”, was done starting from the remains. This work was very beneficial in defining a spatial grid, able to be extended, and allowing a better understanding of the proportions of each part. To test the virtual project, the mosaics found during the excavation in the 1960s and now conserved in St. Stefano Church were virtually brought back into place and extended in their pattern to fill the whole space. This was a successful test; the new hypothetical plot showed to be perfectly compliant with this operation. The virtual reconstruction of the St. Maria and Stefano church was just the first step of a complex work; the model defined interpolating between existing architecture and inverse design procedures and allows to have a first look at the possible aspects of the area. Yet it leaves all the questions about the St. Donato cathedral open, as its original place remains a mystery and nothing seems successful in finding its traces. Even the most promising excavations turned out to discover only fragments belonging to other buildings. The presence of the underground chapel gives not enough suggestions to be used as a possible reference in locating the main monument. In the end, the total destruction applied to all the buildings of the area and the numerous rearrangements of the terrain seem to have destroyed everything to such a level that the main question seems to be “why did only the St. Maria and Stefano Church ruins remain intact enough to be read?” Such a question may open new and interesting scenarios about the state of knowledge of the area, while the attention raised by the use of contemporary archaeology may be able to bring back attention and understanding

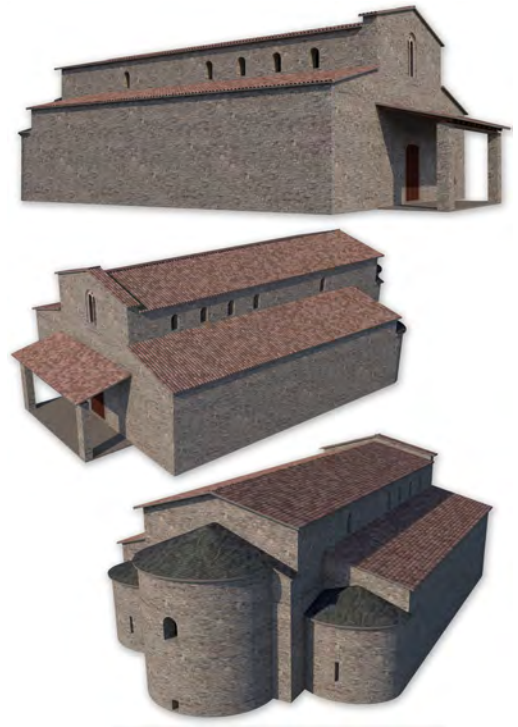


Fig. 20 - Digital reconstruction of the Church of the Saints Stefano and Mary (I. Giannini, G. Verdiani, 2016).

about this rich and unlucky part of the town. At the state of the art of the knowledge about the Pionta hillock any try for a virtual reconstruction of the St. Donato Cathedral must be based on reasoning, interpolation and abstraction. The ideas about this architecture are easy to be resumed. Urban aspects: the hillock hosted a very rich citadel, with the possible presence of two cathedrals, additionally there was a set of minor chapels, the presence of defensive walls and an undefined number of buildings and facilities composing an urban pattern. It is worth to remember that one of the most surprising elements is the total destruction of all the parts. No traces of the St. Donato Cathedral, no traces of the defence walls. Most of the ruins seem to come from a level underground which was underground even at the time of the demolitions. Architectural aspects: it is known that this second Cathedral was a rich and important church and that its architect was named Maginardo.



Fig. 21 - Study on the plan orientation of the St. Donato lost Cathedral (I. Giannini, G. Verdiani, 2015).

The historical approach to this building suggests a relationship with St. Vitale in Ravenna, seen as Maginardo's inspiration. The drawing from G. Vasari the Younger, various paints and some sculpted representations allow a partial definition of the building. There are also some hypothesis about the presence of the St. Donato Apses in the "Cacciata dei Diavoli da Arezzo" from Giotto (1295) one of the frescos in the St. Francesco Church, Assisi. Thus the indications from this artwork are more cultural than formal in front of further representations. The Vasari's drawing remains the fundamental piece, while it allows to put in scale and orient the plan view. At the same time it allows to organize all the other representations: various paints and drawings about the apses seen from the outside and the aforementioned sculpted representation of the façade. The digital reconstruction moved from the Vasari's plant view: it was oriented and resized into 1:1 scale, this was possible because the drawing has clear notes to help it: the indication of a dimension scale and an orientation made with the indication of the winds, obviously this form of orientation is not totally accurate, but gives a consistent reference. The process of reconstruction bring back the question: why, in the total destruction of the Citadel on the Pionta hillock, only the basement of the St. Mary and Stefano remains in place? No other constructions are there any more, no trace of large basements, neither the ancient

walls closing the citadel left any trace. A possible answer may come from placing the drawing from Vasari over the ruins of the St. Mary and Stefano church. They look compliant, so is it possible to imagine that St. Donato was built over the previous church? A renewal of the Cathedral?. No evidences can support this idea and the documents and the historical reading of the poor archives traces seems to exclude this possibility. It is known that the demolition of an older church for the new one to be built is something that happened in other towns, like it happened in Florence with the "new" St. Maria del Fiore" rising over the ancient basement of the previous St. Reparata. Even if not possible to any confirmation and in front of many odd advices, this hypothesis should explain the remains: they were yet underground at the time of the demolition. In the lack of any archaeological finds this can take place in the various number of ideas about this place, or at least can be worth of verification any previous reading of archive data, just to clearly check any possible misinterpretation about the co-existence of both the buildings. Last but not least, this hypothesis even if not demonstrable and even if denied by other evidences can be seen as an intellectual exercise, showing how, sometimes, when a research can not find answers can still found the right questions, and "why some elements are still in place?" can be still a good one for starting a new interpretation of this particular site.

In the completion of the virtual reconstruction of the St. Donato it was preferred to define the mass of the architectural elements and use generic "replicated" models for the details like capitols and other decorative elements. The construction of the model makes quite clear that this is not a central plant church, it has a particular, almost experimental solution, the external aspect is the one of a massive, lengthened church, but the inside is dominated by the central space. It seems that there are no other buildings with similar

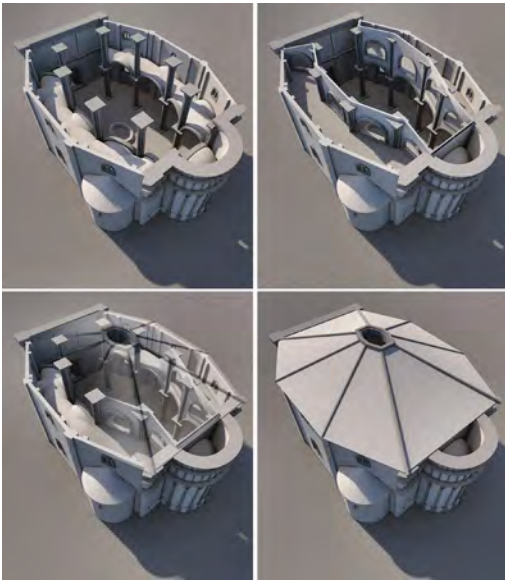


Fig. 22 - Study on the digital reconstruction of the St. Donato lost Cathedral (M. Pucci, G. Verdiani, 2016).

layout available for a direct match. The St. Donato cathedral was a very “experimental” building for its time, with the effort to find a balance between the need of a cathedral and keeping a central space, opened to the

roof. For this complex nature it is not simple to find existing reference buildings, none of them seem available in Tuscany, almost none of them from the same age. At the state of the research it has been possible to find two interesting references: the church of St. Sofia in Benevento (774), the original church of St. Flaviano in Montefiascone (1180, but transformed in 1302) and the church of St. Erasmo in Capaci (1523). These churches are not to be considered in connection with St. Donato, but they present a similarity in the spatial aspect, with a central open volume articulating the shape of the church. These churches come from different historical periods, but all present the complex will to design a central space developing into the naves of a church. The virtual reconstruction of the St. Donato is just a part of a complex work, the models defined interpolating between existing architectures and inverse design procedures allow to have a first look at the possible aspects of this lost building, yet this leaves open many questions about the



Fig. 23 - Study on the digital reconstruction of the St. Donato lost Cathedral (M. Pucci, G. Verdiani, 2016).

Pionta Hillock, as its original asset remains a mystery. At the same time, the use of interactive media can enhance the approach and consciousness about the important story of a place linked to the roots of the development of Arezzo.

The Vagli town in central Tuscany

A lot of destructive events happen as a consequence of wars, conquests or confrontations to rule a place or an area. But in the recent age we have seen various events connected to the “obsolescence” of a place, or at least the effects of some minds thinking that for higher needs is possible to lost some old but not so “important” place. It is the case of the small town of Fabbri-riche di Careggine in the inner mountains of the Lucca’s Province, included in a municipality named Vagli di Sotto. The need for energy in Italy brought to the realization of a new dam in this area, with the result of flooding completely the valley and the small town. The small medieval town was founded in the thirteenth century, a period in which it is documented the presence of blacksmiths coming from Brescia. After the conquer of the area by the Estense dynasty, starting from 1755, the town became quickly one of the largest iron suppliers of the state, it was equipped with a mill, increased its number of building and the renovation of the older constructions. In its maximum

growth phase it was realized a new road to direct connect the shipping of the products to Modena and Massa, this road crossed the river Edron first on a wooden walkway, then on a masonry bridge with three arches. The Church of St. Teodoro, erected in the central part of the settlement, had a single nave covered with a barrel vault and octagonal lantern concluded with a lowered dome. There was also a rectangular apse decorated with some wall paintings. A simple bell tower with square plant was the completion to the characterization of this small town Church. The progressive decline of factories led to the gradual decay of the connecting structures and in the nineteenth century, the people living there had to return to the ancient crafts of farmers and herders. At the beginning of the twentieth century, the economy of the area saw a new positive period, following the exploitation of local marble, this new industrial activity brought to the construction, between 1906 and 1907, of a small hydroelectric plant on the Edron river. In 1941, under the Fascist regime, the SELT-Valdarno company (later to become the National Board for Electricity: ENEL) decided to build a hydroelectric reservoir damming the river Edron nearby the municipality of Vagli di Sotto. After the end of the World War Two, this project was brought on, and between 1947 and 1953 a large dam has been built and is still in place: it is 92 m high and can collect 32



Fig. 24 - View of the ruins of Fabbri-riche di Careggine in 1994 (mapio.it).



Fig. 25 - View of the ruins of Fabbri-riche di Careggine emerging from the water in 1994 (tuscanypeople.com).



Fig. 25 - View of the ruins of Fabbriache di Careggine in an old postcard, probably from 1983.

million cubic meters of water. As a result of this the old town was gradually submerged and the people living there forced to move away. At the time of abandonment the town was made up by 31 houses and 146 inhabitants. The residents were moved into the new housing of Vagli di Sotto, built, according to the propaganda of the time “in order to faithfully reproduce the urban layout of the medieval village evacuated”. The lake, on the occasion of the dam maintenance, was emptied doing resurface the medieval village, with its stone houses, the cemetery, the bridge with three arches, the Romanesque church of San Teodoro and the bell tower. This event, which was initially expected to happen every ten years, took place only four times since the flooding: in 1958, in 1974, in 1983 and in 1994; the next emptying, which was scheduled for 2016, it was postponed for various and mixed reason. In November 2010 it was planned to complete the construction of a suspension bridge in wood and steel, which was completed in 2016. The inauguration of

the bridge took place on the 19th June 2016. It is worth to say that this is not the only case of flooded town in Italy: there is also, for example, the case of Curon and Resia in Alto Adige, flooded for the same reasons of Fabbriache di Careggine, but still showing the tower bell out of the water. Many and quite various cases are not missing in the world, like the apparently similar case of the Seuthopolis, in Bulgaria, flooded in 1948, presented on the web as brought out of the water by an apposite dam, which comes out of being a misunderstanding based on a project proposal (still far from being passed to an operative phase) from the Bulgarian architect Zheko Tilev. Fabbriache di Careggine, somehow has a quite curious condition that define a place different from the others. The periodic emerging of the town create a sort of unique vision of cracked mood and ruins, which is capable to capture the attention of a large number of visitors, the quite extended amount of building and the preserved “urban” aspect of the site make it unique. The significant



Fig. 27 - The project for the Bulgarian archaeological flooded site of Seuthopolis (Tilev Architects).

popularity has brought as main effect the will to convert this place in a sort of amusement park, which is in the end can be seen as not completely negative, but at risk of ruining the charm of the ruins, or to exchange it with some eccentric experiment, like the idea, seen around local newspapers of a “glass bubble” to preserve the remains of the town (make it sense? An interesting subject to discuss about). Behind all this circus of ideas and bad practices in Cultural Heritage there is the experimental and almost unique aspect of seeing what remains of a town submerged for more than half a century and brought to air for short period in time.

The concept of “almost intangible” ghost town has here replaced the original historical value of the place. Probably the best approach to such a situation is the documentation and the digital modeling for virtual reality and some accurate reflection about how to tell its story and coordinate information for visitors and curious. May investments build a new result that is still missing around? Or all the operators will simply look at a town in its slow disappearing while wasting money for the creation of a spectacular mess? The answer may appear easy but it is not sure, while this abandoned town has the chance of evolving itself into something else, remaining at the same time a ruin, which is a very rare occasion for a ghost town.

The Corallo baths in Livorno

In Livorno, there is a bad case of abandon, a historical monument made of fine art element is left to complete decay. The “Terme del Corallo” (Coral Baths), were at the beginning a bath area exploiting salt waters. After a first abandon, no serious efforts were done in years to go behind this situation, the poor and slow moves towards the restoration were stopped and slowed down by inefficiencies and never ending political times. The monument is now on the edge of its collapse, showing a full failure of cultural preservation. According to this visible shame, a variety of studies, initiatives, television reports and newspaper articles take place renewing the common idea that “something should be done” but in the end the whole community simply stand looking at the progressive destruction of the building. The story bringing at this tragic point starts inside the large set of Bath buildings in the Italian (and international) tradition. Italy is one of the most important



Fig. 28 - Main dancing hall of the Corallo Baths (G. Verdiani, 2012).

country for bathing-place in the world. In its tradition bath represents history and cultural characteristic of a territory and one of the factors in social valuation and costumes. For example the “Thermae” and “Balnea” during the ancient Roman period were a place for social life; or later have represented a social status of richness, like it was during the “elite thermalism” in the past Century. During the period between the XVIIIth and XXth Centuries, thermal baths have an exponential growth with the construction of several new buildings. The thermal baths in this phase became a complex system, expanding their functions to offer: hotels, café, gardens, and mixing the classical scheme from the Roman age with spaces coming from the oriental tradition. In this way the baths became more and more a luxury place. The Art Noveau architecture (as well known, in Italy the common word used to indicate this current is “Liberty”) was in its best development phase during that time. So it became the most used style for this kind of buildings, the richness of

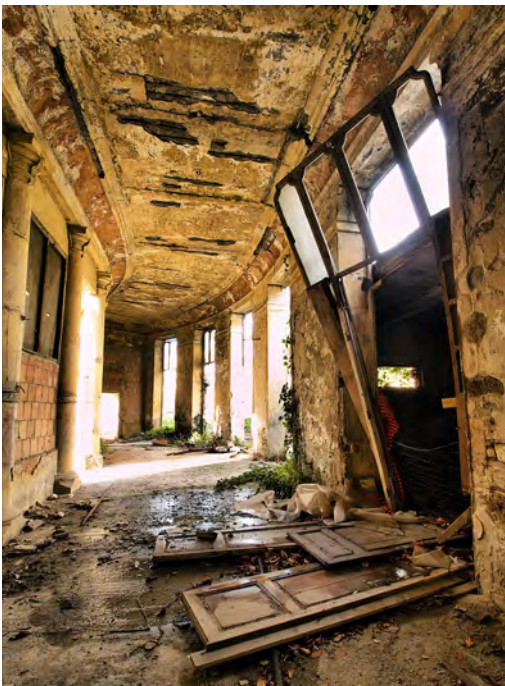


Fig. 29 - Lateral passage in serious decay inside the Corallo Baths (G. Verdiani, 2012).



Fig. 30 - Detail of the columns of the porch in the Corallo Baths (G. Verdiani, 2012).

the details, the presence of natural shapes, seemed perfectly compliant with the luxury and the wellness that this place was in need to evoke. Is this the case of the “Acqua della Salute “ in Livorno settled along the “Viale dei Condotti”. In 1865 along the the owners of an area, excavated the land and found water and they named it “Acqua del Corallo” (Coral Water). During the period from the 1854 to the 1893, six different kinds of water were found, the curative property of these waters became famous; the hospitals near Livorno started using the waters for medical treatment. The popularity of the waters was the beginning for a new company, created by a group of person that had a robust fortune behind, the name was “Società delle Acque della Salute” (literally: “The Health Water Company”). The company decided to protect the water in the ground building an underground system of walls; in the 1903 they decided to entrust Angiolo Badaloni with the task of realizing the new building named “Stabilimento delle Acque della Salute” (literally: “the Health Water Establishment”). The inauguration of the building was a rich event, people from far away went to visit this Art Noveau building. During this period Livorno became a popular place for human-care with water and was indicated as the “Montecatini a mare” (“Montecatini on the sea”) with a direct recall to the name of “Montecatini Terme” a town very famous in Tuscany for its baths. About the event that caused the



Fig. 31 - Main front of the Corallo Baths (V. Fantini, 2012).

first closure of the complex, there aren't certain information. The building worked until the 1936, the second World War was probably the main cause. Livorno was strongly injured by bombing, in the centre of the city remained safe only the 8% of buildings, while in the suburbs the 43% buildings were saved. The "Stabilimento delle Acque della salute" did not receive damages, but obviously the presence of people was strongly reduced. Anyway in the second post World War there was an increase of the population caused by

the return of the soldiers, so in the 1947 the local administration bought the area in the east side of the city and started to build housing. The growth of the city in the surroundings of the Coral baths probably caused the pollution of the ground and destroyed the underground walls; the water were dispersed. After this the "Stabilimento delle Acque della Salute" changed his primary function into: disco and club, but anything were durable or stable solutions, its decay was on a one way path. The last use of the building was as a factory.



Fig. 32 - Internal staircase in the porch of the Corallo Baths (G. Verdiani, 2012).



Fig. 33 - The same staircase painted in a picture in an art gallery in Vienna (G. Verdiani, 2015).



Fig. 34 - Recent view of the Corallo Baths, with the front garden cleaned up because of some TV shooting, thus the state of decay of the architecture is still ongoing (G. Verdiani, 2017).

In 1964 the society named S.T.I.B produced there four different drinks, including Coca-Cola. In 1967 Coca-Cola society bought S.T.I.B and after three years decided to close this factory. Since then the process of decay brought the building to support various kind of damages, the demolition of all the minor buildings, the realization of ugly tall housing with mere economical purposes, absolutely far from increasing urban quality, while the persistence of the main building was due only to the good quality of the concrete used for the vaults and in general of the whole construction, but after such a long time in decay the conditions are gradually being worst every year. So this may look as a case of simply abandon, with no will to force the forgiveness of the place, but the more the decay goes on the more the phrase “impossible to recovering” is heard around, asking for resignation, defining a slow, but not for this less brutal decision of destruction for an interest piece of cultural heritage.

The Tonietti mausoleum on the Elba Island

At the end of the XIX century the Elba Island was the Italian centre of the mining process. One of the important mines of the Elba was right in Rio Marina, as mentioned

above. The first concessionaire of this mine was Giuseppe Tonietti, a very rich man in Rio Marina. In 1896 he died, and his son Ugo decided to build a monumental chapel as a family tomb, in the place where his father used to walk and stare at the sea, in the peak of the Mount Lentisco. At that time, the Italian architect Adolfo Coppedè was working in the Elba Island. Ugo Tonietti commissioned to Coppedè the construction of the chapel, which today is considered one of the best examples of the eclectic work from this architect. From the second half of the 20th century, with the extinction of the familiars Tonietti, the chapel was abandoned. Today it appears in an advanced state of decay and dangerous deterioration. The Tonietti Chapel is a witness of the climate of those years, the ambitions of the clients as well as the high quality of the designer. The chapel is configured to suggest the shape of a lighthouse marking the route between Piombino and Portoferraio, rising majestically from the woods. The choice of recalling a lighthouse is can be explained because of the strong relationship with the seaman life that always inspired Giuseppe Tonietti. The Mausoleum is composed by a large and impressive staircase that leads the visitor to the decorated entrance gate of the main room at the first level. This room is characterized by a ribbed cross-vault and by a small polygonal apse, covered with a ribbed half-vault, where once there was an altar. The tombs found their place in the floor of the main room and on the two sides of the chapel, where the traces of two large coffins are still visible. The interior part of the chapel, painted by Carlo Coppedè, but all this artistic work is now barely visible and only some remains of a starry sky and of other decorations on the vault and the half-dome are still readable. A small opening on the left side of the altar leads to a narrow stone corkscrew staircase that give access to the upper level: a very small room with an iron helicoidal stair arriving to the lantern. From the staircase



Fig. 35 - The Tonietti Chapel at the time of its completion and nowadays (A. Mancuso, A. Pasquali 2016).

it is possible to see a breathtaking view of the landscape of the island. It is worth to say that except for minimal changes in the houses on the side looking straight towards the sea, all the windows see now a day the same panorama they were seeing at the time of the construction: wood and sea. Unfortunately, the four windows in iron and glass originally closing the oculus are now totally disappeared: stolen and/or destroyed by the thieves.

The remains of a rusted frame is still laying on the ground nearby the building. With the oculus fully opened the salinity and the wind enter accelerating the rusting of the staircase, which is now collapsing and highly dangerous. Abandon, absence of interventions, vandalisms, thieves, has heavily damaged this architecture, giving the most favourable conditions to destructive natural effects to operate: plants, roots, weather have affected many parts of the building.

Comparing a historical picture of the mausoleum to a recent picture taken from a

similar point of view it becomes immediately clear the numerous differences between the past and present: some important parts of the balustrade are missing, the oculus windows, the entrance gate and of various significant sculptural pieces are disappeared. The columns at the side of the main entrance have been engraved and some poor graffiti are visible on the left side.

As seen in the past for many archaeological sites, the forgiveness of the place, the disappearing of the original owners, leave it in hands unable to manage it, opening the way to thieves and vandals. They operate slowly, but with a twisted approach to the value of things, considering their vantage as the only thing that matters. In this case, the situation is even more bad because of the dangerous conditions caused by these events. In its actual state the chapel has its access opened to everyone, it is not inconceivable that a visitor may stumble trying to reach the entrance, or entering and accessing the damaged staircase encounter and highly harmful mass of falling iron.

Conclusions

In a certain sense, an architecture of the past, an architecture of the future really does not exist, the only existing architecture is the architecture of the present time. A manifestation of layered decisions or an articulated mix of choices, a set of opportunities and/or some twists of fate. An architecture can start in its own environment, it took parts from it, it exploited it and changed it, but it will be changed by the changes, it will face fast transformations, but to the eyes of an acute observer it will show the rich articulation of all the events. It will demonstrate how variable and ever-changing is the landscape and the environment in itself. The restoration of a place should be always aimed to a clear series of tasks, and this not to force a mere utilitarian purpose, but to give a lively condition to the restored building, to make it a part of a living urban tissue, used by the society residing in that area. Generic restoration, made only for law requirements, create the risk to bring on the procrastination in the decay of an unused area, reflection and reason should be always the guidelines to renew and to revitalize an urban area, with all the involved parts acting with a clear consciousness that a place is always the expression of a complex environment made of cultural, economical, artistic, social and not necessarily “quite” choices. In each case, the approach of the archaeologist, of the architect, of the Cultural Heritage scholar must start from the understanding of the reason which caused the decay of a place and first of all must define the “right questions” before finding convictions about hypothetical answers. One question can be “why what is still in place is still here?” this can be most important than “where are gone the missing part and/or buildings?”, and in general some first hypothesis can be redefined applying classical investigation procedures like the Occam’s razor. In this kind of analysis it must be kept in

mind that all the remains are work of man (and in a certain part of nature), and that most of the time the approach to ruins has never been “constructive” until our recent age. Reuse, transformation, replacement are the most common operations, they are practical, highly compliant with the needs of humanity. The progress of understanding the value of the past is merely contemporary, it is important, it is an enrichment, but it is so recent that all the long past times has simply not known this approach as a general behaviour. So, in first place, the value of a site, a monument, an ancient building, must be recovered and valorized, while in a lot of environment the “preservation” is still something far from being completely structured in the approach to built heritage, no matter of its value. Interpreting a reconstruction studies or defining a restoration work without understanding this may cause mistakes and misinterpretation of the reasons of behaviour of the same context in which the subject of the study is located.

Credits

- The paragraph “The Hekatomnos’ tomb in Milas, Turkey” has been developed in collaboration with Anna Frascari.
- The paragraph “The Hadrian’s Villa in Tivoli” has been developed in collaboration with Graziano Corsaro.
- The paragraph “The Montecastrese settlement on the Tuscany coast” has been developed in collaboration with Martina Carrara and Stefano Lami.
- The paragraph “The Pionta citadel in Arezzo” has been developed in collaboration with Angela Mancuso, Iacopo Giannini, Mirco Pucci, Carlo Gira.
- The paragraph “The Corallo baths in Livorno” has been developed in collaboration with Valentina Fantini.
- The paragraph “The Tonietti mausoleum on the Elba Island” has been developed in collaboration with Angela Mancuso and Andrea Pasquali.

References

- Cook B., Ashmole B., Emrys Strong D. (2005), *Relief Sculpture of the Mausoleum at Halicarnassus*, Oxford University Press, UK
- De Angelis D'Ossat G. et al. (1973), *Les cryptoportiques dans l'architecture romaine*, Ecole française de Rome, Roma, Italy
- Frascardi A., Mancuso A. (2015), "Milas Turkey: cancelling the town to extract the monument ? The case of the Hekatomnos' Tomb", in *Architecture, Archaeology and Contemporary City Planning - State of knowledge in the digital age, Proceedings of the Workshop*, G. Verdiani, P. Cornell, P. Rodriguez-Navarro (editors), Valencia 18th-20th May 2015, Lulu.com press, USA
- Kinney D. (2006), "The concept of Spolia," in C. Rudolph (Editor), *A Companion to Medieval Art: Romanesque and Gothic in Northern Europe*, Oxford, UK
- Kuroda T. (2008), Lucca 1838. *Trasformazione e riuso dei ruderi degli anfiteatri romani in Italia*, Pacini Fazzi, Lucca, Italy
- Macdonald W. L. (1998), *Hadrian's Villa and Its Legacy*, Yale University Press, USA
- Macdonald W. L., Pinto J. A. (2006), *Villa Adriana. La costruzione e il mito da Adriano a Louis I. Kahn*, Mondadori Electa, Italy
- Moxey K. P. F. (2001), *The Practice of Persuasion: Paradox and Power in Art History*, Cornell University Press, US
- Panofsky E. (2011), *La scultura funeraria dall'Antico Egitto a Bernini*, Einaudi, Italy
- Salza Prina Ricotti E. (2001), *Villa Adriana. Il sogno di un imperatore*, L'Erma di Bretschneider, Roma, Italy
- Settis S. (1986), "Continuità, distanza e conoscenza. Tre usi dell'antico. L'uso dell'antico nel Medioevo", in S. Settis (Editor), *Memoria dell'antico nell'Arte Italiana*, III, Turin, Italy
- Verdiani G., Corsaro G. (2011), "Cryptoporticus: a hidden system under the skin of the ancient town", in *Proceedings of the CHNT 15 Conference*, W. Börner, S. Uhlirz (Editors), Vienna 15th - 17th November 2010, Museen der Stadt Wien – Stadtarchäologie, Austria
- Wassermann G.D. (1997), *From Occam's Razor to the Roots of Consciousness: 20 Essays on Philosophy, Philosophy of Science and Philosophy of Mind*, Avebury Series in Philosophy, Ashgate Publishing Limited
- Antonelli R. (1995), Bianco Bianchi cronista del '500, Camaione
- Panero F., Pinto G. (2009), Castelli e fortezze nelle città e nei centri minori italiani (secoli XIII - XV) in *Atti del convegno svoltosi a Cherasco presso la sede del CISIM*, 2008, Cherasco, Italy
- Stortoni Florio E. (1993), *I castelli feudali del territorio di Camaione*, Sarzana, Italy
- Gattiglia G., Anichini F. (2009), La Versilia nel Medioevo. Ricerche archeologiche in un'area 'buia' della Toscana settentrionale, in *Atti del V Congresso Nazionale di Archeologia Medievale (Foggia-Manfredonia, 2009)* pp. 268-273, Firenze, Italy
- Gattiglia G., Tarantino G. (2013), ...loco ubi dicitur castello. Montecastrese e l'incastellamento in Versilia, in *Archeologia Medievale*, XL, pp. 233-257, Italy
- Le Goff J. (2011), *L'immaginario medievale*, Laterza publishing.
- Tristano C., Molinari A. (editors) (2005), *Arezzo: Il Pionta, fonti e materiali dall'età classica all'età moderna*, Letizia publishing, Italy
- Armandi M. (2003), *L'Oratorio di Santo Stefano. La Cripta. Graffiti e cromie su roccia del colle di Pionta*, Arezzo, Italy
- Delumeau J. P. (1987), Arezzo dal IX ai primi del XII secolo: sviluppo urbano e sociale agli inizi del comune aretino, in *Atti e Memorie dell'Accademia Petrarca di Lettere, Arti e Scienze*, IL, Italy
- Donati P. P. (1965), Scavi Archeologici sul colle del Pionta in Arezzo, *Antichità Viva* n.1, Edam publishing, Firenze, Italy
- Fatucchi A. (1969), *I primi mille anni della vicenda urbanistica di Arezzo*. In *Atti e Memorie dell'Accademia Petrarca di Lettere, Arti e Scienze*, XXXIX, Italy
- Fatucchi A. (1998), Sulle tracce della prima cattedrale di Arezzo, in *Atti e Memorie dell'Accademia Petrarca di Lettere, Arti e Scienze*, LIX-LX, Italy
- Galli E. (1915), Arezzo - Scoperte archeologiche nel terreno del manicomio in località "Duomo Vecchio", in *Notizie Scavi*, XII, Italy
- Pizzi A. (editor) (1995), *L'architettura religiosa in Toscana, Il Medioevo*. Banca Toscana publishing, Italy
- Ladner G. B. (2008), *Il simbolismo paleocristiano, Dio, Cosmo, Uomo*, Jaka Book, Italy
- Pasqui U. (1899), *Documenti per la storia della città di Arezzo nel medioevo*, I, Firenze, Italy
- Paturzo F. (2007), *La fortezza di Arezzo e il colle di S. Donato dalle origini ad oggi*, Letizia publishing, Italy
- Tafi A. (1995), *Pionta. Il vaticano aretino*. Calosci publishing. Cortona, Italy
- Melucco Vaccaro A. (1991), *Arezzo. Il colle del Pionta, il contributo archeologico alla storia del primitivo gruppo cattedrale*, Arezzo, Italy
- Melucco Vaccaro A. (1985), Gli scavi di Pionta: La problematica archeologica e storico- topografica, in *Arezzo e il suo territorio nell'altomedioevo*, in *Atti del Convegno promosso dall'Accademia Petrarca di Lettere, Arti e Scienze, Arezzo, 22-23 ottobre 1983*, Calosci-Cortona, Italy

- Stefanelli V. (1970), *Giorgio Vasari il Giovane: La città ideale. Piante di chiese (palazzi e ville) di Toscana e d'Italia*, Roma, Italy
- Vasari G. (1986), *Le vite de' più eccellenti pittori, scultori e architettori*, Einaudi publishing, Italy
- AA.VV. (1988), *Itinerari Turistici illustrati d'Italia*, Vol. II, pag. 131, Touring Club Italiano, Milano, Italy
- AA.VV. (2017), Fabbriche di Careggine, il paese sommerso, in *Pruneta di Sopra villa* <https://www.youtube.com/watch?v=-M2eWCOFykM>
- AA.VV. (1947), Tuscany - Sunken Village, in *British Pathé* https://www.youtube.com/watch?v=DHsXU_G1R1U
- Dikov I. (2015) Reports of submerged ancient Thracian capital Seuthopolis's 'resurfacing' in Koprinka water reservoir in central Bulgaria prove false, in *Ancient Thrace, Modern Era, Other History, Underwater Archaeology*, Bulgaria
- Menicagli Di Batte S. (2000), *Fatti e personaggi attorno alle Acque della Salute ovvero Storia di Montecatini a mare*, Editrice l'informazione, Italy
- Piombanti G. (2003), *Guida storica ed artistica della città e dei dintorni di Livorno*, Arnaldo Forni Editore.
- Bossaglia R. (1985), *Stile e Struttura delle città termali*, Nuovo Istituto Italiano D'arti Grafiche.
- Bairati E., Riva R. (2001), *Il Liberty in Italia*, Laterza Editore, Italy
- Giusti M. A. (1996), *Le età del liberty in Toscana*, Octavo Franco Cantini Editore, Italy
- Cagianelli F., Matteoni D. (2006), *Livorno la costruzione di un immagine, Tradizione e modernità nel Novecento*, Silvana Editoriali, Italy
- Faroldi E., Cipullo F., Pilar Vettori M. (2008), *Terme e architettura, progetti, tecnologie, strategie, per una moderna cultura termale*, Maggioli Editore, Italy
- Pasqualetti R. (2008), *Architetture Livorno*, Edizioni ETS, Italy
- Pasquonucci M. (1993), *Terme Romane e vita quotidiana*, Franco Panini Editore, Italy
- Bossaglia R. (1987), *Archivi del liberty italiano: architettura*, Franco Angeli, Milano, Italy
- Bossaglia R., Cozzi M. (1982), *I Coppedè*, Sagep Editrice, Genova, Italy
- Brancacciolo L. (2011), *Adolfo Coppedè agli esordi dell'Elba contemporanea*, Sillabe, Mediaprint, Livorno, Italy
- Cresti C. (1991), *Firenze 1896-1915 : la stagione del Liberty*, Alinea, Firenze, Italy
- Docci Mario and Fiorucci Tiziana. 2005. *Metodologie innovative integrate per il rilevamento dell'architettura e dell'ambiente*, Gangemi Editore, Roma, Italy
- Fantini V. (2014). Abandoned Art Nouveau in Italy. Document the Built Heritage before its lost, in *Proceeding of the 18th International Conference on Cultural Heritage and New Technologies 2013* (CHNT 18, 2013). Museen der Stadt Wien – Stadtarchäologie, Vienna, Austria
- Formenti C. and Magnani F. (1905), Cappella Gentilizia della Famiglia Tonietti all'Isola d'Elba, Architetto Adolfo Coppedè in *L'edilizia Moderna*, Periodico Mensile di Architettura Pratica e Costruzione, Anno XIV - Fasc.1, Modiano, Milano, Italy
- Giusti M.A. (1996), *Le età del Liberty in Toscana. Proceedings of the Conference in Viareggio*, 29-30 September 1995, Octavo Franco Cantini Editore, Firenze, Italy
- Insabato E., Ghelli C. (2007), *Guida agli Archivi di Architetti e Ingegneri del Novecento in Toscana*. Firenze, Edifir, Italy
- Lambardi S. (1966), *Memorie antiche e moderne dell'Isola d'Elba*, Forni Ed. Bologna, Italy
- Ninci G. (1988), *Storia dell'Isola d'Elba*. Sala Bolognese, Forni, Italy
- Targioni Tozzetti G. (1768), *Relazioni di alcuni viaggi fatti in diverse parti della Toscana*, Firenze, Italy
- Vanagolli G. (2012), *Miniere e ferro dell'Isola d'Elba. Tempo spazio lavoro tecnologia immagini*, Le opere e i giorni, Livorno, Italy
- Verdiani G., Fantini V. (2012), The "Terme Del Corallo" in Livorno, Italy, a Contribution to Try Going Beyond the Abandon, in *International Journal of Heritage in the Digital Era*, vol. 1-1, pp. 15-19
- Verdiani G., Parretti L., Fantini V., De Paola J., Giraudeau S. (2013), Ad impossibilia nemo tenetur. Three case studies on built heritage elements at risk, in *Built Heritage 2013 Monitoring Conservation and Management*, Milano, 18-20/11/2013, vol. 1, pp. 574-581, Italy

London, UK
22-25th September 2016

Scholar workshop:
ARCHITECTURE, ARCHAEOLOGY AND CONTEMPORARY CITY PLANNING

The workshop took place in London, U+I Offices, 7a Howick Place, Victoria.

Workshop organizing committee:
James Dixon, Giorgio Verdiani, Per Cornell

The workshop has been realized in collaboration between Museum of London Archaeology (MOLA), the Architecture Department of the Florence University, Italy, the Department of Historical Studies, University of Gothenburg, Sweden.



UNIVERSITÀ
DEGLI STUDI
FIRENZE

DIDA
DIPARTIMENTO DI
ARCHITETTURA

Proceedings Editors: James Dixon, Giorgio Verdiani, Per Cornell
jdixon@mola.org.uk / giorgio.verdiani@unifi.it / per.cornell@archaeology.gu.se



22th-25th September/LONDON, UK

In discussions on urbanism, the need to involve new actors has been a major theme of recent debate. In this field, throughout Europe, various ways of allowing citizens to take a more direct part in planning is stressed. It is also important to look at the role or lack of role played by particular research fields. Architecture plays a major role in city planning. While archaeology has become increasingly involved in field projects in urban environments, the discipline seldom plays an important role in city planning. In several countries and particular cities this situation has been questioned during the last decades. In September 2016 a group of scholars from different countries met in London to discuss about the relationship between Architecture, Archaeology and contemporary City Planning. This book collects the final papers from that meeting.



The workshop has been realized in collaboration between **Museum of London Archaeology** (MOLA), the **Architecture Department** of the Florence University, Italy, the **Department of Historical Studies**, University of Gothenburg, Sweden

*Workshop organizing committee:
James Dixon, Giorgio Verdiani, Per Cornell*

ISBN n.: 978-0-244-00557-3